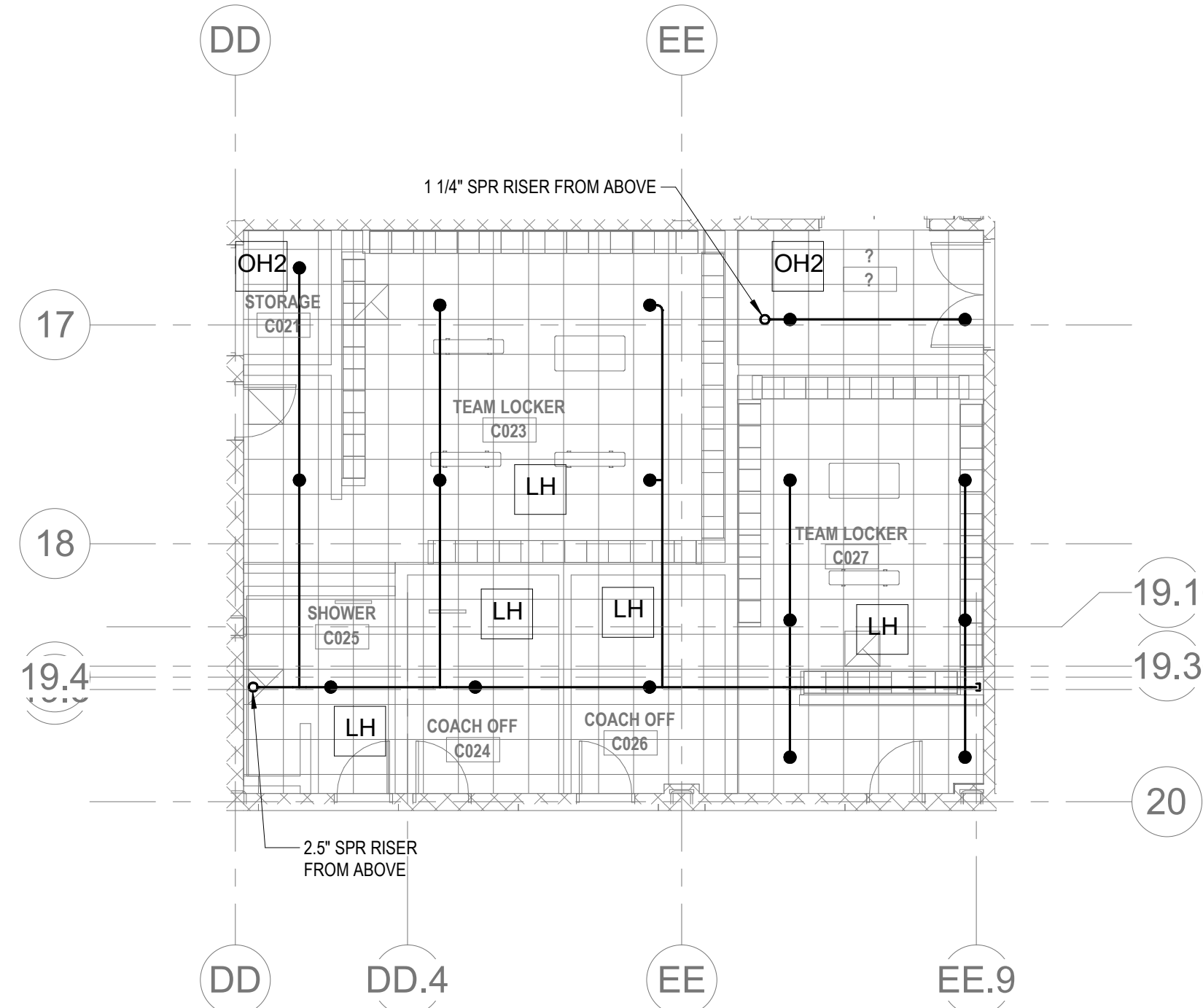
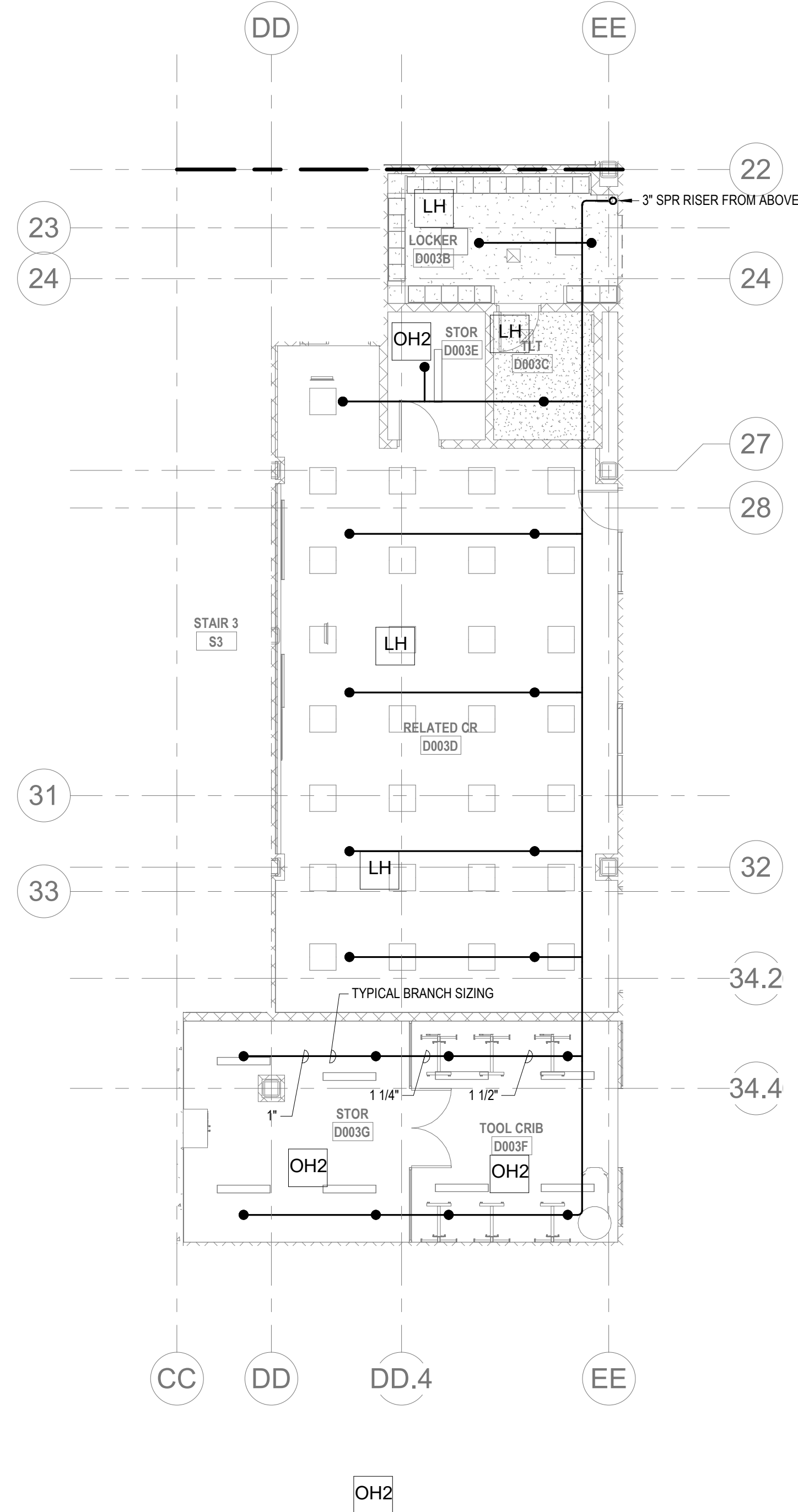


③ FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA C - Callout 1  
1/8" = 1'-0"



④ FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA C - Callout 2  
1/8" = 1'-0"



⑥ FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA D - Callout 1  
1/8" = 1'-0"

- KEYNOTES
- LH LIGHT HAZARD OCCUPANCY
  - OH ORDINARY HAZARD OCCUPANCY
  - EH EXTRA HAZARD OCCUPANCY

#### FP GENERAL NOTES

- WITHIN AREA OF SCOPE EXTEND NEW 1" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" ARMOVERS TO NEW CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRE TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PLUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
- SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAIR FLOOR OPENINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERE WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
- CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS, PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
- DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40F.
- SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
- PROVIDE GAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
- FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
- GENERAL NOTE AT SOUND BARRIER CEILING:  
- IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEPPFP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEPPFP SYSTEMS COMPONENTS. SPECIALLY ADJUSTED RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEPPFP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEPPFP DRAWINGS.
- GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
- ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEPPFP COORDINATION PROCESS.
- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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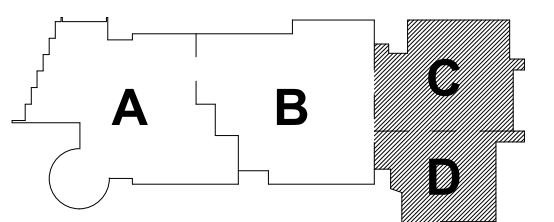
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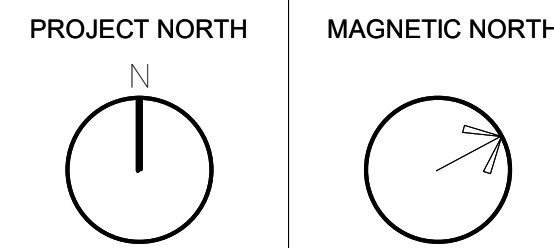
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MSBA 90% CD  
Construction Document  
Submittal  
May 12th, 2023



#### KEY PLAN



FIRE  
PROTECTION  
UNDER  
MEZZANINE -  
AREAS C&D

Scale: 1/8" = 1'-0"

Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

FP1-1-0.5CD

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## KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- THE INDICATED AREA SHALL BE PROTECTED BY SPRINKLERS WITH A EXTRA HAZARD GROUP 2 EQUIVA SPRINKLER DESIGN CRITERIA PER NFPA 13.
- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL).
- PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.
- FOR ALL PIPING PASSING THROUGH COORDINATE Y5, PROVIDE AN EXPANSION LOOP AND ADD FLEXIBLE COUPLINGS ON EITHER SIDE.
- PROVIDE HIGH TEMPERATURE RATED SPRINKLERS THROUGHOUT THE INDICATED AREA.
- SPRINKLER COVERAGE REQUIRED BELOW ALL ACCESSIBLE AREAS.
- PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
- FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- PROVIDE SPRINKLER HEAD EVERY 12' WITHIN VERTICAL PORTION OF PAINT BOOTH EXHAUST DUCT.

## GENERAL NOTES FOR PAINT SPRAY BOOTHS

- SPRINKLERS PROTECTING THE PAINT SPRAY BOOTHS SHALL BE DESIGNED FOR AN EXTRA HAZARD (GROUP 2) OCCUPANCY IN ACCORDANCE WITH NFPA 13.
- THE SPRINKLER SYSTEM PROTECTING DUCTS SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:
  - HORIZONTAL EXHAUST DUCTS SHALL HAVE SPRINKLERS LOCATED 12 FT CENTERS BEGINNING NO MORE THAN 6 FT FROM THE DUCT ENTRANCE.
  - WHERE EXHAUST DUCTS ARE MANIFOLDED, A SPRINKLER SHALL BE LOCATED IN THE MANIFOLD AT THE JUNCTION OF EACH EXHAUST DUCT WITH THE MANIFOLD.
  - SPRINKLERS SHALL PROVIDE A MINIMUM FLOW OF 30 GPM PER HEAD AT A MINIMUM OF 15 PSI PRESSURE.
  - SPRINKLERS SHALL BE ORDINARY TEMPERATURE RATE, UNLESS REQUIRED TO BE HIGHER DUE TO OPERATING TEMPERATURES MEASURED IN THE DUCTS, IN WHICH CASE THE OPERATING TEMPERATURE SHALL BE AT LEAST 50 F ABOVE THE INSIDE TEMPERATURE OF THE DUCT.
- EXHAUST DUCTS SHALL BE PROVIDED WITH ACCESS OPENING FOR INSPECTION AND MAINTENANCE OF SPRINKLERS.
- SPRINKLERS SHALL BE PERMITTED TO BE COVERED ONLY BY CELLOPHANE BAGS HAVING A THICKNESS OF 0.003 IN. OR LESS OR BY THIN PAPER BAGS. THESE COVERINGS SHALL BE REPLACED FREQUENTLY SO THAT HEAVY DEPOSITS DO NOT ACCUMULATE.
- SPRINKLERS THAT HAVE BEEN PAINTED OR COATED BY OVERSPRAY OR RESIDUES SHALL BE REPLACED WITH NEW SPRINKLERS.

## FP GENERAL NOTES

- WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" BRANCHES TO NEW CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12' OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
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ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

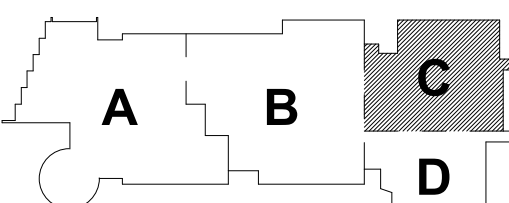
ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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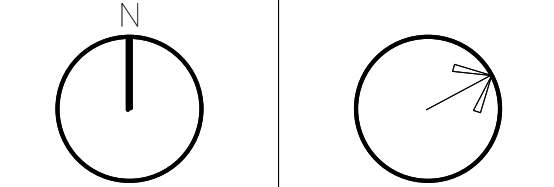
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May 12th, 2023



KEY PLAN

PROJECT NORTH  
MAGNETIC NORTH



FIRE  
PROTECTION  
LOWER LEVEL  
FLOOR PLAN -  
AREA C

Scale: 1/8" = 1'-0"

Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

FP1-1-0C

2 FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA C  
1/8" = 1'-0"

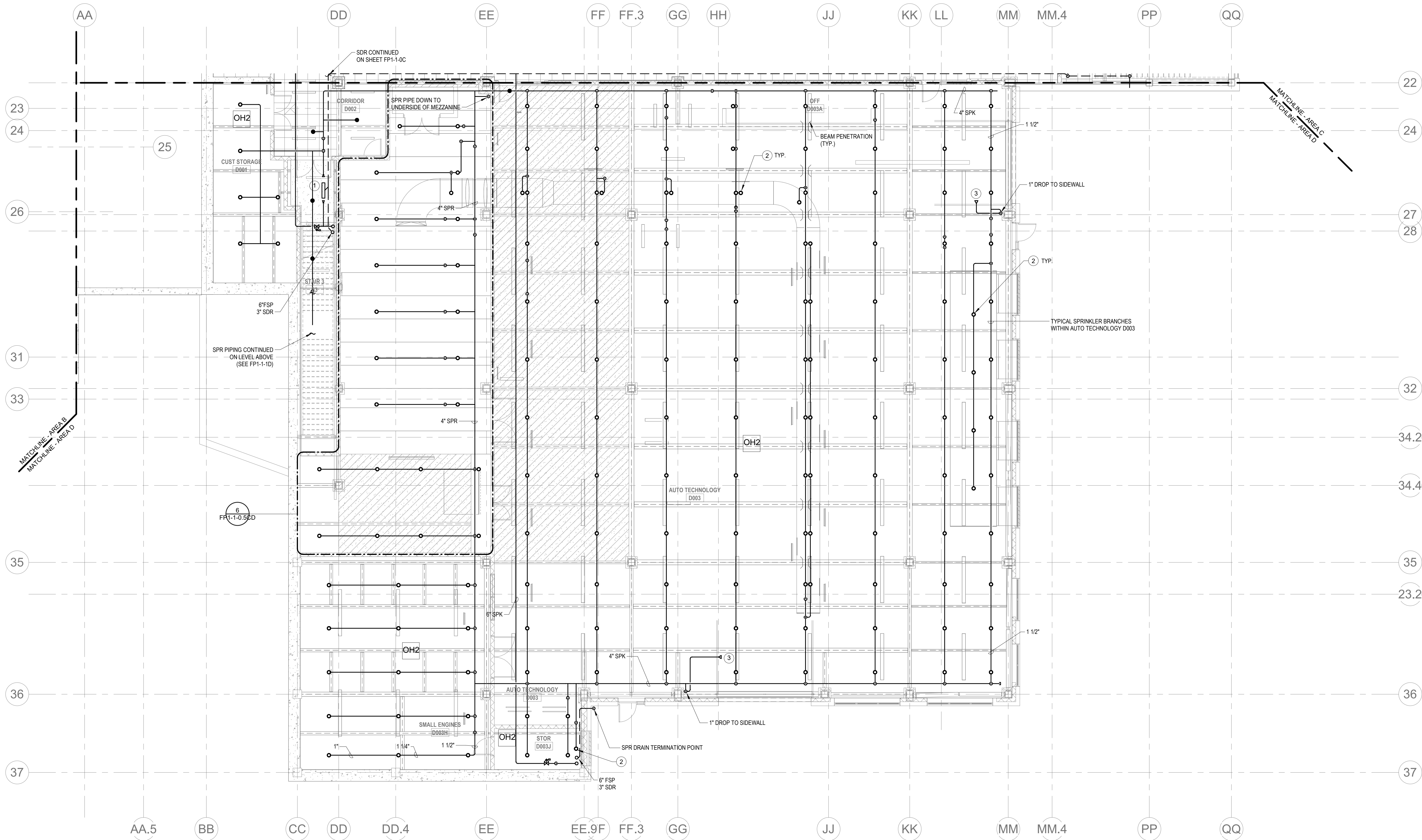
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
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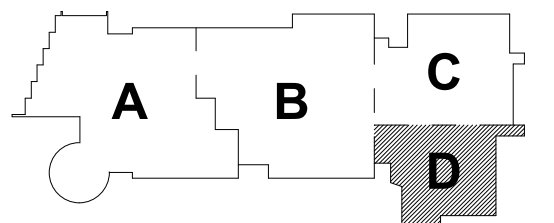
1. PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTORS TEST CONNECTION. (AS REQUIRED PER DETAIL).
2. PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
3. PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.

FP GENERAL NOTES

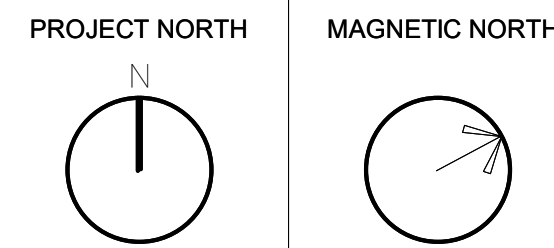
1. WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" ARMOVERS TO NEW CONCEALED PENDENTS. 1" SPRIGGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
2. PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.T. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
3. SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAR FLOOR OPENINGS.
4. SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERES WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
5. CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
6. SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
7. DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40°.
8. SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
9. PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
10. FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
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ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.



2 FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA D  
1/8" = 1'-0"



KEY PLAN



**FIRE  
PROTECTION  
LOWER LEVEL  
FLOOR PLAN -  
AREA D**

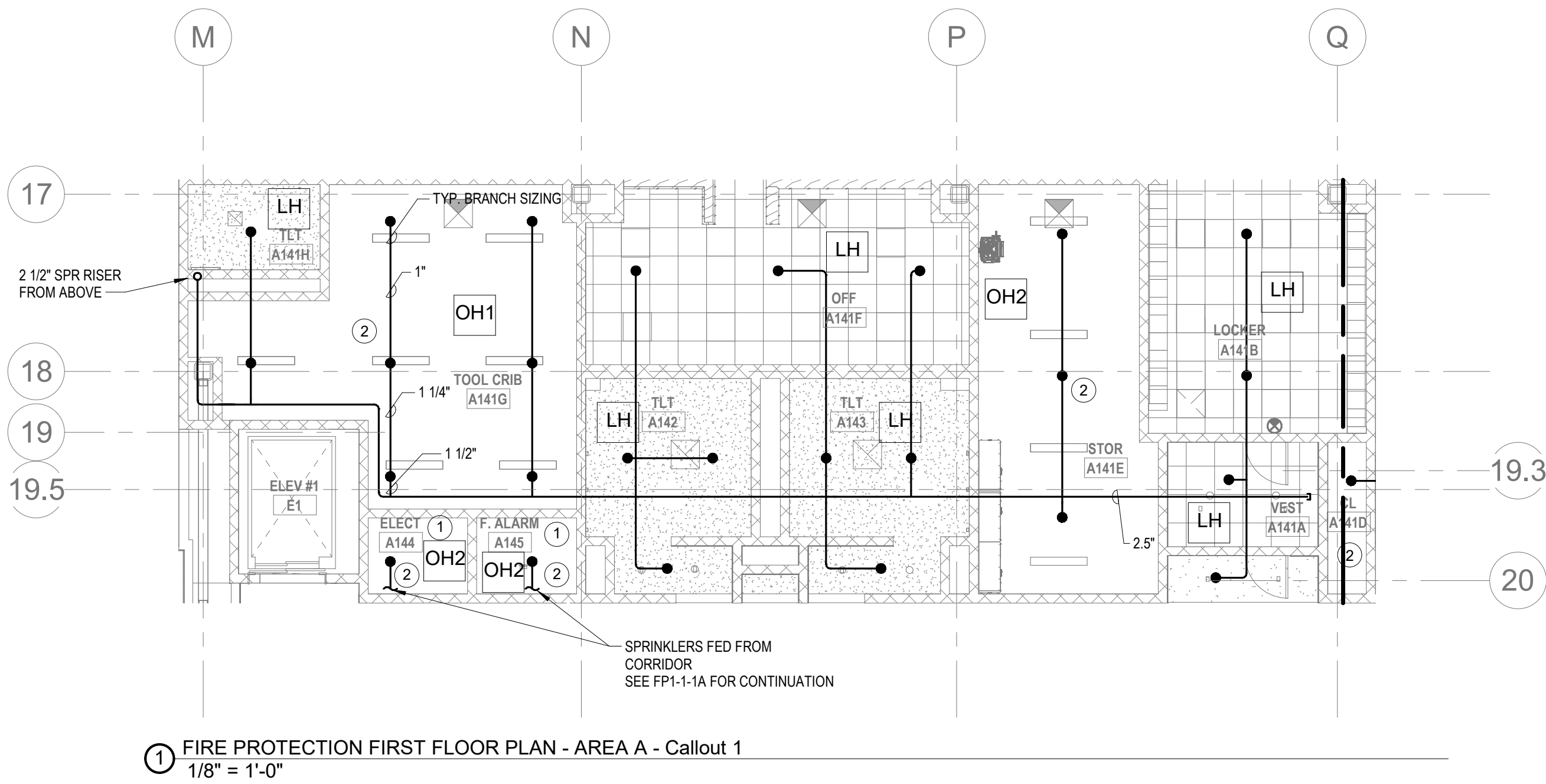
Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

**FP1-1-0D**

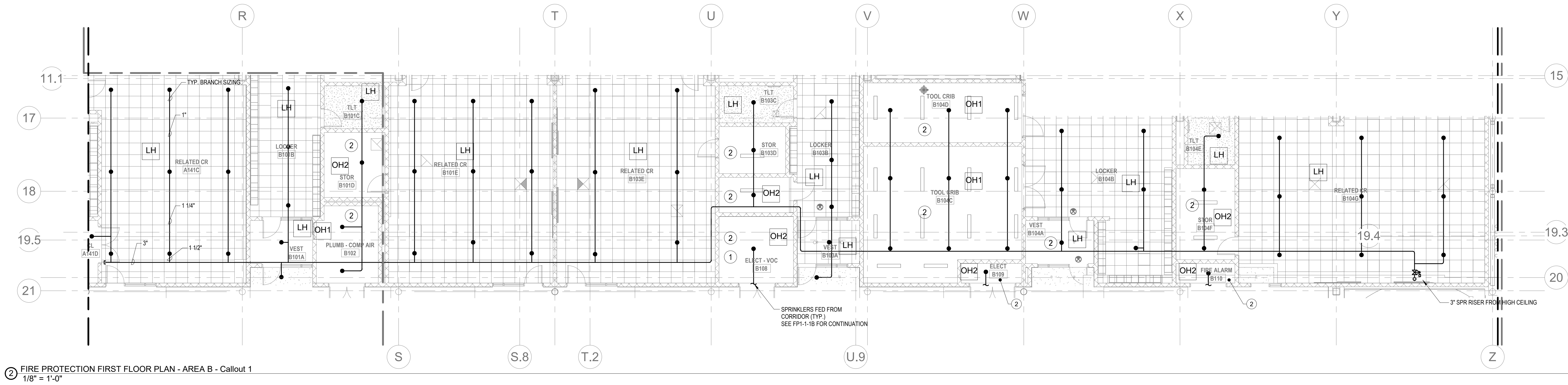
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- 1 FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.  
2 SPRINKLERS LOCATED IN THIS AREA SHALL BE EXPOSED PENDENT SPRINKLERS



1 FIRE PROTECTION FIRST FLOOR PLAN - AREA A - Callout 1  
1/8" = 1'-0"



2 FIRE PROTECTION FIRST FLOOR PLAN - AREA B - Callout 1  
1/8" = 1'-0"

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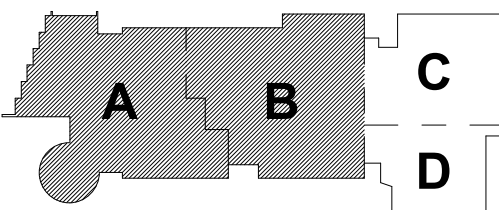
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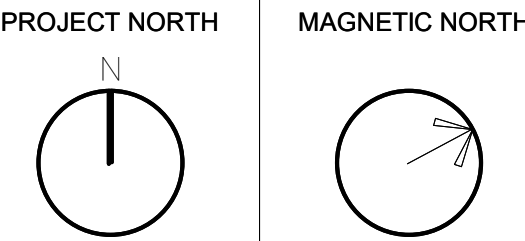
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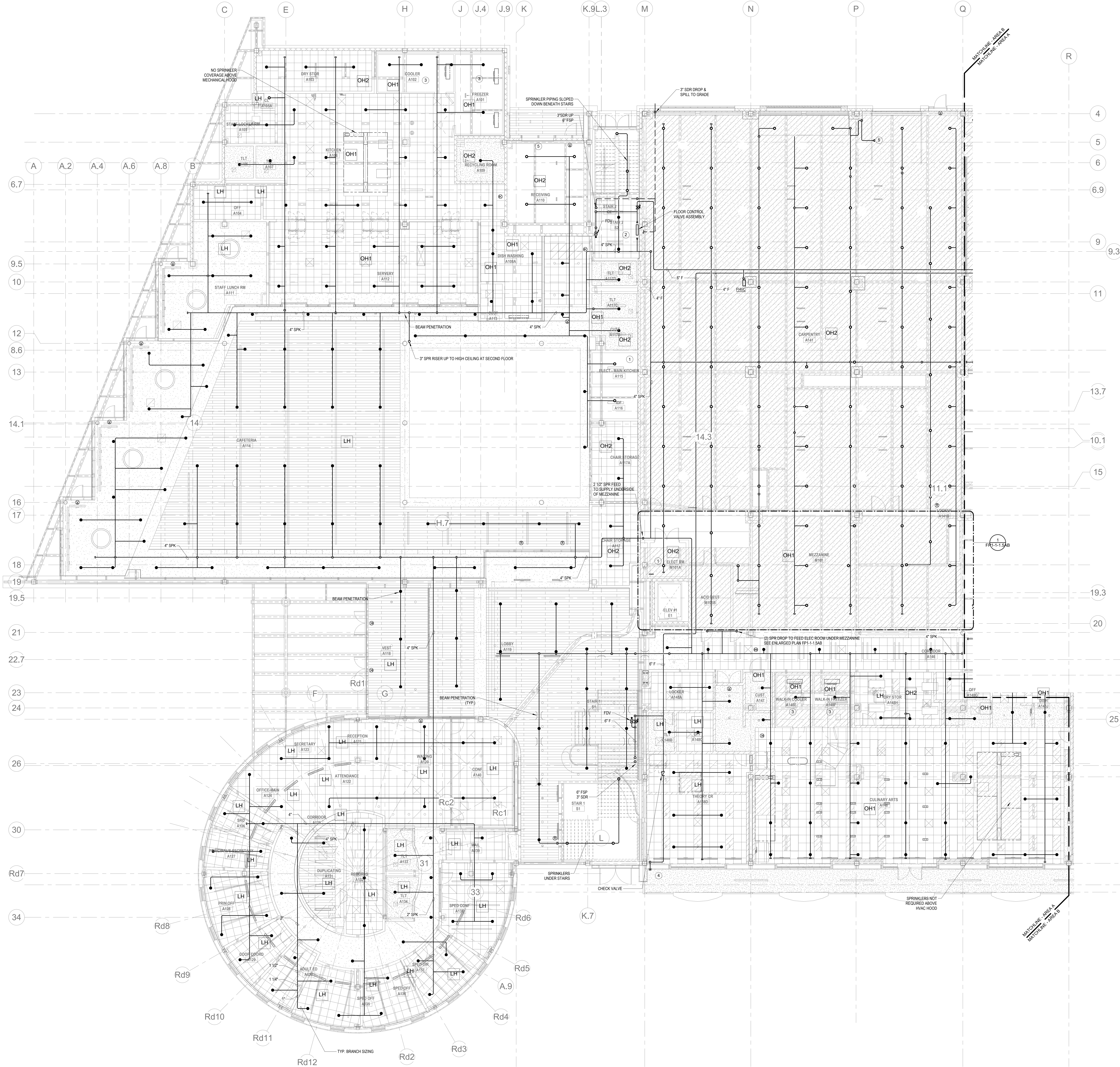
KEY PLAN



FIRE  
PROTECTION  
FIRST FLOOR  
MEZZANINE LVL  
PLAN - AREA A

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: DRA  
Date: May 12th, 2023

FP1-1-1.5AB



# KEYNOTES

- LH LIGHT HAZARD OCCUPANCY
- OH ORDINARY HAZARD OCCUPANCY
- EH EXTRA HAZARD OCCUPANCY

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- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTORS TEST CONNECTION (AS REQUIRED PER DETAIL).
- PROVIDE DRY PENDENTS TO SERVE THE ROOM. NO SPRINKLER COVERAGE REQUIRED ABOVE WALK IN COOLER/FREEZER.
- FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT. PROVIDE ELECTRIC ALARM BELL TO BE MOUNTED TO THE FDC.
- PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.
- PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.

## FP GENERAL NOTES

- WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SUB BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILING ARE INDICATED. EXTEND NEW 1" BRANCHES TO NEW CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
- SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAIR FLOOR OPENINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERE WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
- CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDINGS. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
- DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40°F.
- SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
- PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
- FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
- GENERAL NOTE AT SOUND BARRIER CEILING:  
IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEPP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNSTRUCT SUPPORTS ATTACHED TO BOTTOM CHORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEPP SYSTEMS COMPONENTS. SPECIALTY ACoustically RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEPP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEPP DRAWINGS.
- GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP-FP COORDINATION PROCESS.

ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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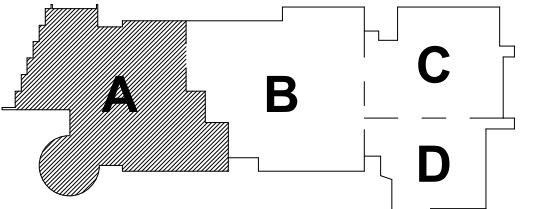
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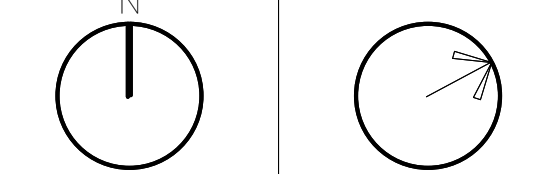
MSBA 90% CD  
Construction Document  
Submittal

May 12th, 2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



FIRE  
PROTECTION  
FIRST FLOOR  
PLAN - AREA A

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-1A

## KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- FOR ALL PIPING PASSING THROUGH COORDINATE Y9, PROVIDE AN EXPANSION LOOP AND ADD FLEXIBLE COUPLINGS ON EITHER SIDE.
- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL).
- PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.
- PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
- FIRE PUMP FP-1 SHALL BE PRESSURE PUMP MODEL 64E14M, DOUBLE SUCTION, CENTRIFUGAL PUMP. PUMP SHALL DELIVER 1000 GPM WITH DIFFERENTIAL PRESSURE OF 60 PSI, 480V, 3 PHASE, 50 HP, 1800 RPM MOTOR.
- FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT. PROVIDE ELECTRIC ALARM BELL TO BE MOUNTED TO THE FDC.

## FP GENERAL NOTES

- WITHIN AREA OF SCOPE, EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE SPRINKLES IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILING ARE INDICATED. EXTEND NEW 1" ARMED/TEST TO NEW CONCEALED PENDENTS. SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
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- FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILING ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
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ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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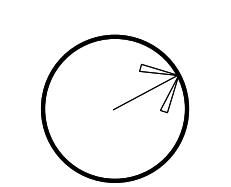
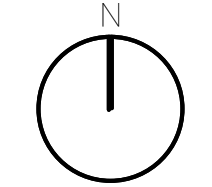
May 12th, 2023

A B C  
D

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



FIRE  
PROTECTION  
FIRST FLOOR  
PLAN - AREA B

Scale: 1/8" = 1'-0"

Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

FP1-1-B

FIRE PROTECTION FIRST FLOOR PLAN - AREA B  
1/8" = 1'-0"

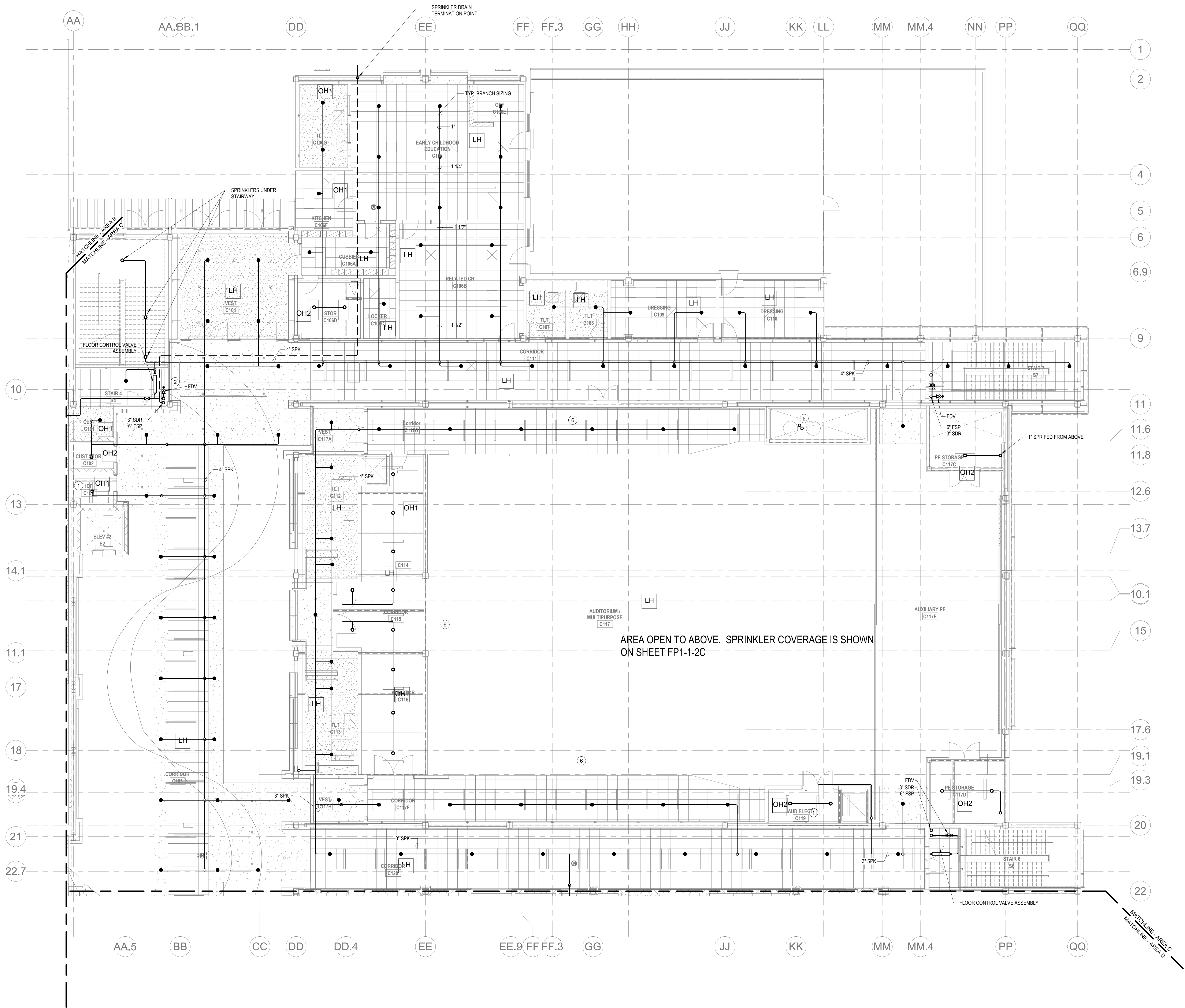
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- 1 FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.  
2 PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL)  
3 PROVIDE A FIRE HOSE VALVE CABINET ON EACH SIDE OF THE STAGE IN ACCORDANCE WITH 160 CIB.3.1  
4 PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.  
5 PROVIDE SPRINKLER HEAD EVERY 12' WITHIN VERTICAL PORTION OF SPRAY PAINT EXHAUST DUCT.  
6 PROVIDE ALLOWANCE FOR A 2 1/2" SPR MAIN DROP TO FEED (2) SIDEWALL HEADS AT UNDERSIDE OF RETRACTABLE BLEACHERS. FINAL LOCATION OF BLEACHERS SHALL BE COORDINATED.

FP GENERAL NOTES

1. WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" RANOVERS TO NEAREST CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12' OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.  
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1 FIRE PROTECTION FIRST FLOOR PLAN - AREA C  
1/8" = 1'-0"

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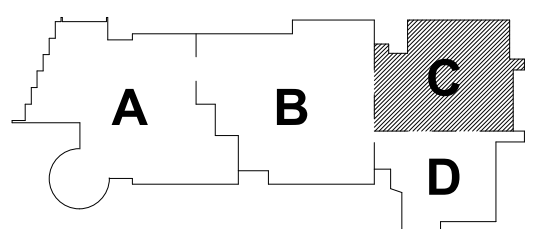
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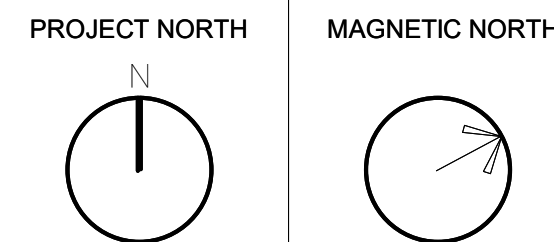
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KEY PLAN



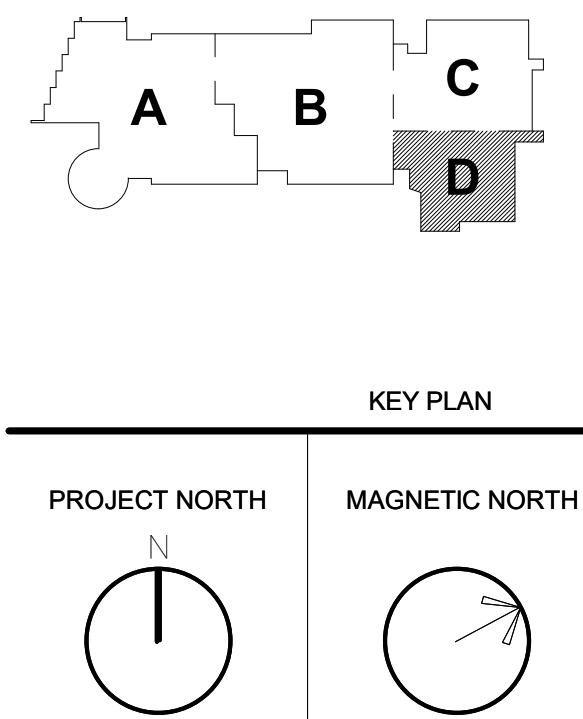
FIRE  
PROTECTION  
FIRST FLOOR  
PLAN - AREA C

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
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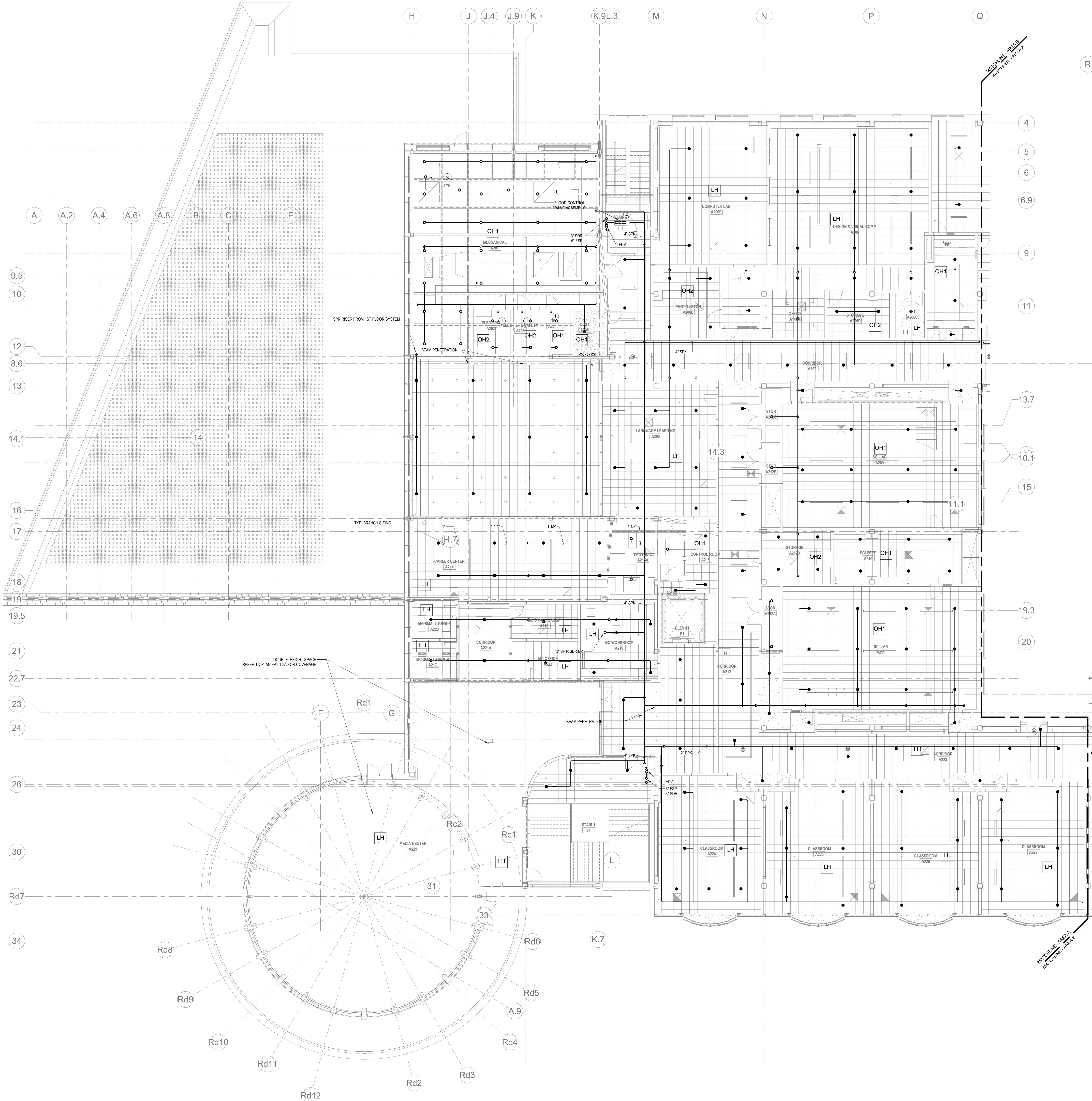
**FP1-1-1C**

LH	LIGHT HAZARD OCCUPANCY
OH	ORDINARY HAZARD OCCUPANCY
EH	EXTRA HAZARD OCCUPANCY

- ① PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL)
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**FIRE  
PROTECTION  
FIRST FLOOR  
PLAN - AREA D**



- KEYNOTES**
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- FP GENERAL NOTES**
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IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM MEFP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNRESTRICTED SUPPORTS ATTACHED TO BOTTOM CORNERS OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEFP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEFP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEFP DRAWINGS.
  12. GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEFP-PP COORDINATION PROCESS.
- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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May 12th, 2023

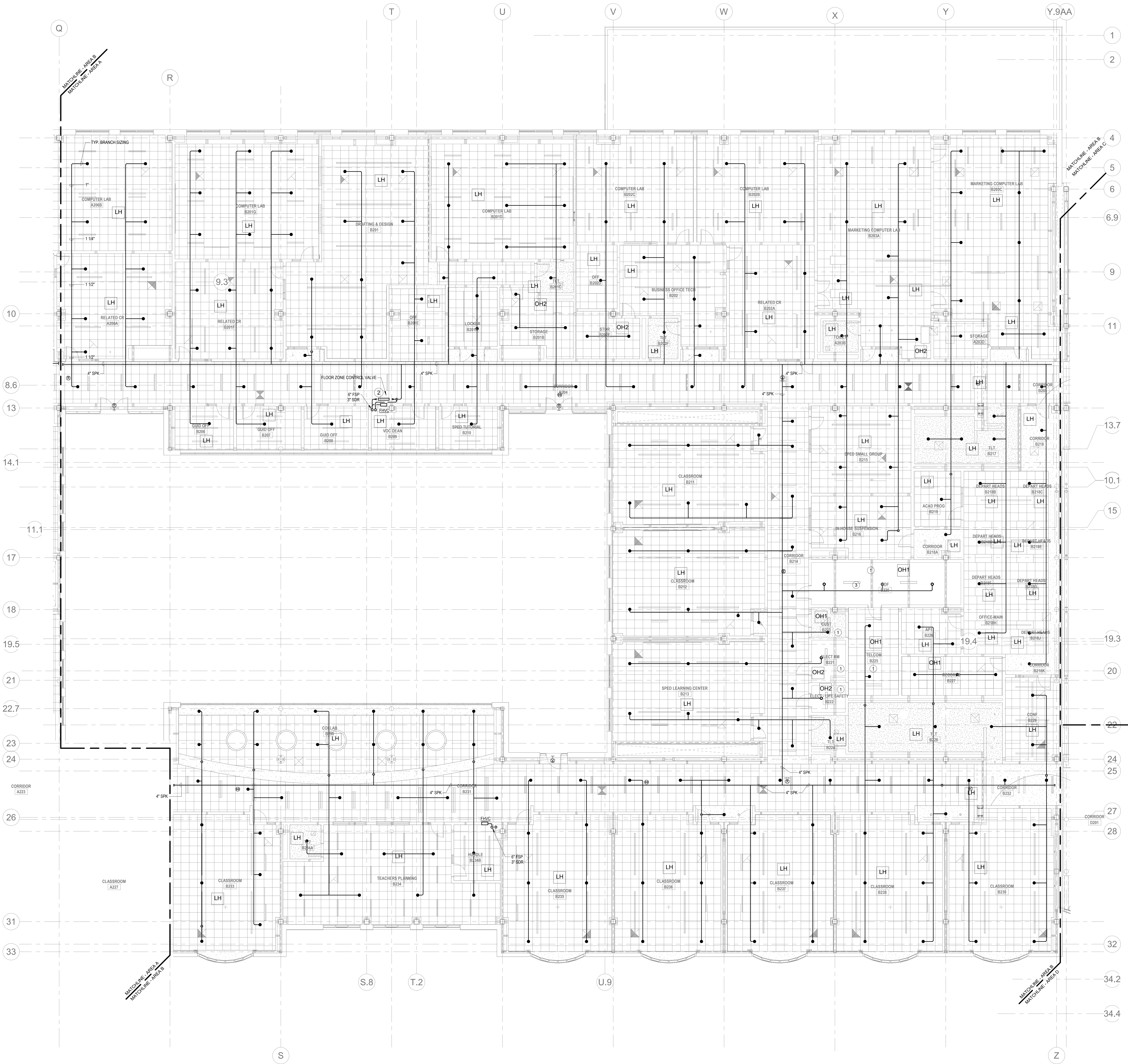
A B C  
D

KEY PLAN

PROJECT NORTH  
MAGNETIC NORTH

FIRE  
PROTECTION  
SECOND FLOOR  
PLAN - AREA A

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023  
FP1-1-2A



## KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION (AS REQUIRED PER DETAIL). CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE DRIP PAN UNDER ALL SPRINKLER BRANCH PIPING WITHIN MDF ROOM.

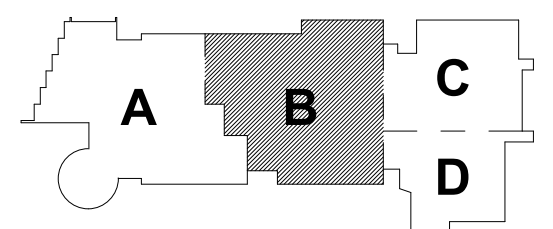
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- WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" ARMED TO NEW CONCEALED PENDENTS. 1" SPRINGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, DYNAMISMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
- SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAR FLOOR OPENINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERES WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
- CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
- DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40F.
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## Northeast Metropolitan Regional Vocational High School

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PROJECT NORTH  
MAGNETIC NORTH

## FIRE PROTECTION SECOND FLOOR PLAN - AREA B

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-2B

LH	LIGHT HAZARD OCCUPANCY
OH	ORDINARY HAZARD OCCUPANCY
EH	EXTRA HAZARD OCCUPANCY

- ① PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL)
- ② PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
- ③ PROVIDE SPRINKLER PROTECTION ABOVE BALCONY CEILING. ARE ABOVE CEILING IS NOT ENCLOSED.
- ④ FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRICAL TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.

[illegible]

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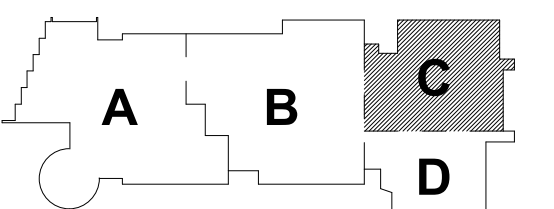
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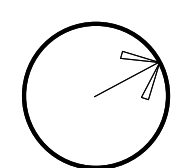
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Construction Document  
Submittal  
May 12th, 2023



### KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



Scale: 1/8" = 1'-0"

Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

**FP1-1-2C**

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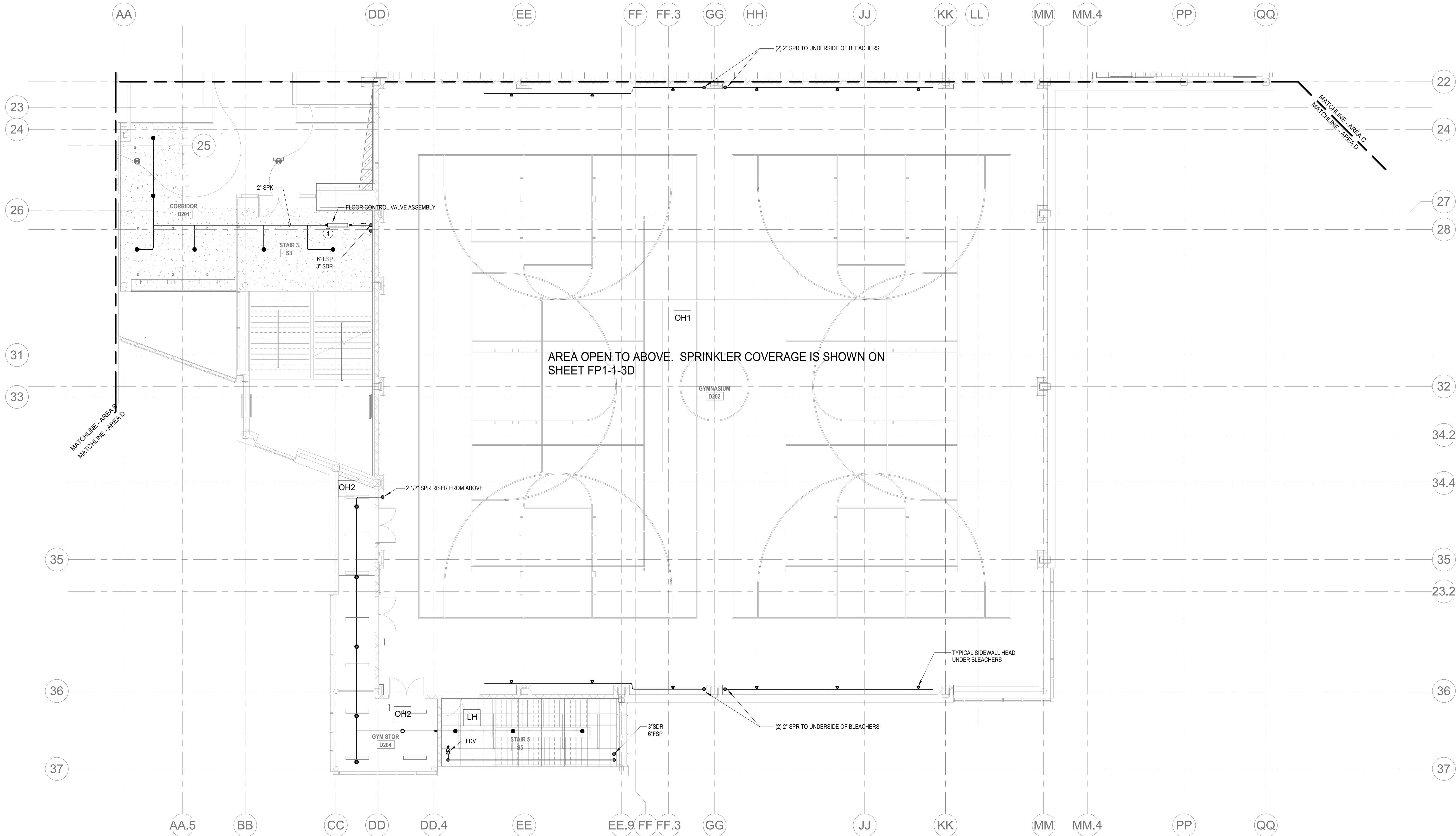
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

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- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

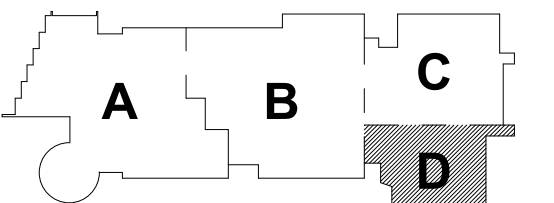


1. FIRE PROTECTION SECOND FLOOR PLAN - AREA D  
1/8" = 1'-0"

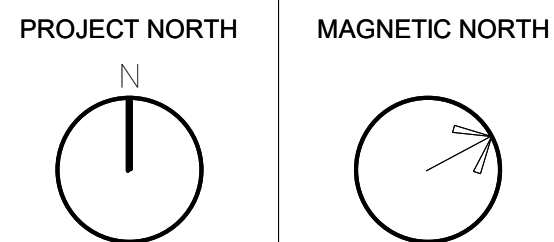
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May 12th, 2023



KEY PLAN



FIRE  
PROTECTION  
SECOND FLOOR  
PLAN - AREA D

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-2D



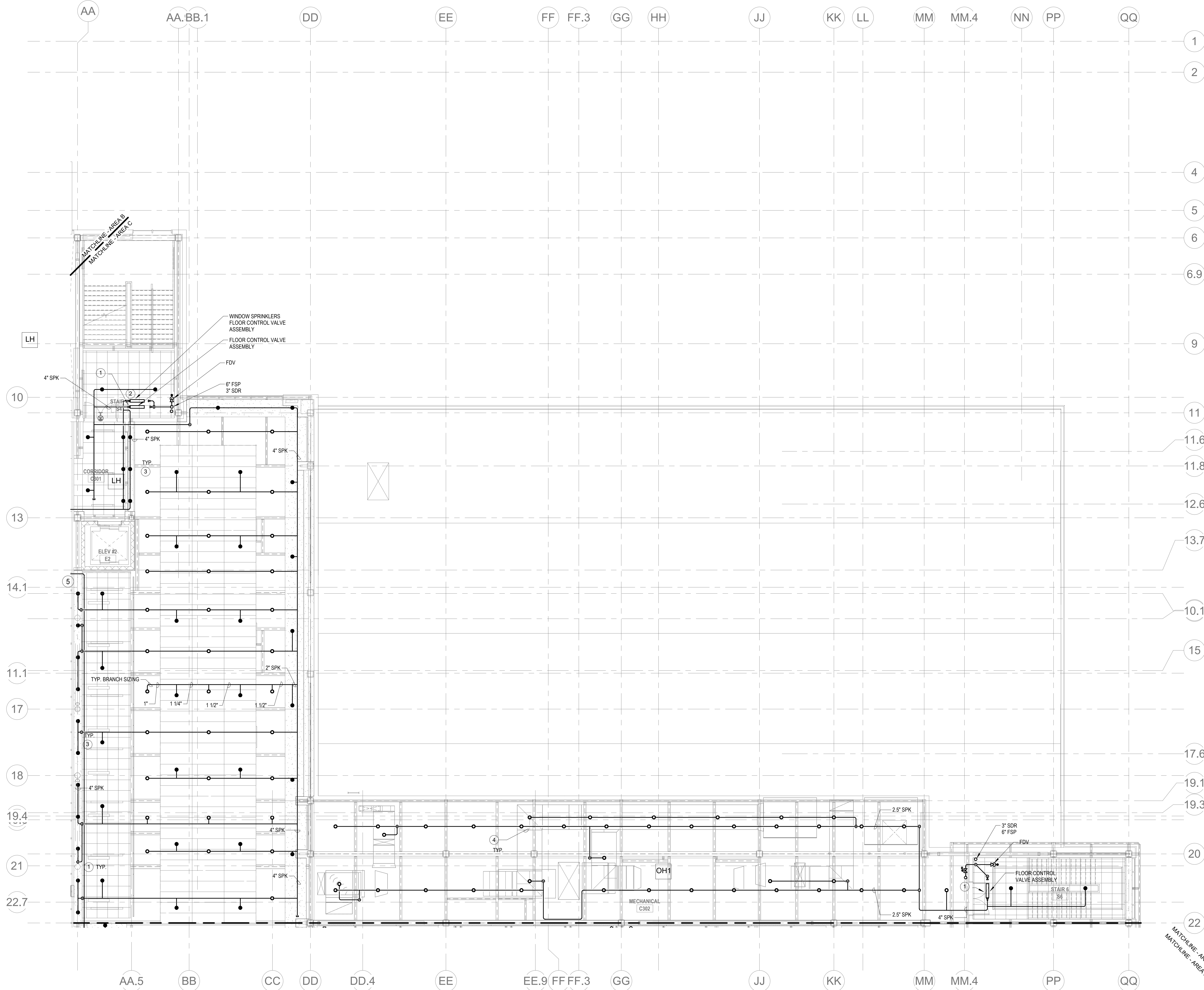
- 1 FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- 2 PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW STRAINER, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION (AS REQUIRED PER DETAIL).
- 3 PROVIDE SPRINKLER COVERAGE ABOVE AND BELOW MEDIA CENTER CEILING. SPRINKLER COVERAGE ABOVE CEILING SHALL BE COORDINATED WITH CEILING ELEMENTS.
- 4 PROVIDE CUSTOM COLOR SPRINKLER HEADS IN CIRCULAR PORTION OF MEDIA CENTER CEILING.
- 5 PROVIDE WINDOW SPRINKLERS WITH 2 IN. OF THE GLASS PARTITIONS IN ACCORDANCE WITH NFPA 13 TABLE 7.8.8.4. THESE SPRINKLERS SHALL BE SPACED NOT MORE THAN 6 FT FROM EACH OTHER.

[illegible]

Wakefield, MA 01880

**FP1-1-3A**





- KEYNOTES
- LH LIGHT HAZARD OCCUPANCY
  - OH ORDINARY HAZARD OCCUPANCY
  - EH EXTRA HAZARD OCCUPANCY

- 1 PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL.)
- 2 PROVIDE FLOOR CONTROL VALVE FOR THE WINDOW SPRINKLERS. THE FLOOR CONTROL VALVE SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION.
- 3 PROVIDE WINDOW SPRINKLERS WITHIN 12" OF THE GLASS PARTITIONS IN ACCORDANCE WITH NFPA 13 TABLE 7.8.4. THESE SPRINKLERS SHALL BE SPACED NOT MORE THAN 8 FT FROM EACH OTHER.
- 4 PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
- 5 FOR ALL PIPING PASSING THROUGH COORDINATE Y9, PROVIDE AN EXPANSION LOOP AND ADD FLEXIBLE COUPLINGS ON EITHER SIDE.
- 6 PROVIDE FLOOR DRAINS WITH TRAP GUARD.

#### FP GENERAL NOTES

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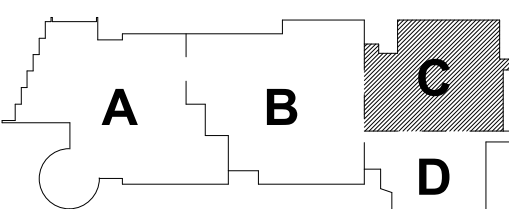
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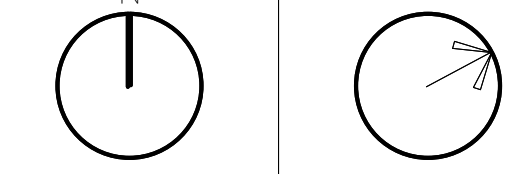
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KEY PLAN

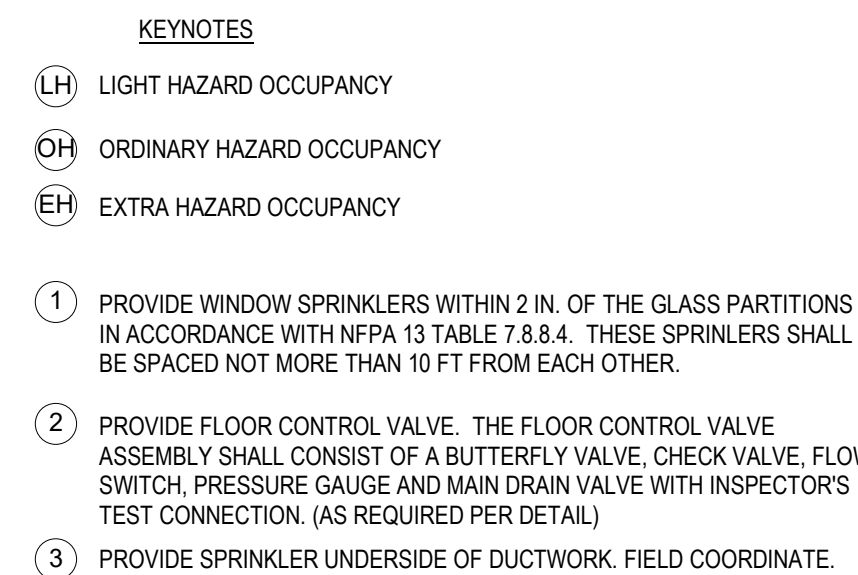
PROJECT NORTH MAGNETIC NORTH



## FIRE PROTECTION THIRD FLOOR PLAN - AREA C

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-3C



1. WITHIN AREA OF SCOPE EXCEED NINE (9) SPINKLER MAN PIPING FROM A NEW CONJUNCTION VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY OF FLOW. CONTRACTOR SHALL PROVIDE SPRINKLER ORT CONNECTIONS TO ALL AREAS AND CONCEALED PENETRS IN AREAS WHERE DROP CEILINGS ARE INDICATED. CONTRACTOR SHALL ADVISE THE OWNER OF ANY CONCEALED PENETRS. SPRINGS SHALL BE ROUTED TO SURFICED WITHIN 12" OF CEILING. DESIGN INTENT IS TO PROVIDE A COVERED SPRINKLER MAN PIPING SYSTEM TO ALLOW ACCESS TO THE SPRINKLER SYSTEM. CONTRACTOR TO PROVIDE SUBMITTAL/ANALYSIS CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
2. PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, ELEVATOR SHAFTS, SERVICE AREAS, ETC. CONTRACTOR SHALL PROTECT THE SPRINKLER HEAD PLUMBING AND HEADS OTHERWISE SUSCEPTIBLE TO DAMAGE.
3. SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6' FEET NEAR STAIR FLOOR OPENINGS.
4. SPRINKLERS SHALL BE PROVIDED NEAR MECHANICAL, DUCTWORK AND/OR GROUPS OF EQUIPMENT. CONTRACTOR SHALL PROVIDE 4" FT IN WITHIN. WHERE DUCTWORK MAY INTERFERE WITH SPRINKLERS, ADDITIONAL COVERING SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
5. CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PROVIDE ELECTRICAL, MECHANICAL, AND/OR PLUMBING ACCESS.
6. SPRINKLERS SHALL BE PROVIDED NEAR ACCESSIBLE LADDERS, PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS NEAR ACCESSIBLE LADDERS AND AT MECHANICAL ROOMS. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
7. DRY PIPES AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40°F.
8. SPRINKLERS SHALL BE PROVIDED NEAR FITTINGS GREATER THAN 4 FT IN WITHIN.
9. PROVIDE GASKS ON EXPOSED PENETRED SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
10. FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE DETERMINED BY THE ARCHITECT. CONTRACTOR SHALL PROVIDE SPRINKLER HEADS TO FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERING AS REQUIRED TO SUIT.
11. GENERAL NOTE AT SOUND BARRIER CURB:
  - ALL NEW FABRICATION AND AUTO COLLISION SHIP A SOUND BARRIER CURBING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPRIGHT FLOOR. CONTRACTOR SHALL PROVIDE PROTECTIVE SPRINKLING OF STEEL BEAMS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALLY SOUND BARRIER CURBING SYSTEM. CONTRACTOR SHALL PROVIDE PROTECTIVE SPRINKLING AS REQUIRED TO SUPPORT MEPPP SYSTEMS COMPONENTS. SPECIALLY "ACoustically TRANSMITTING" SPRINKLING SYSTEM SHALL BE PROVIDED TO ACCESS MEPPP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BEAMS AT LOCATIONS SPECIFICALLY INDICATED ON THE MEPPP DRAWINGS.
12. GENERAL NOTES AT PRE-CAST CONCRETE PANELS LOCATED AT VERTICAL SHOP MEANS:
  - ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE SHALL BE FIELD COORDINATED WITH THE ARCHITECT. CONTRACTOR SHALL COORDINATE WITH THE PRE-CAST PLANK CORE LOCATIONS PENETRATIONS THROUGH THE PRE-CAST CONCRETE. CONTRACTOR SHALL PROVIDE A GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK KAS PART OF THE MEPPP COORDINATION PROCESS.
13. ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE PRE-CAST CONCRETE SHALL BE FIELD COORDINATED WITH THE ARCHITECT. WITH THE PRE-CAST CONCRETE SUB-CRACKING DURING CONSTRUCTION, SHOP DRAWING SHALL BE PROVIDED TO THE ARCHITECT FOR REVIEW. CONTRACTOR SHALL PROVIDE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE "FIELD" WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CRACKING. NO CUTTING AND/OR

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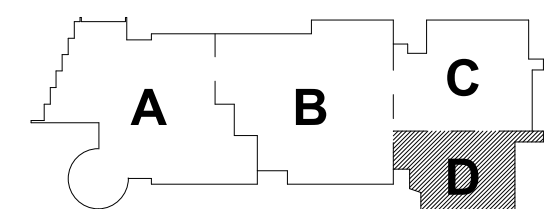
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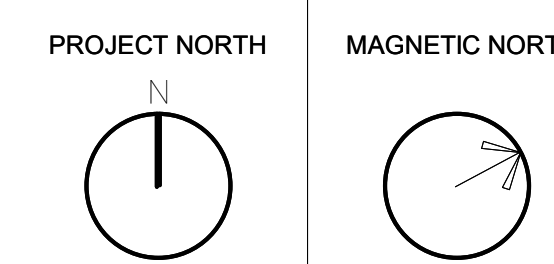
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MECHANICAL • ELECTRICAL • PLUMBING • FIRE PROTECTION

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May 12th, 2023



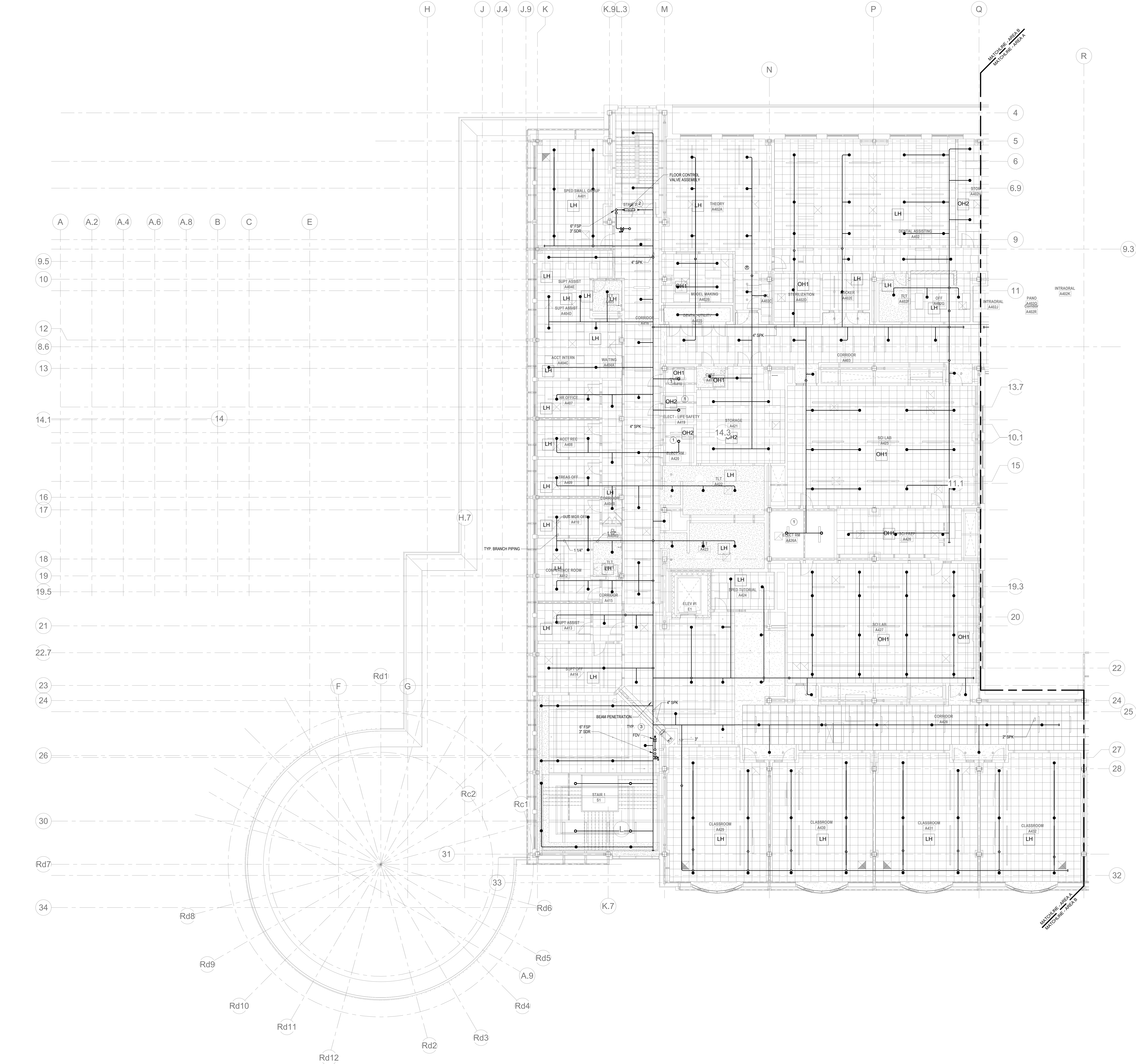
### KEY PLAN



**FIRE  
PROTECTION  
THIRD FLOOR  
PLAN - AREA D**

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

**FP1-1-3D**



1 FIRE PROTECTION FOURTH FLOOR PLAN - AREA A  
1/8" = 1'-0"

### KEYNOTES

- LH LIGHT HAZARD OCCUPANCY
- OH ORDINARY HAZARD OCCUPANCY
- EH EXTRA HAZARD OCCUPANCY

- FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION.

### FP GENERAL NOTES

- WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILING ARE INDICATED. EXTEND NEW 1" ARMED OVER TO NEW CONCEALED PENDENTS. 1" SPRINGS SHALL BE ROUTED TO SPRINGS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
- SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAIR FLOOR OPENINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERE WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
- CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDINGS. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
- DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40°F.
- SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
- PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
- FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
- GENERAL NOTE AT SOUND BARRIER CEILING:  
-IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL, REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEPP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNSTRUT SUPPORTS ATTACHED TO BOTTOM CORN OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEPP SYSTEMS COMPONENTS. SPECIALLY ACoustically RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEPP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEPP DRAWINGS.
- GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
-ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEPP COORDINATION PROCESS.
- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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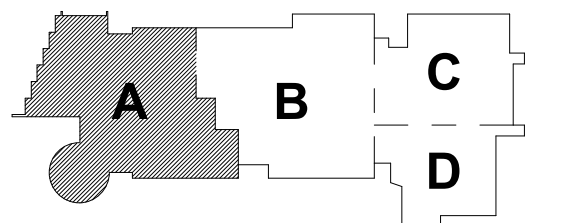
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KEY PLAN

PROJECT NORTH  
MAGNETIC NORTH

## FIRE PROTECTION FOURTH FLOOR PLAN - AREA A

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-4A

- KEYNOTES
- LH LIGHT HAZARD OCCUPANCY
  - OH ORDINARY HAZARD OCCUPANCY
  - EH EXTRA HAZARD OCCUPANCY

- FINAL LOCATION OF ALL PIPING AND SPRINKLER HEADS IN ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.
- PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL)

#### FP GENERAL NOTES

- WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" MINOR VENTS TO NEW CONCEALED PENDENTS. 1" SPIGOTS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
- PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
- SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACINGS OF 6 FEET NEAR STAIR FLOOR OPENINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERE WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
- CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
- SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
- DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40F.
- SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
- PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
- FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
- GENERAL NOTE AT SOUND BARRIER CEILING:  
-IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL, REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUBSYSTEM. CEILING SYSTEM MEWP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED OR INSTALLED ABOVE THE CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEWP SYSTEMS COMPONENTS. SPECIALTY ACoustically RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEWP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEWP DRAWINGS.
- GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
-ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEP-FP COORDINATION PROCESS.
- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

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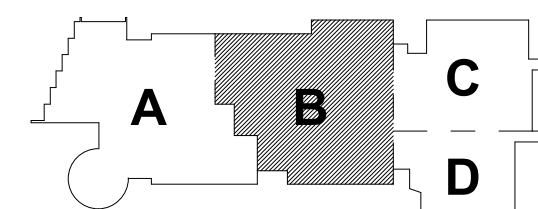
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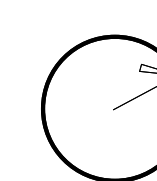
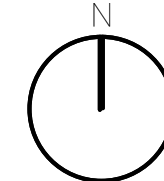
May 12th, 2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



**FIRE  
PROTECTION  
FOURTH FLOOR  
PLAN - AREA B**

Scale: 1/8" = 1'-0"

Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

**FP1-1-4B**

① FIRE PROTECTION Level 4 Area B  
1/8" = 1'-0"

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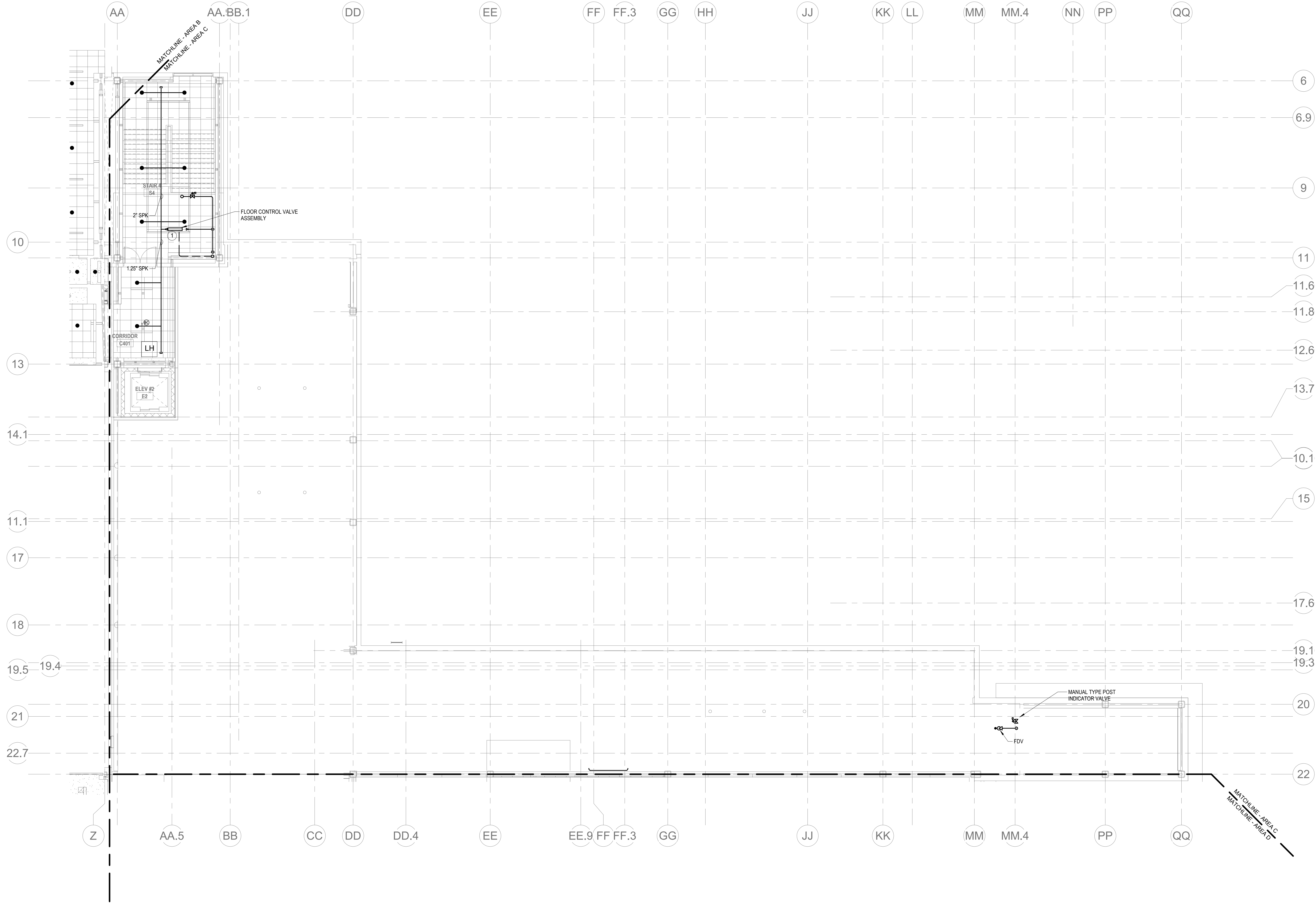
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY  
OH ORDINARY HAZARD OCCUPANCY  
EH EXTRA HAZARD OCCUPANCY

- 1 PROVIDE FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTORS TEST CONNECTION. (AS REQUIRED PER DETAIL)

FP GENERAL NOTES

1. WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" RUNNERS TO NEW CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTOR IS REQUIRED TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
2. PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, GYMNASIUMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
3. SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAIR FLOOR OPENINGS.
4. SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERES WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
5. CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
6. SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
7. DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40F.
8. SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
9. PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
10. FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
11. GENERAL NOTE AT SOUND BARRIER CEILING:  
- IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL, REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MEFP SYSTEMS COMPONENTS ARE NOT ALLOWED TO BE ATTACHED, SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEFP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MEFP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MEFP DRAWINGS.
12. GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
- ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MEFP COORDINATION PROCESS.
- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

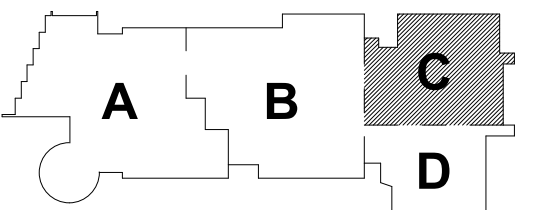


1 FIRE PROTECTION FOURTH FLOOR PLAN - AREA C  
1/8" = 1'-0"

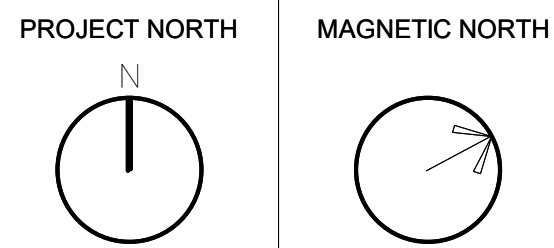
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KEY PLAN

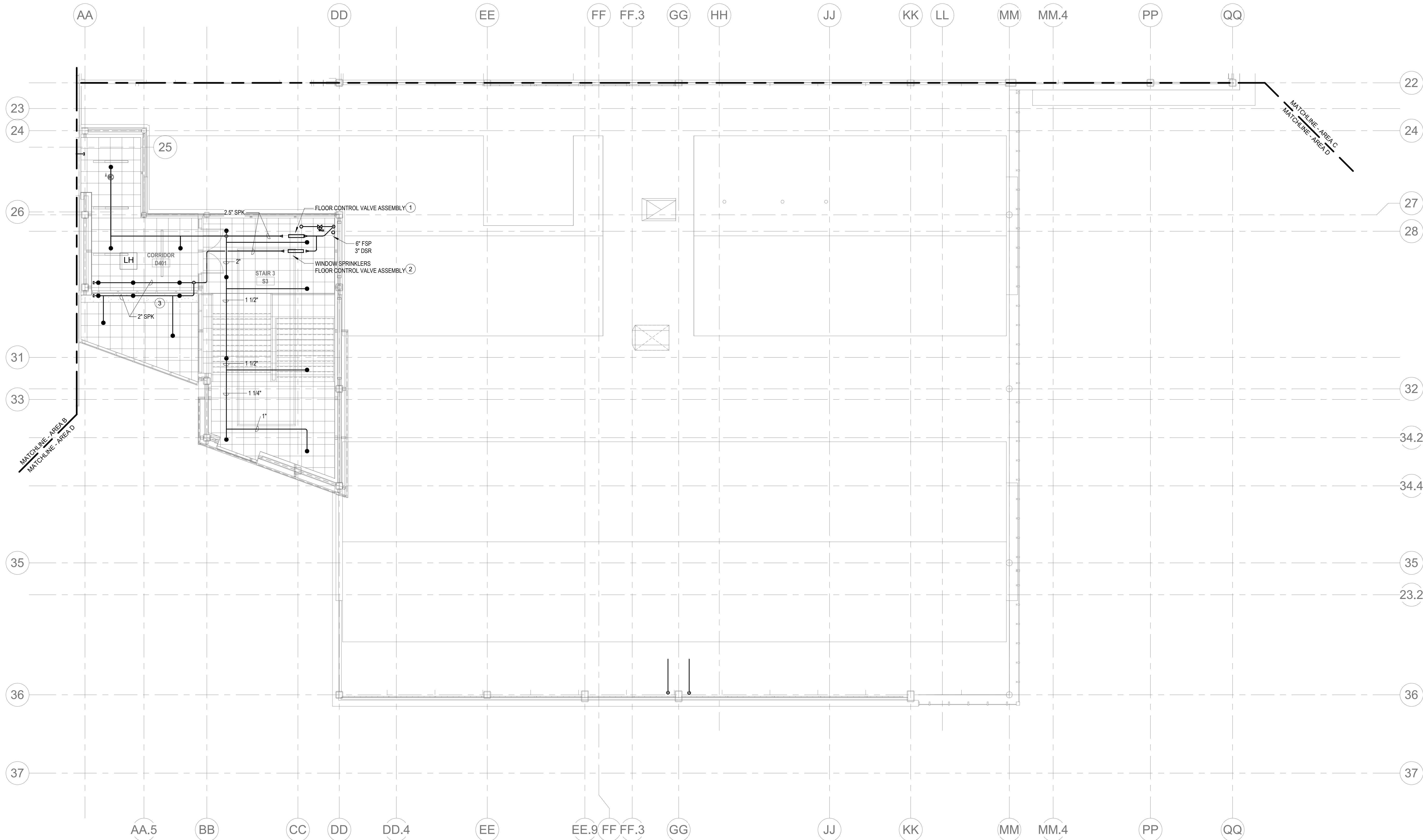


FIRE  
PROTECTION  
FOURTH FLOOR  
PLAN - AREA C

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-4C

① FIRE PROTECTION Level 4 Area D  
1/8" = 1'-0"



#### KEYNOTES

- LH LIGHT HAZARD OCCUPANCY
- OH ORDINARY HAZARD OCCUPANCY
- EH EXTRA HAZARD OCCUPANCY

1. PROVIDE 2.5" FLOOR CONTROL VALVE. THE FLOOR CONTROL VALVE ASSEMBLY SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL)
2. PROVIDE 2.5" FLOOR CONTROL VALVE FOR THE WINDOW SPRINKLERS. THE FLOOR CONTROL VALVE SHALL CONSIST OF A BUTTERFLY VALVE, CHECK VALVE, FLOW SWITCH, PRESSURE GAUGE AND MAIN DRAIN VALVE WITH INSPECTOR'S TEST CONNECTION.
3. PROVIDE WINDOW SPRINKLERS WITHIN 2 IN. OF THE GLASS PARTITIONS IN ACCORDANCE WITH NFPA 13 TABLE 7.8.8.4. THESE SPRINKLERS SHALL BE SPACED NOT MORE THAN 15 FT FROM EACH OTHER.

#### FP GENERAL NOTES

1. WITHIN AREA OF SCOPE EXTEND NEW 4" SPRINKLER MAIN PIPING FROM A NEW ZONE CONTROL VALVE. CONTRACTOR SHALL SIZE BRANCH PIPING TO ALLOW FOR VELOCITY WILL REMAIN BELOW 20 FPS. PROVIDE QUICK RESPONSE UPRIGHTS IN OPEN CEILING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" ARM/OVERS TO NEW CONCEALED PENDENTS. 1" SPRIGS SHALL BE ROUTED TO UPRIGHTS WITHIN 12" OF DECK. DESIGN INTENT IS TO PROVIDE A CODE COMPLIANT SPRINKLER LAYOUT FOR THE NEW PROGRAM LAYOUT. CONTRACTORS REQUIRE TO SUBMIT HYDRAULIC CALCULATIONS TERMINATED AT THE HYDRANT OUTLET.
2. PROVIDE PROTECTIVE SPRINKLER GUARDS ON SPRINKLER HEADS LOCATED BELOW 7'-0" 4'-0" IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, DYNAMISMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
3. SPRINKLERS SHALL BE PROVIDED WITH MAXIMUM SPACING OF 6 FEET NEAR STAIR FLOOR OPENINGS.
4. SPRINKLERS SHALL BE PROVIDED BENEATH MECHANICAL DUCTWORK AND/OR GROUPS OF MECHANICAL DUCTWORK GREATER THAN 4 FT IN WIDTH. WHERE DUCTWORK INTERFERE WITH SPRINKLERS, ADDITIONAL COVERAGE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
5. CONCEALED SPRINKLER HEAD FINISHES TO MATCH CEILING COLOR. UNLESS OTHERWISE NOTED REFER TO ARCHITECTURAL DRAWINGS.
6. SPRINKLERS SHALL BE PROVIDED BENEATH ACCESSIBLE LANDINGS. PIPING AND FITTINGS SHALL BE PROVIDED TO SPRINKLERS BENEATH ACCESSIBLE LANDINGS AND AT MAIN LANDING. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
7. DRY PENDENTS AND/OR DRY SIDEWALLS SHALL BE PROVIDED IN ROOMS/AREAS WHERE THE OPERATING TEMPERATURE IS LESS THAN 40F.
8. SPRINKLERS SHALL BE PROVIDED BENEATH FIXTURES GREATER THAN 4 FT IN WIDTH.
9. PROVIDE CAGES ON EXPOSED PENDENT SPRINKLER HEADS AT THE UNDERSIDE OF MEZZANINES.
10. FINAL LOCATION OF UPRIGHT SPRINKLER HEADS IN AREAS WITHOUT CEILINGS ARE TO BE COORDINATED WITH STRUCTURE AND EQUIPMENT OF ALL OTHER TRADES TO ENSURE FULL COMPLIANCE WITH NFPA 13. PROVIDE ADDITIONAL SPRINKLER COVERAGE AS REQUIRED TO SUIT.
11. GENERAL NOTE AT SOUND BARRIER CEILING:  
IN THE METAL FABRICATION AND AUTO COLLISION SHOP A SOUND BARRIER CEILING SYSTEM IS INSTALLED BETWEEN STEEL BEAMS ON THE UNDERSIDE OF THE UPPER LEVEL FLOOR STRUCTURE. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS AND DETAILS DRAWINGS FOR ADDITIONAL INFORMATION. THIS IS A SPECIALTY SOUND ISOLATION SUSPENDED CEILING SYSTEM. MERFP SYSTEM COMPONENTS ARE NOT ALLOWED TO BE ATTACHED/SUSPENDED, OR INSTALLED ABOVE THIS CEILING SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE. EACH SUB-CONTRACTOR SHALL PROVIDE INSTURTR SUPPORTS ATTACHED TO BOTTOM CORO OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MERFP SYSTEM COMPONENTS. SPECIALTY ADJUSTABLY RATED ACCESS PANELS MAY BE ALLOWED TO ACCESS MERFP SYSTEMS COMPONENTS LOCATED ABOVE THE SOUND BARRIER SYSTEM ON THE LIMITED BASES AT LOCATIONS SPECIFICALLY INDICATED ON THE MERFP DRAWINGS.
12. GENERAL NOTES AT PRE-CAST CONCRETE PLANKS LOCATED AT VOCATIONAL SHOP MEZZANINES:  
ALL HVAC COMPONENTS THAT REQUIRE PENETRATIONS THROUGH PRE-CAST CONCRETE PLANK AT MECHANICAL MEZZANINE FLOOR STRUCTURE SHALL BE COORDINATED WITH THE PRE-CAST PLANK CORE LOCATIONS. PENETRATIONS THROUGH THE PRE-CAST PLANK ARE ONLY ALLOWED THROUGH THE CORES. GENERAL CONTRACTOR MUST COORDINATE ALL OPENINGS IN THE PRE-CAST CONCRETE PLANK AS PART OF THE MERFP COORDINATION PROCESS.  
  
ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE ALLOWED IN THE FIELD WITHOUT PRIOR REVIEW AND APPROVAL BY THE PRE-CAST CONCRETE SUB-CONTRACTOR. NO CUTTING AND/OR PATCHING OF THE PRE-CAST CONCRETE PANELS IS ALLOWED IN THE FIELD.

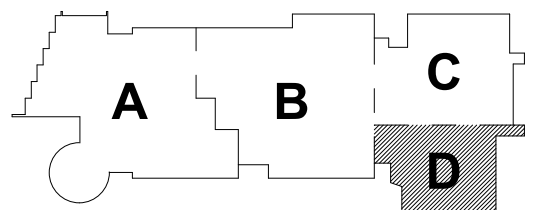
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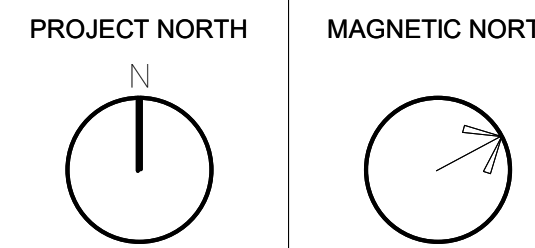
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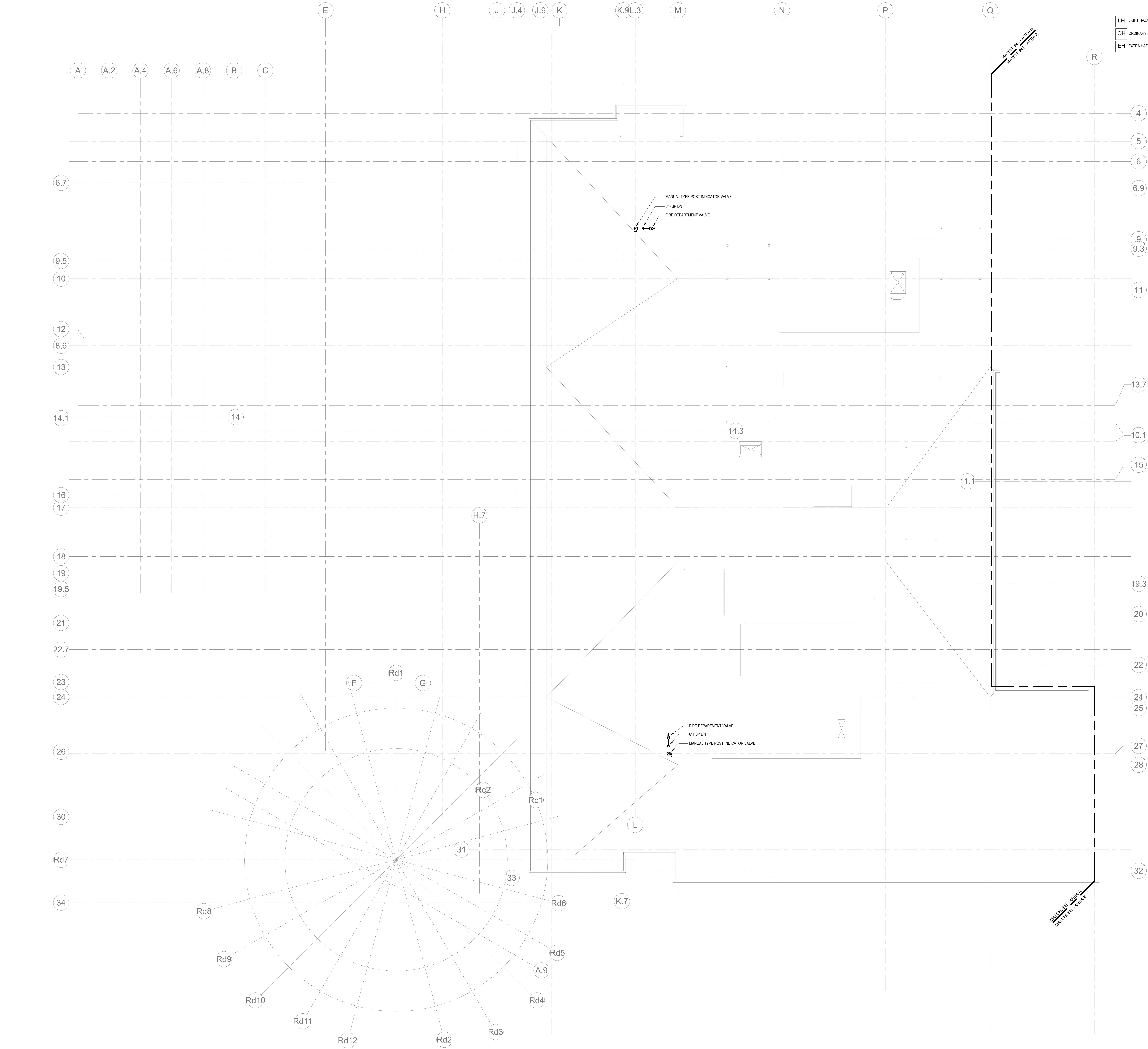
#### KEY PLAN



## FIRE PROTECTION FOURTH FLOOR PLAN - AREA D

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-1-4D



KEYNOTES

LH	LIGHT HAZARD OCCUPANCY
OH	ORDINARY HAZARD OCCUPANCY
EH	EXTRA HAZARD OCCUPANCY



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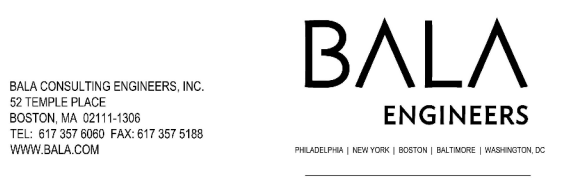
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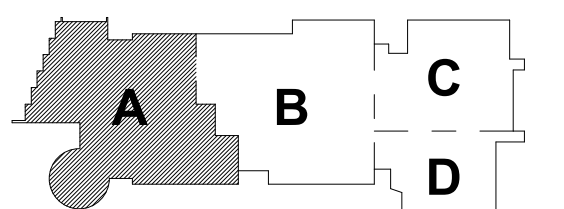
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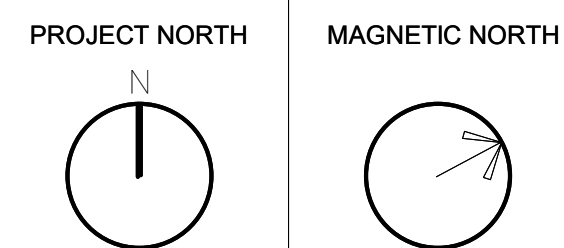
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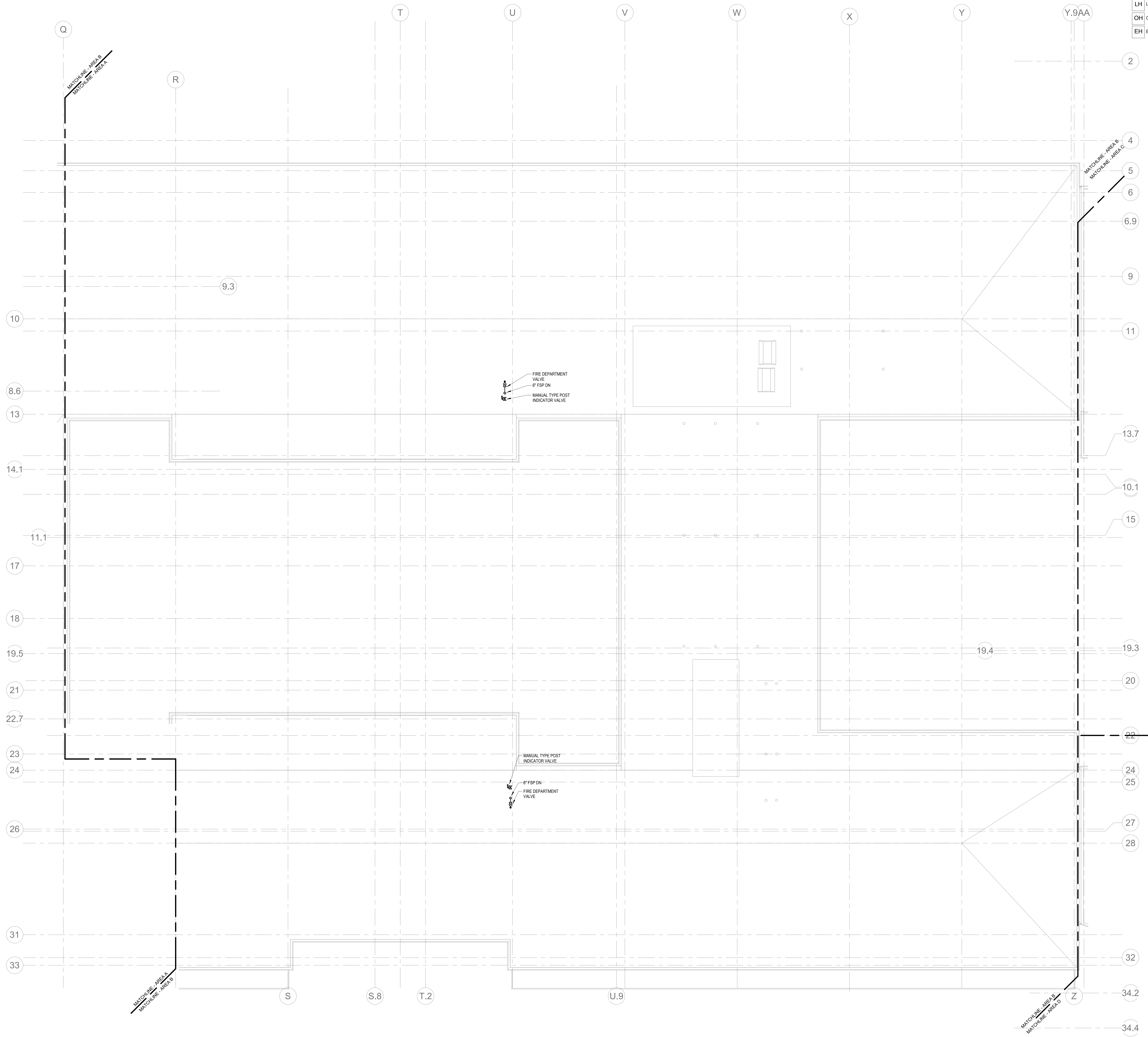
KEY PLAN



FIRE  
PROTECTION  
ROOF PLAN -  
AREA A

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-2-1A



KEYNOTES

LH	LIGHT HAZARD OCCUPANCY
OH	ORDINARY HAZARD OCCUPANCY
EH	EXTRA HAZARD OCCUPANCY

1 FIRE PROTECTION ROOF PLAN - AREA B  
1/8" = 1'-0"

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A B C D

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

FIRE  
PROTECTION  
ROOF PLAN -  
AREA B

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

FP1-2-1B

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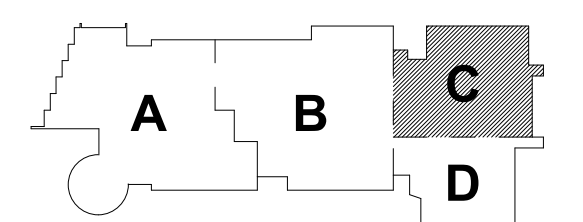
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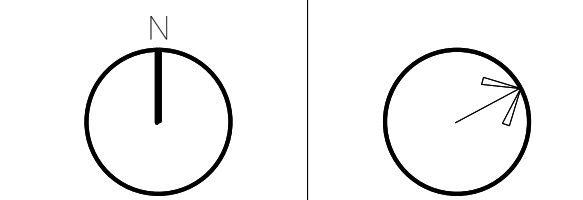
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### KEY PLAN

PROJECT NORTH	MAGNETIC NORTH
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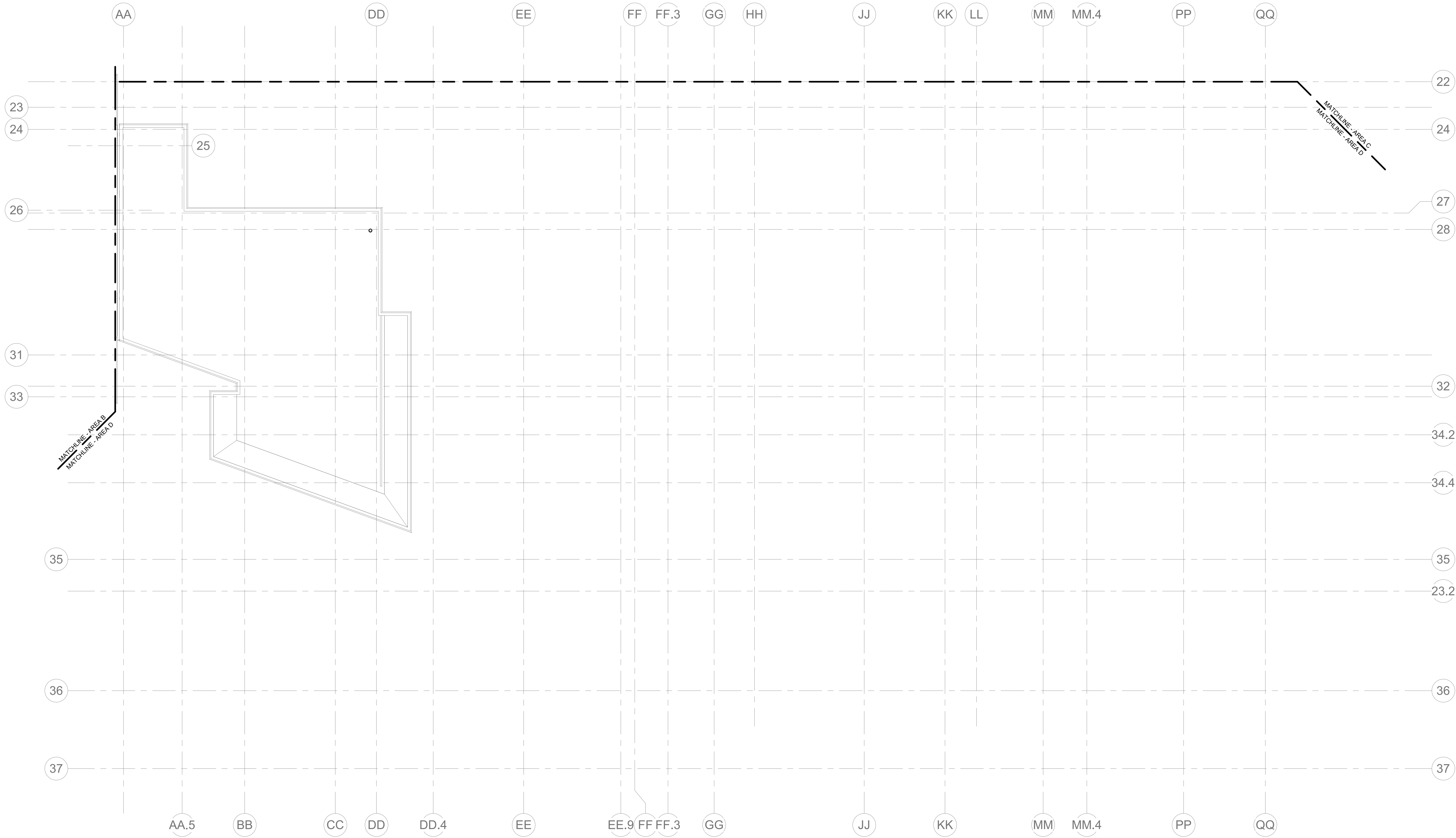
**FIRE  
PROTECTION  
ROOF PLAN -  
AREA C**

Scale: 1/8" = 1'-0"  
Job No.: 60-20-409  
Drawn By: Author  
Date: May 12th, 2023

**FP1-2-1C**

KEYNOTES

LH	LIGHT HAZARD OCCUPANCY
OH	ORDINARY HAZARD OCCUPANCY
EH	EXTRA HAZARD OCCUPANCY



FIRE PROTECTION ROOF PLAN - AREA D  
1/8" = 1'-0"

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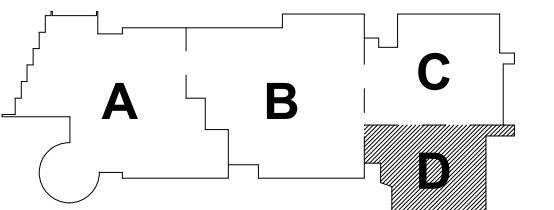
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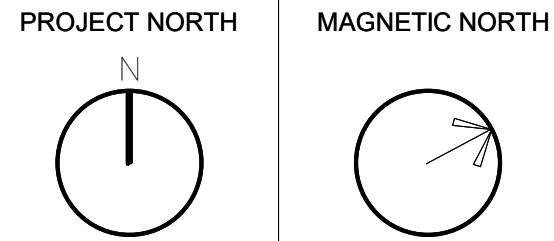
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KEY PLAN



FIRE  
PROTECTION  
ROOF PLAN -  
AREA D

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Date: May 12th, 2023

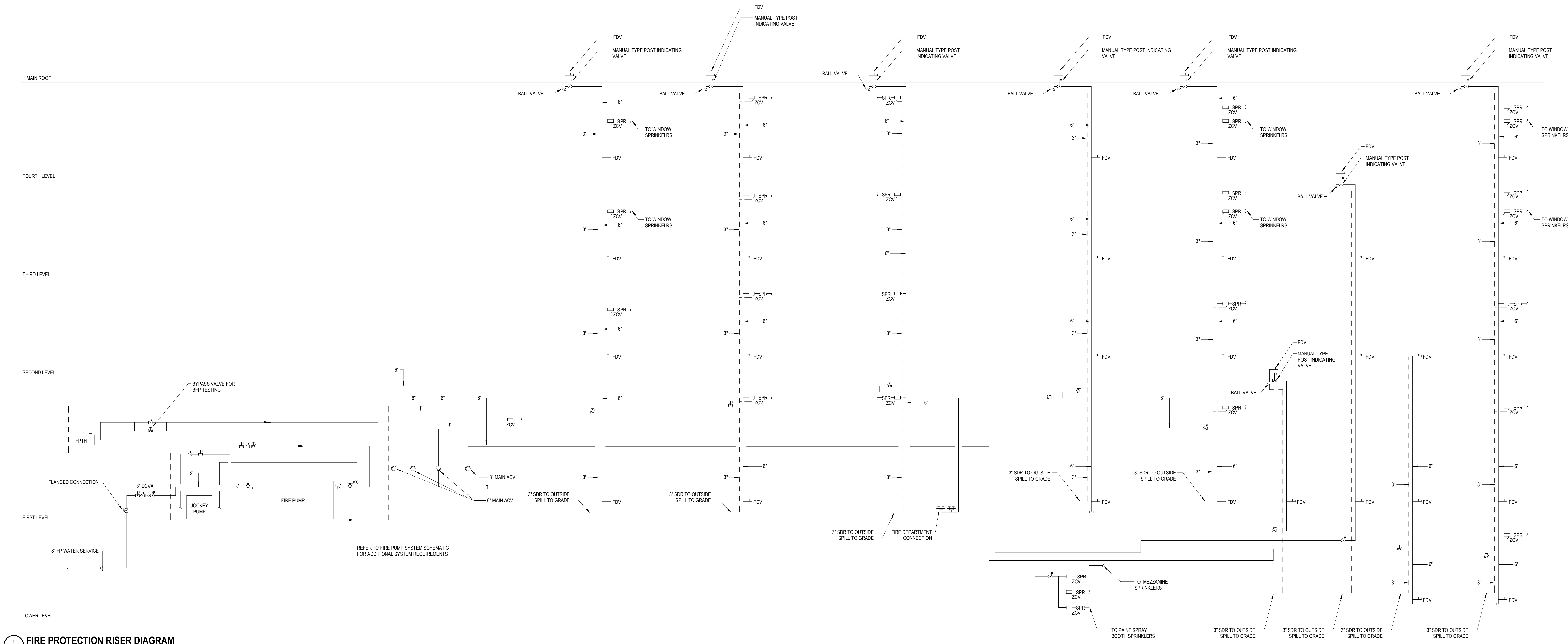
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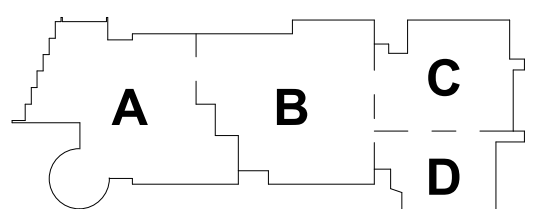


1 FIRE PROTECTION RISER DIAGRAM  
FP5-0-1 NONE

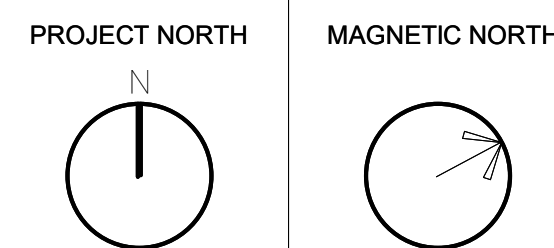
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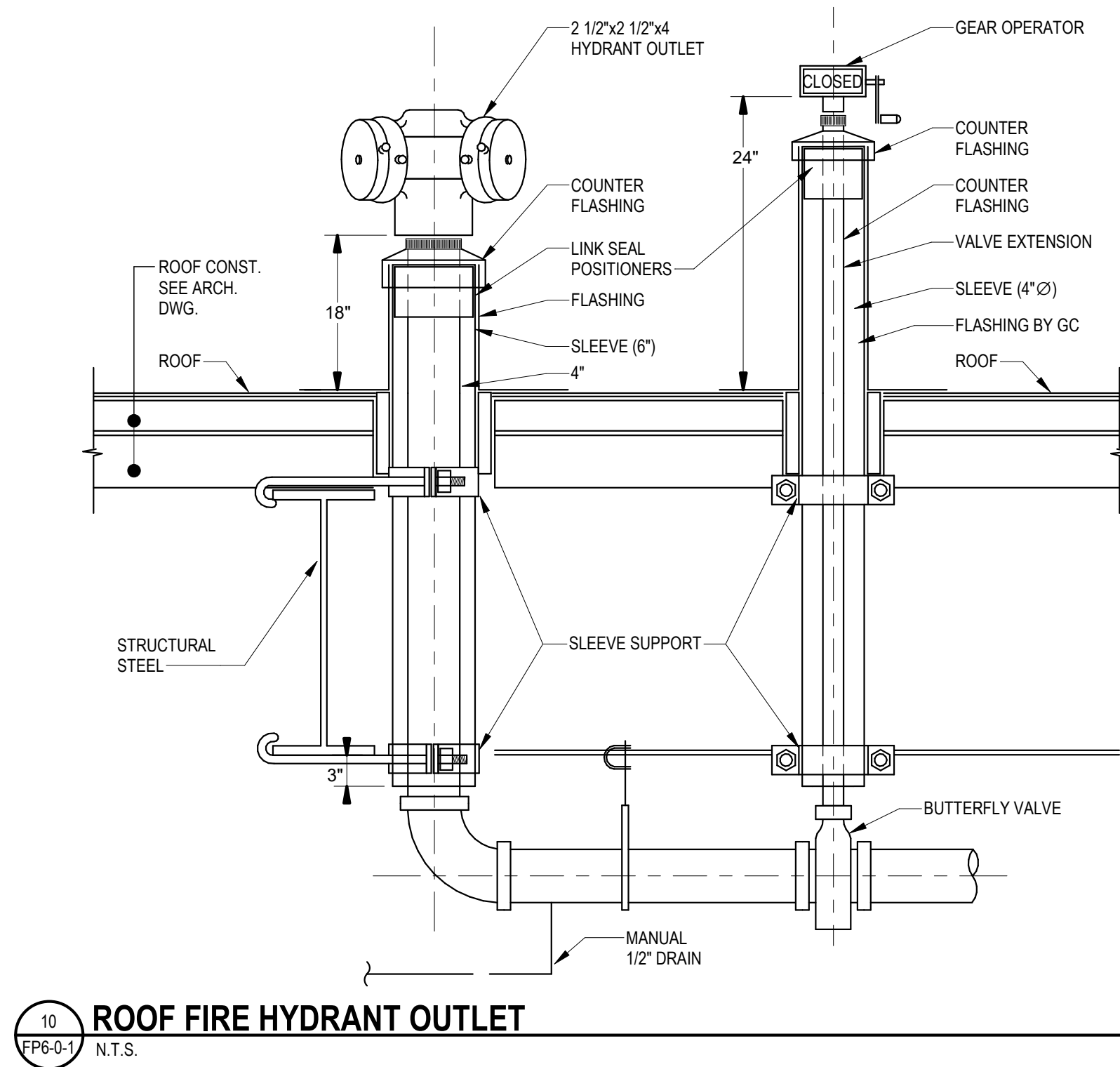
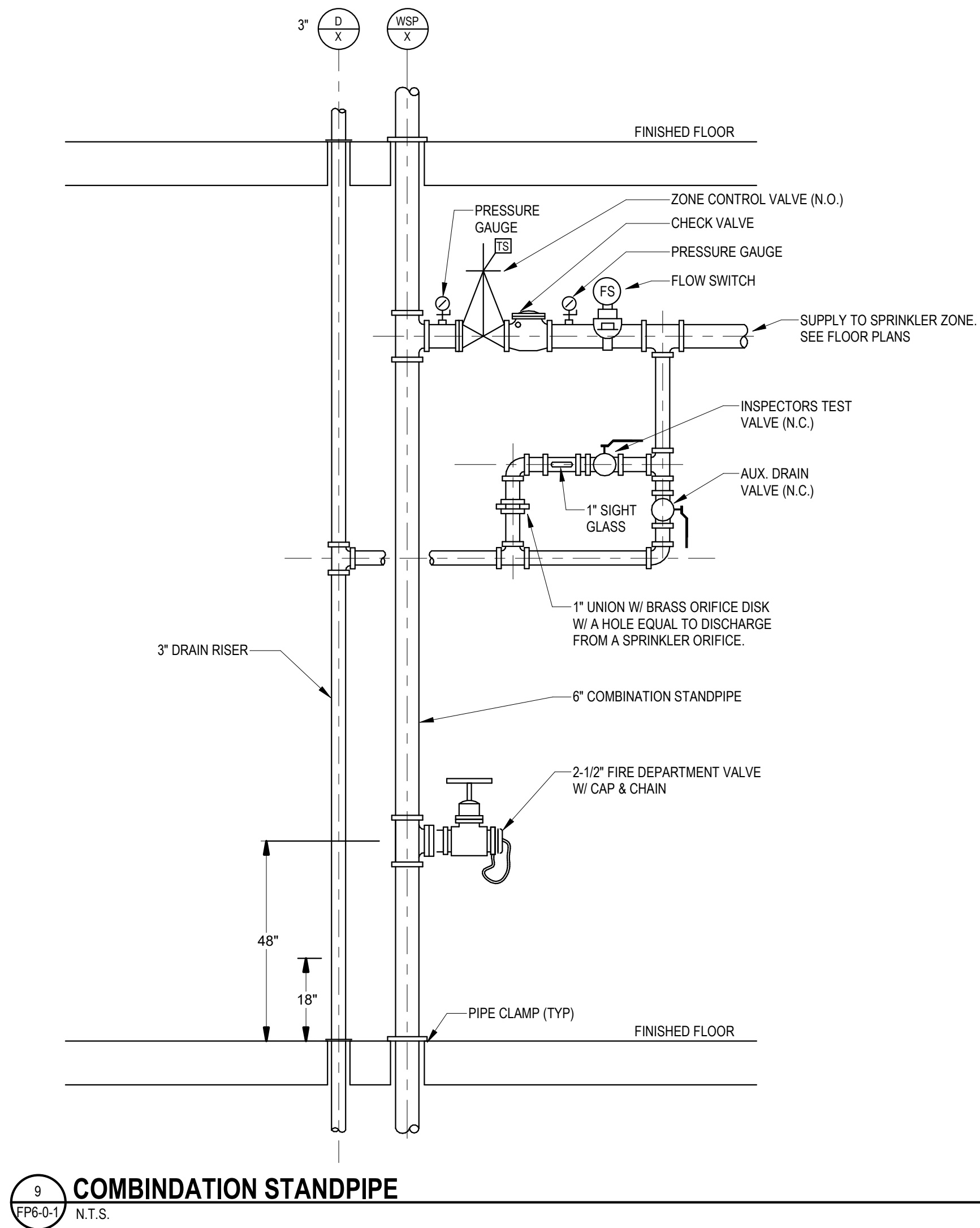
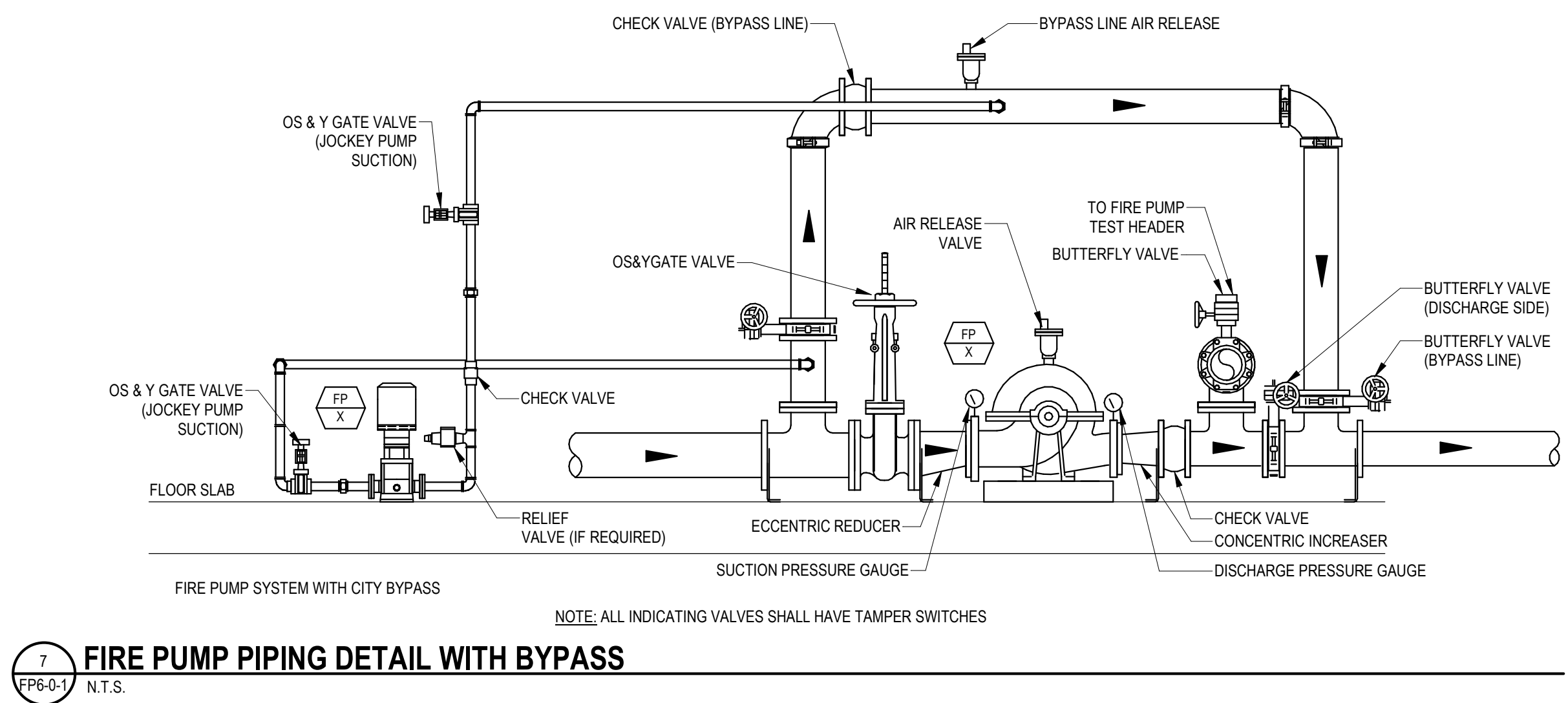
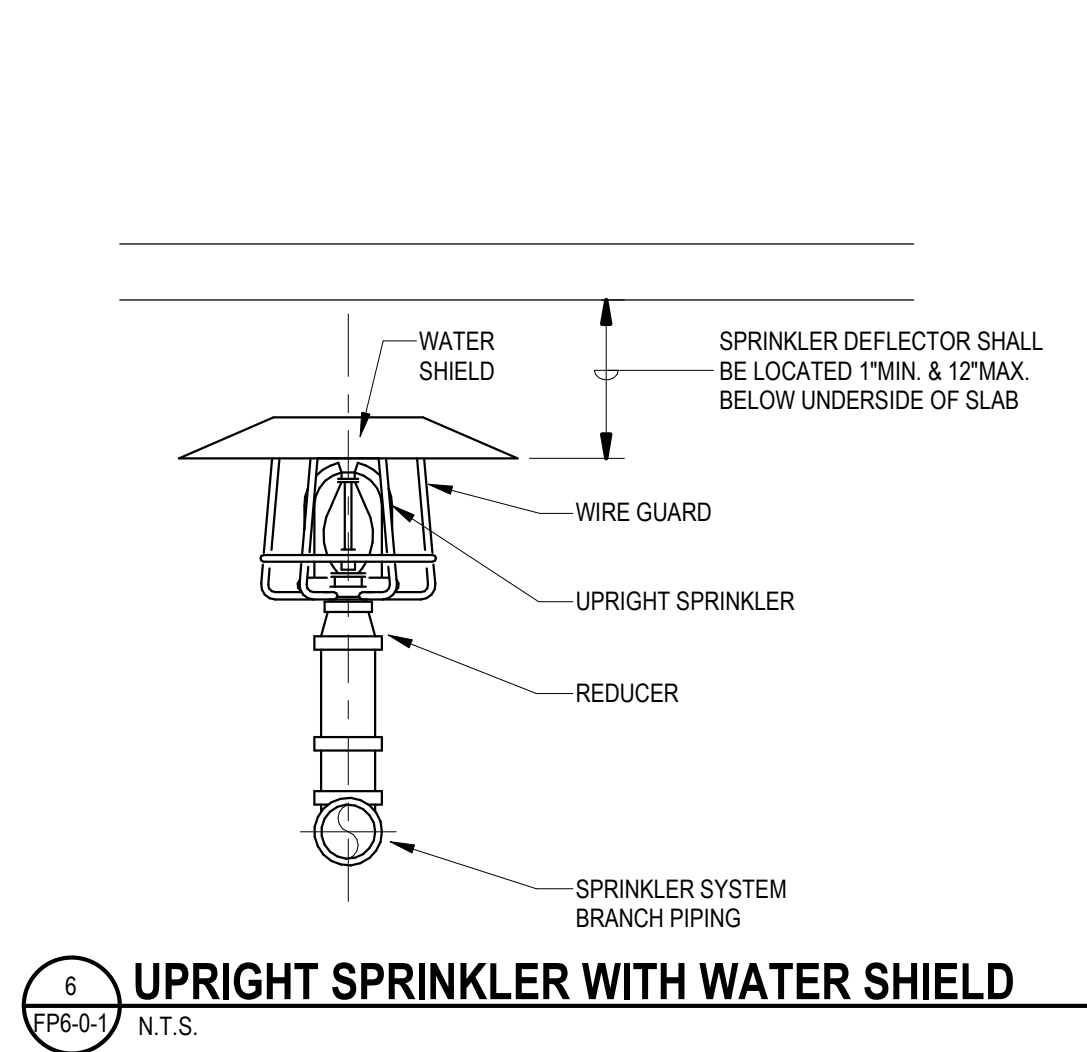
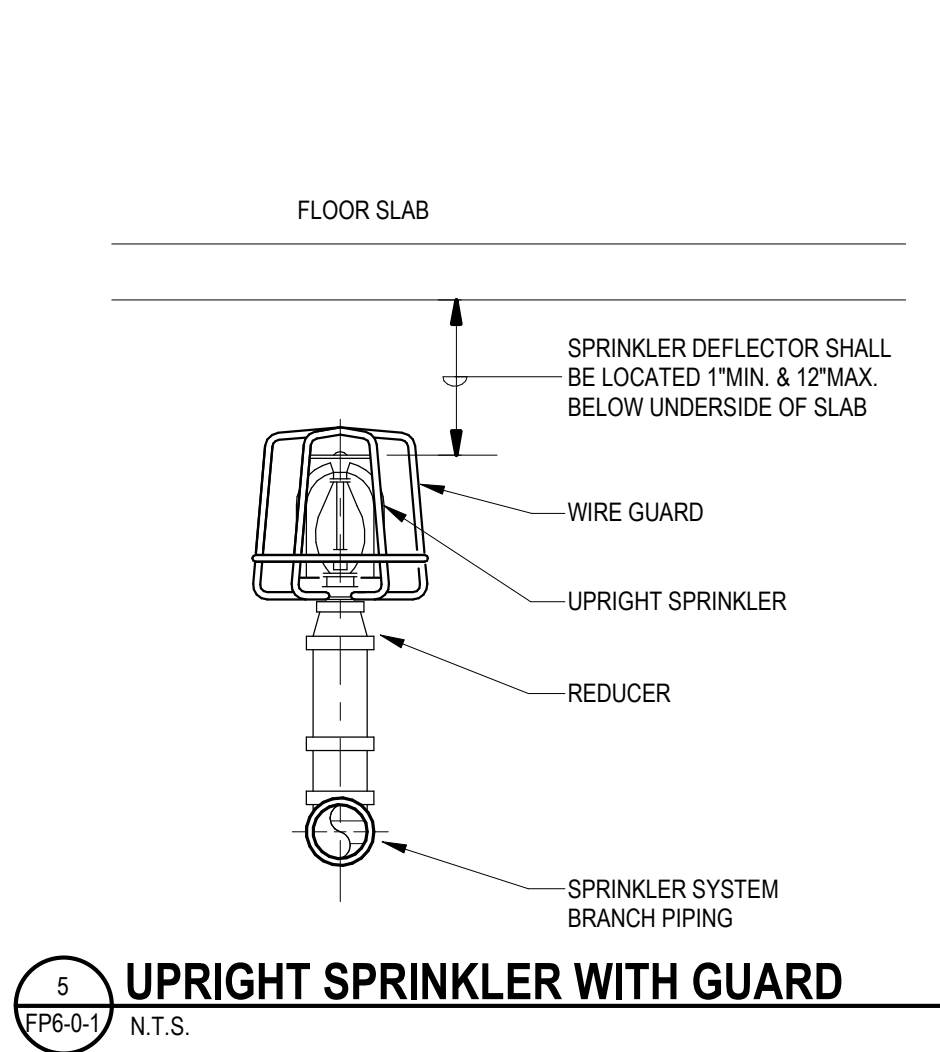
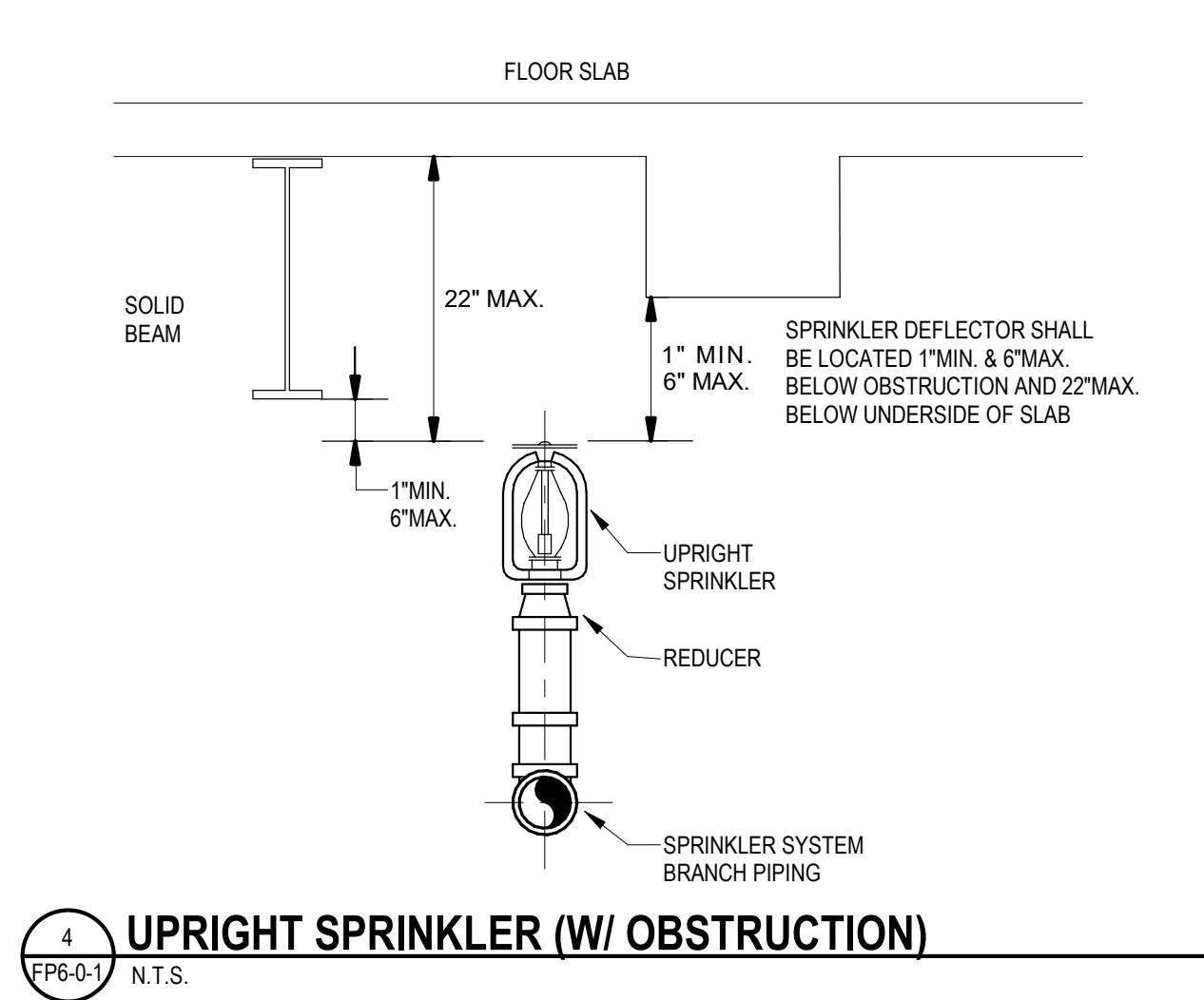
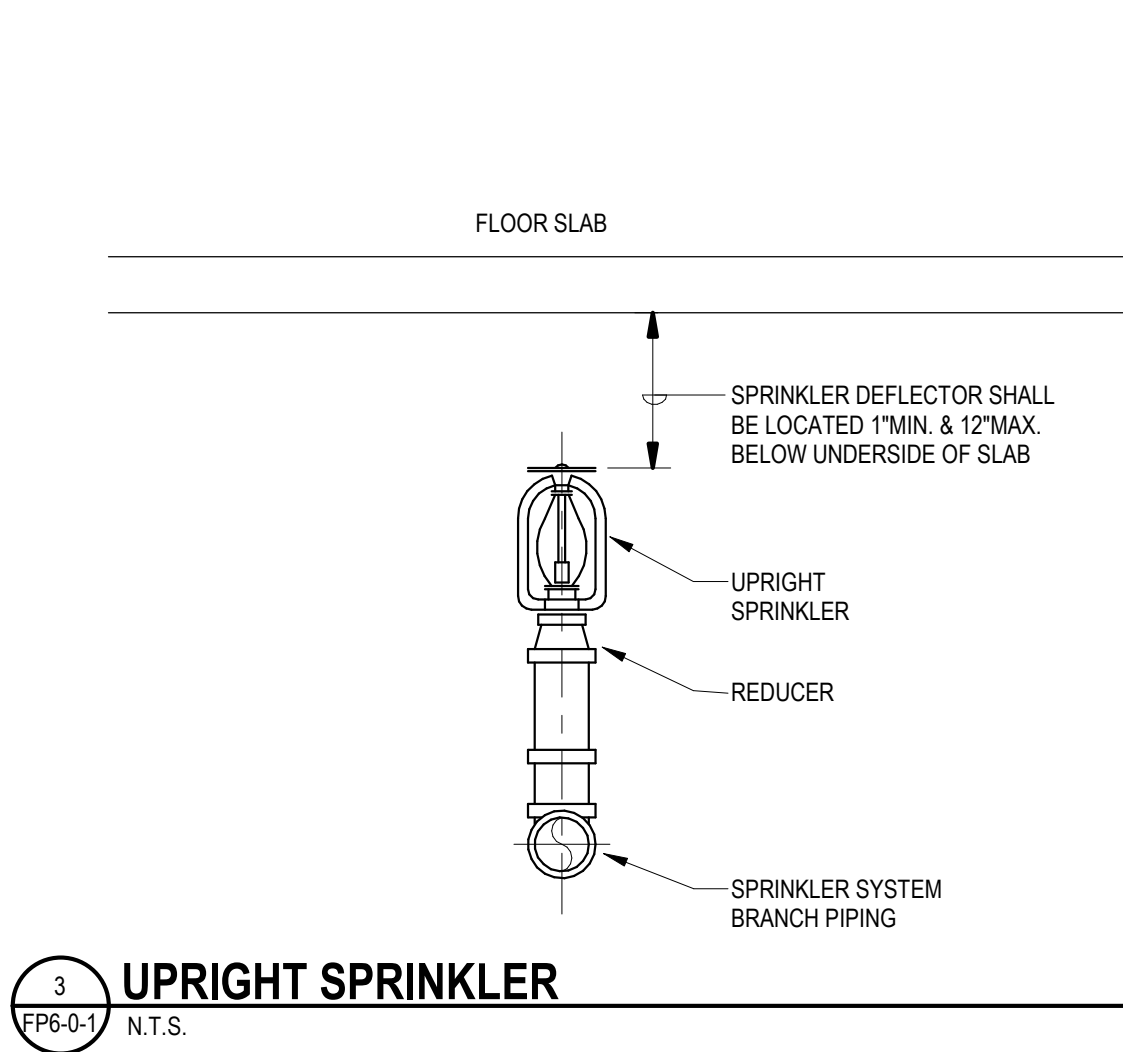
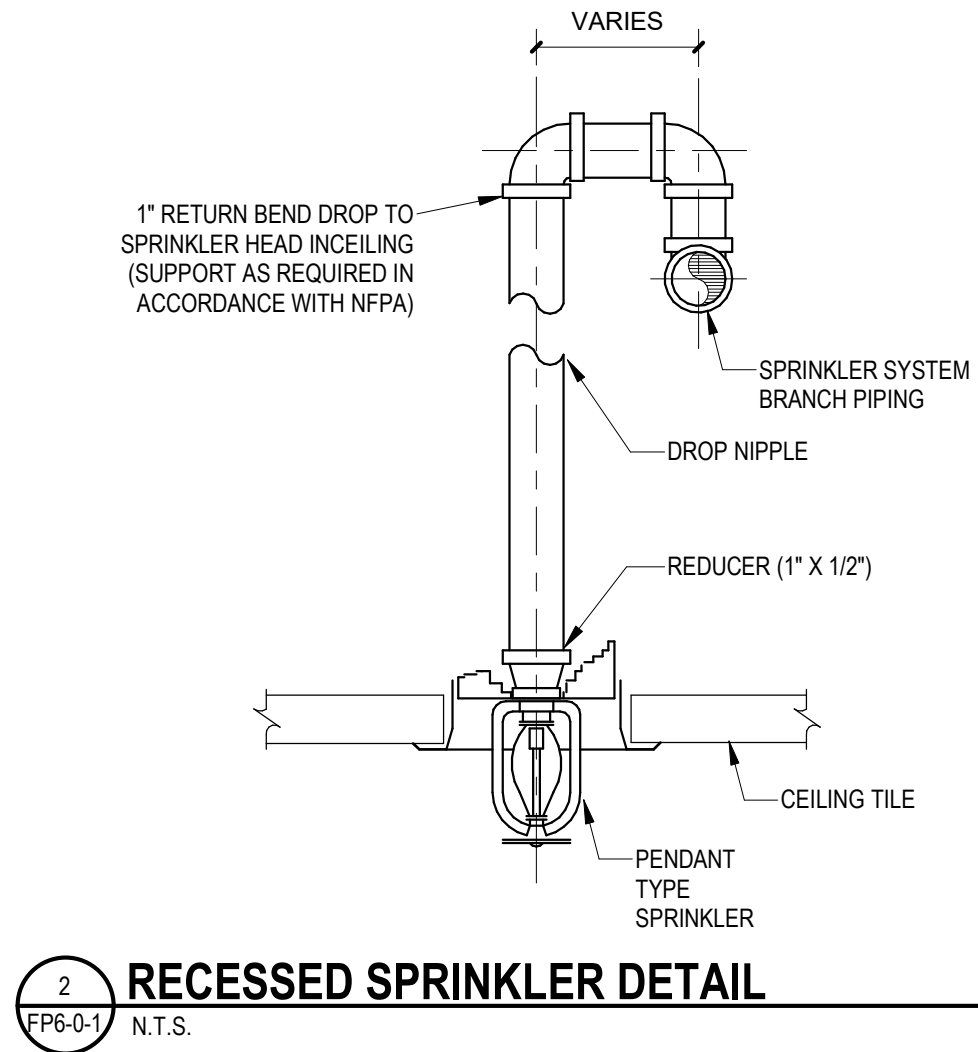
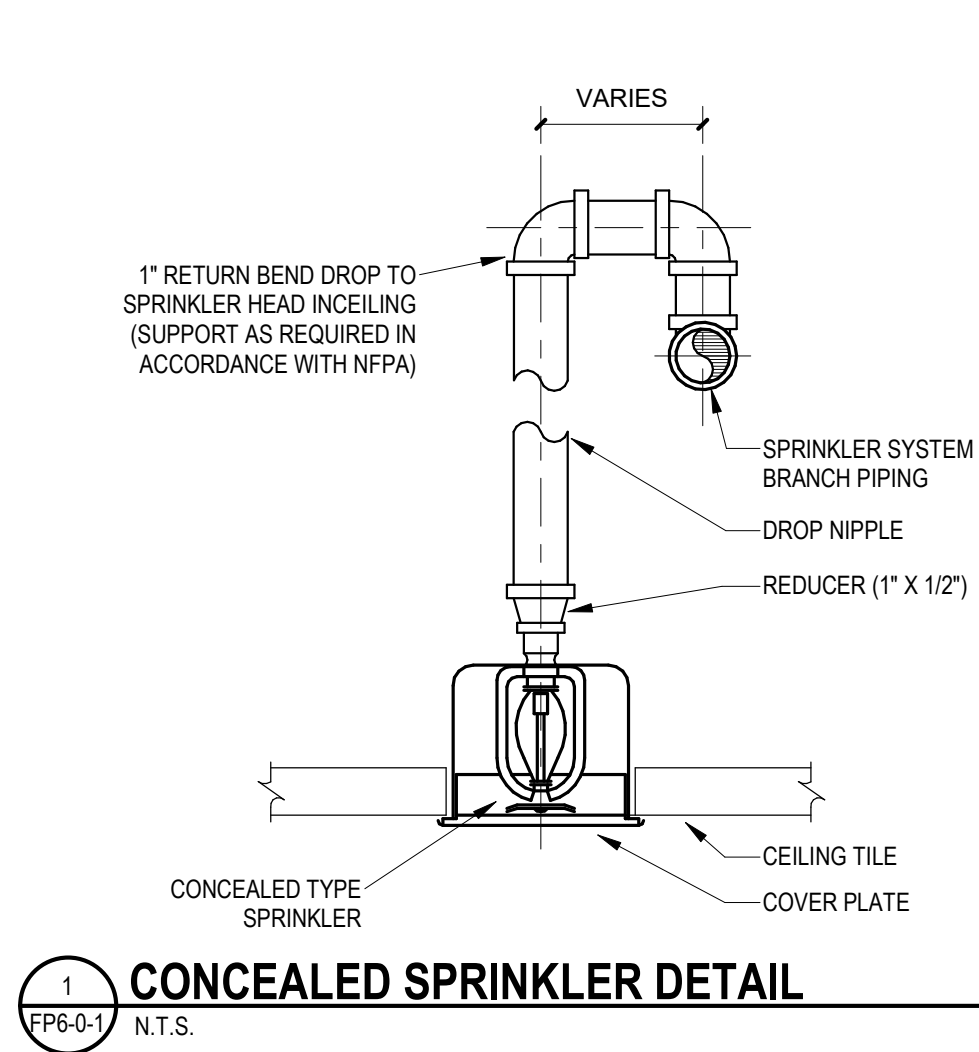


KEY PLAN



FIRE  
PROTECTION  
RISER DIAGRAM

Scale: NONE  
Job No.: 60-20-409  
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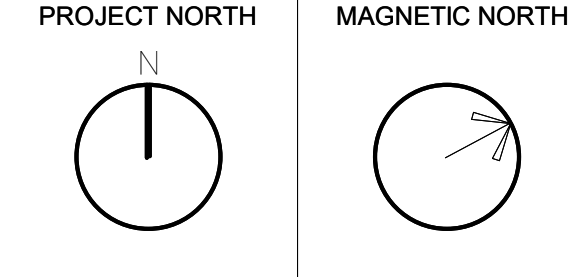
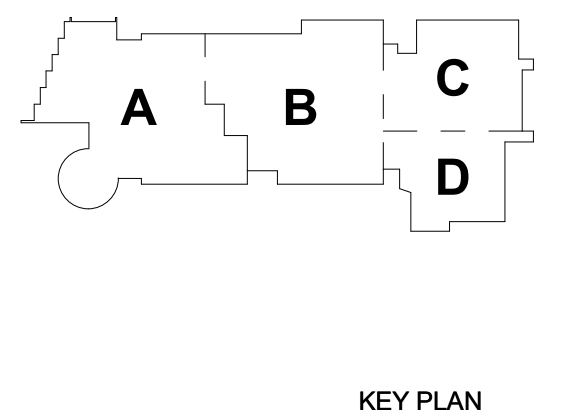
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