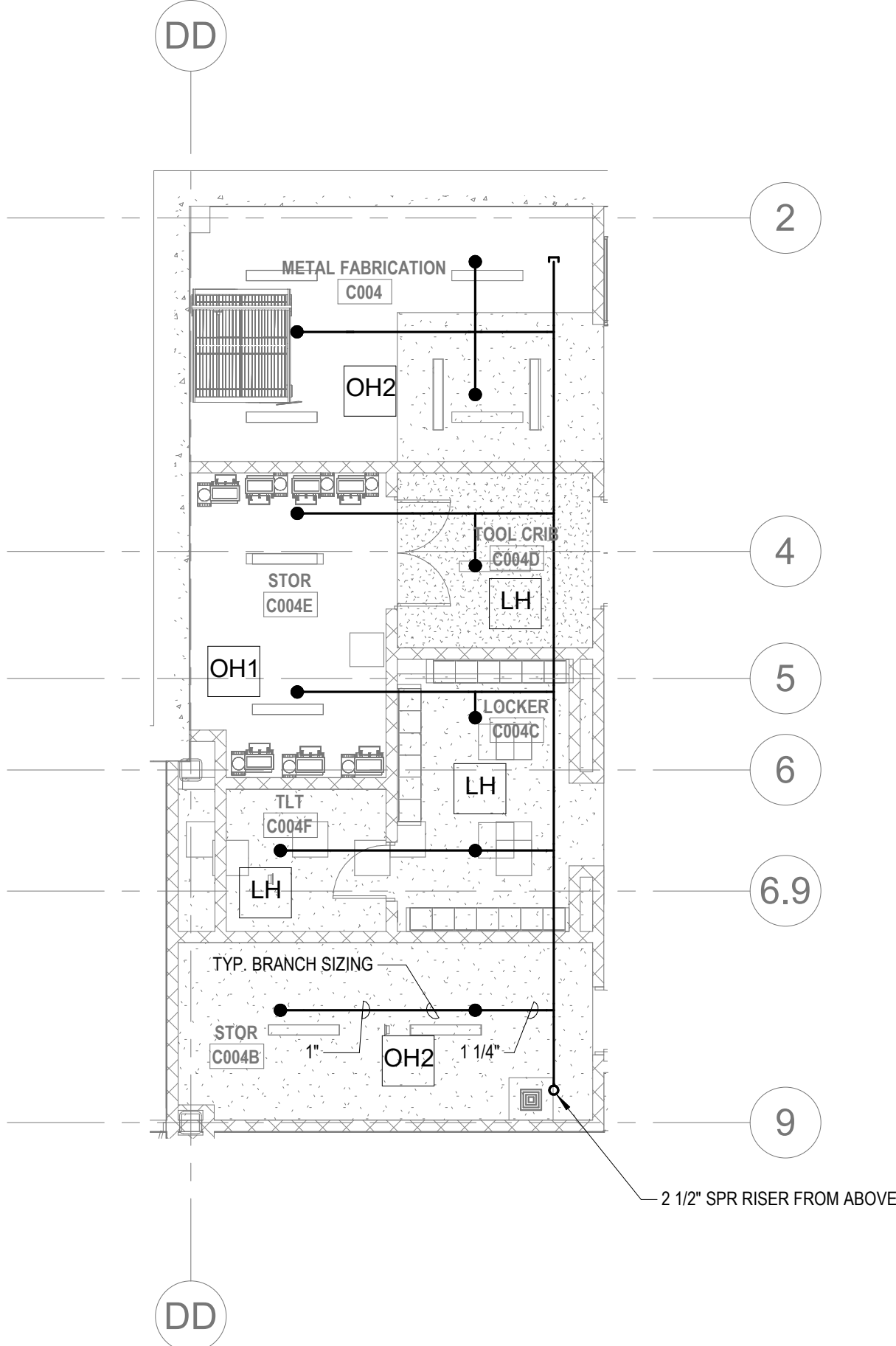
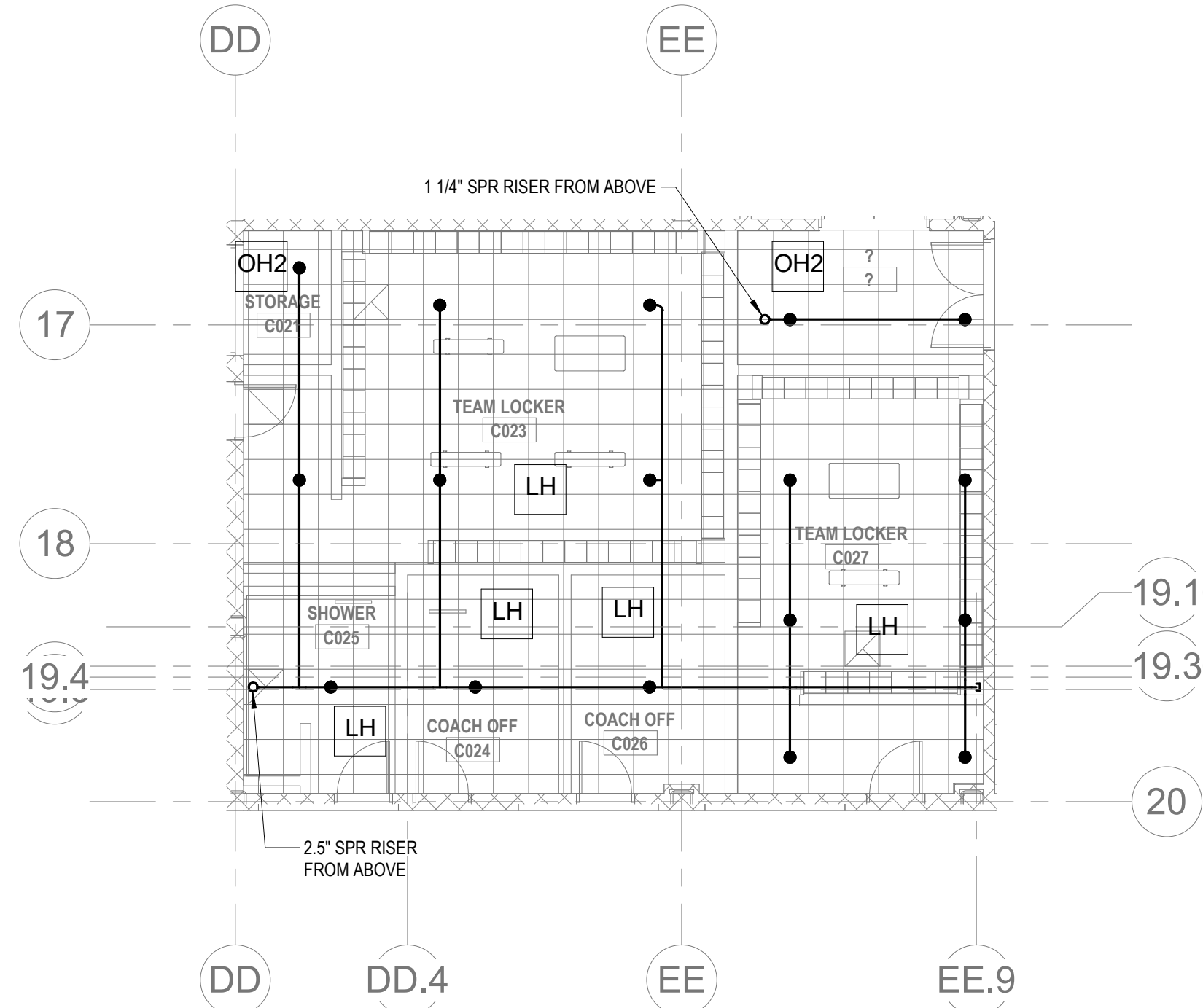
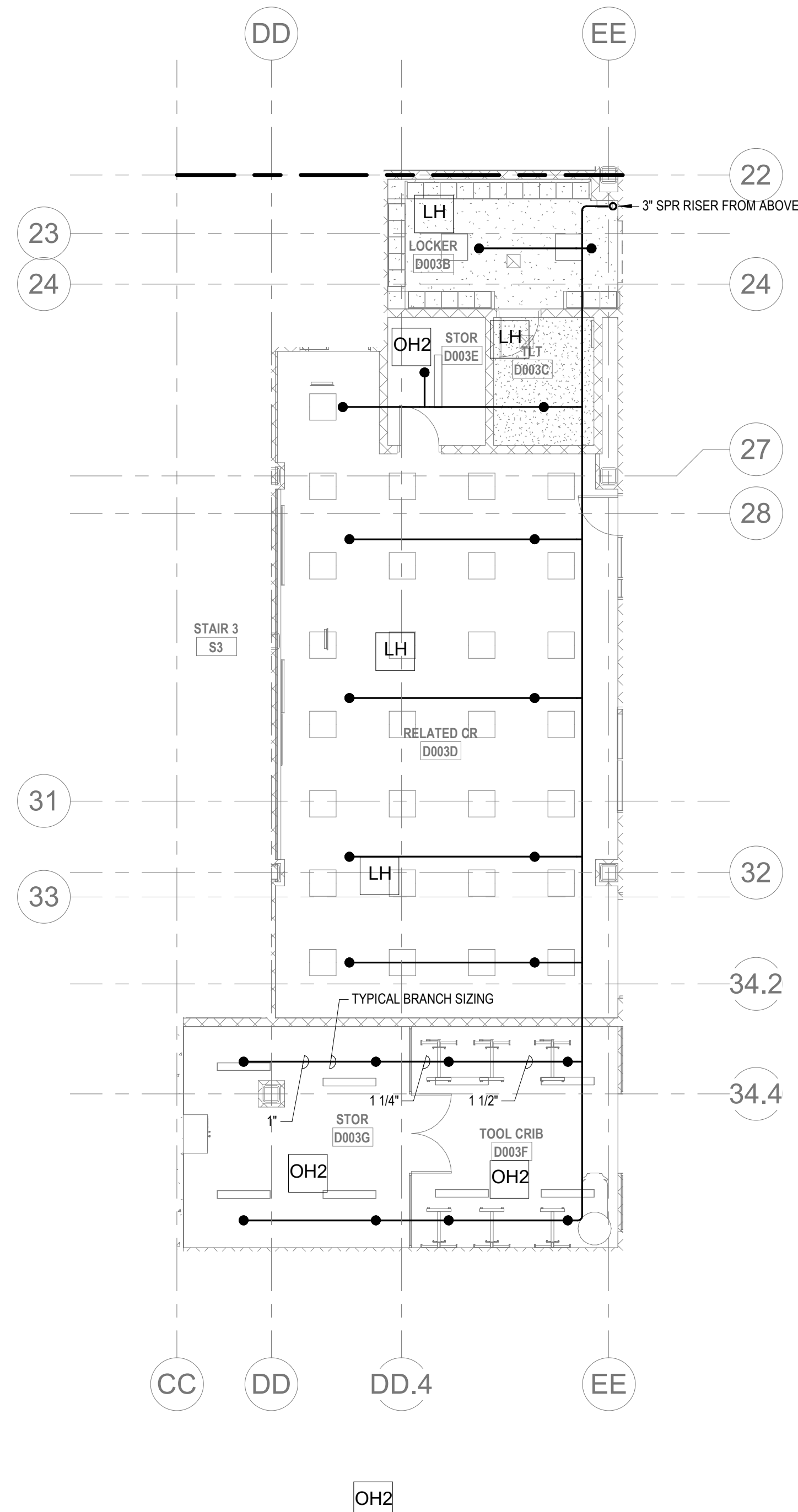




③ FIRE PROTECTION LOWER LEVEL FLOOR PLAN - AREA C - Callout 1
1/8" = 1'-0"



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



⑤ 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 CEILING 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, 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 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 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 UNISTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEPP SYSTEMS COMPONENTS. SPECIALLY ADJUSTED 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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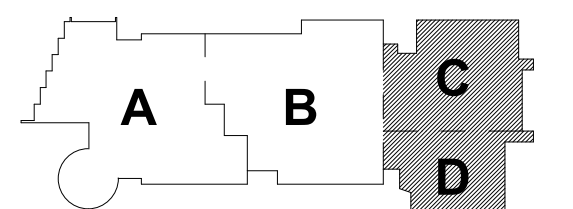
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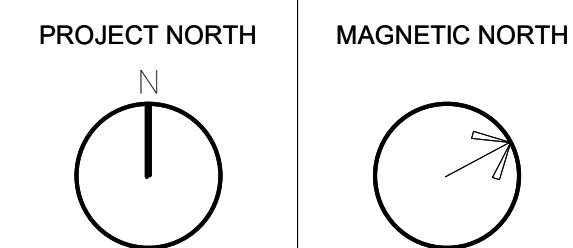
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Construction Document
Submittal
May 12th, 2023



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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06074

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Waltham, MA
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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.
- 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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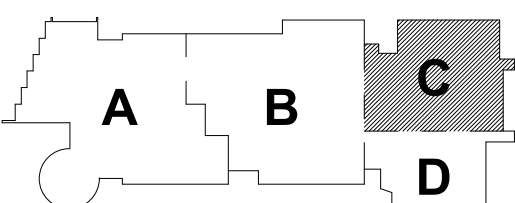
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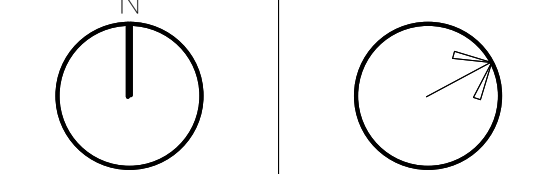
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May 12th, 2023



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

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

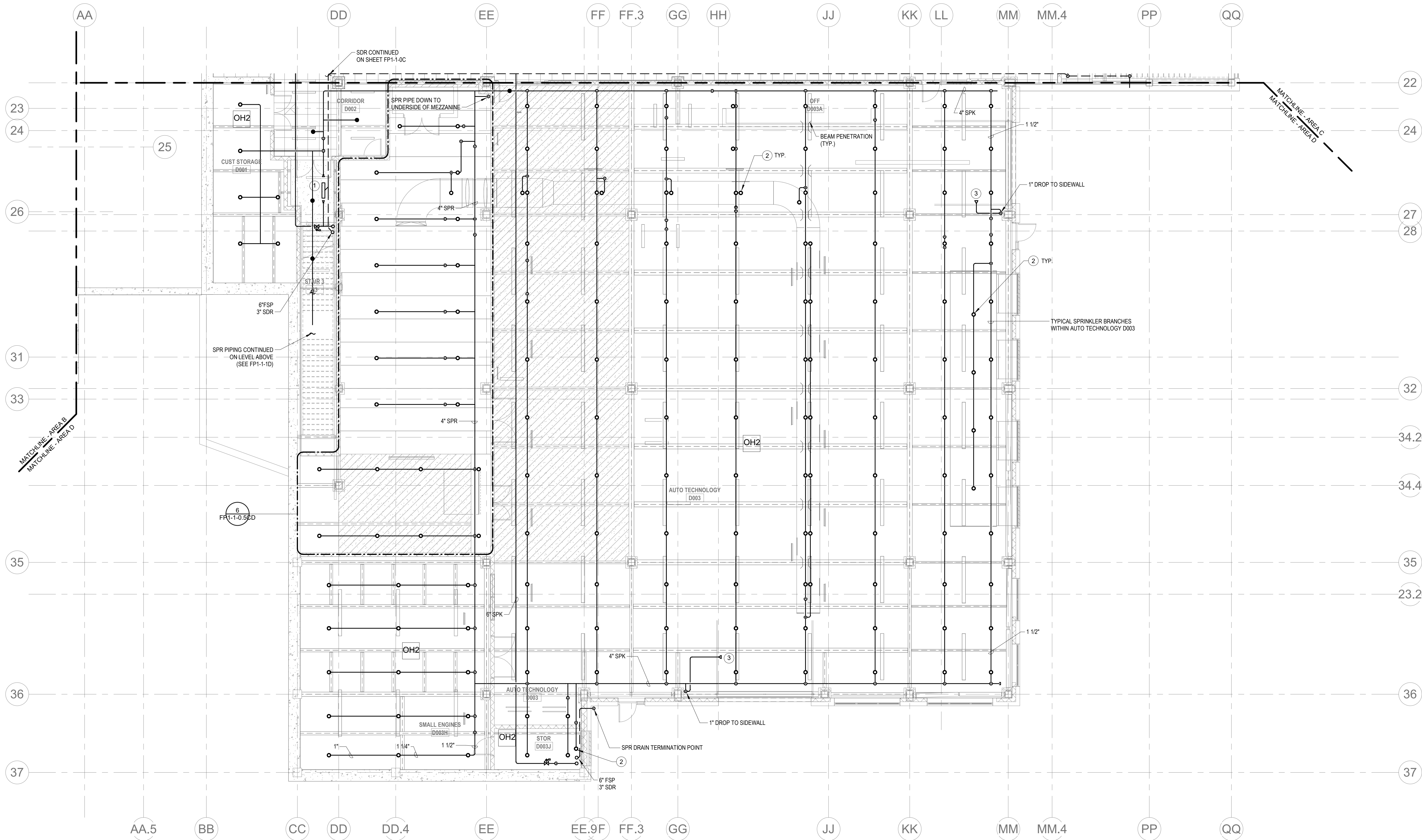
KEYNOTES

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

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- 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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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 MEZ-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.



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

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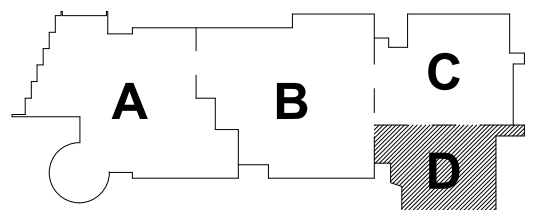
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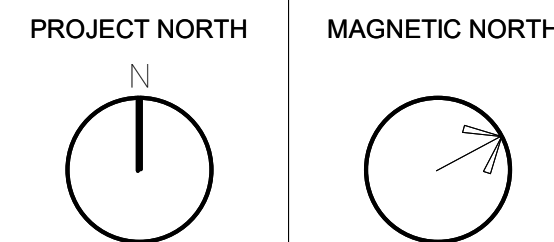
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May 12th, 2023



KEY PLAN



FIRE
PROTECTION
LOWER LEVEL
FLOOR PLAN -
AREA D

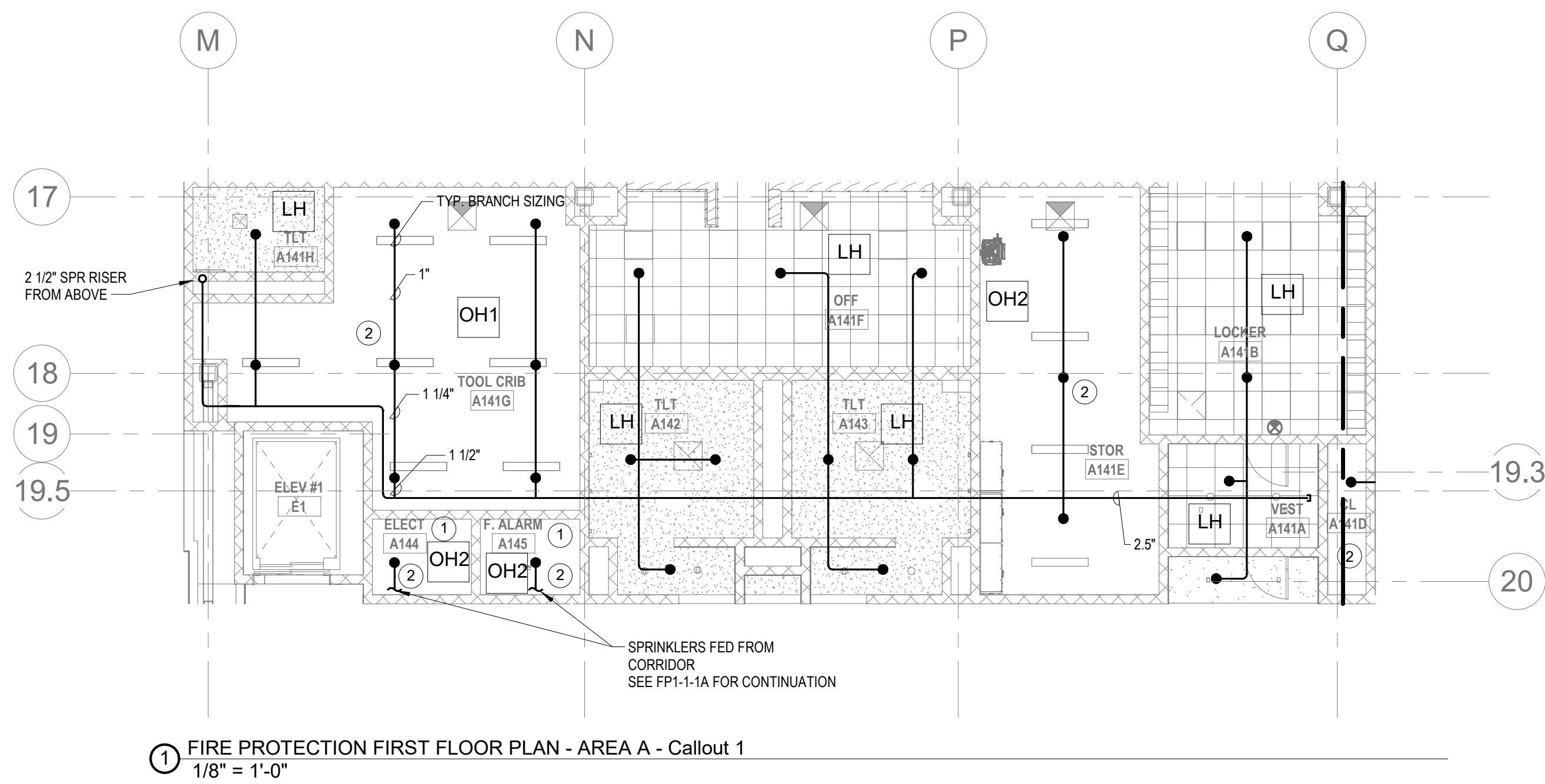
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FP1-1-0D

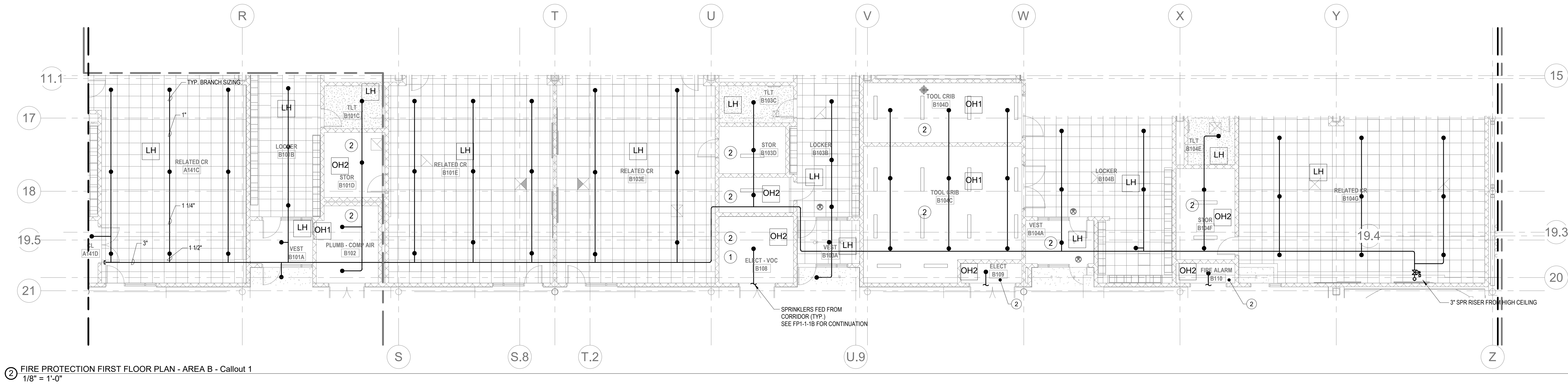
KEYNOTES

- 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"

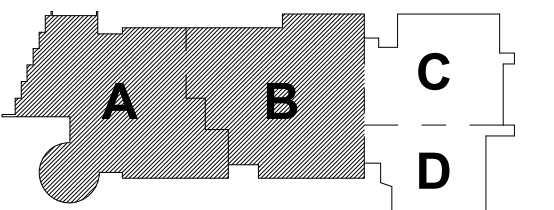


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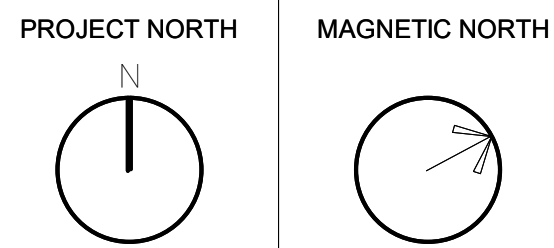
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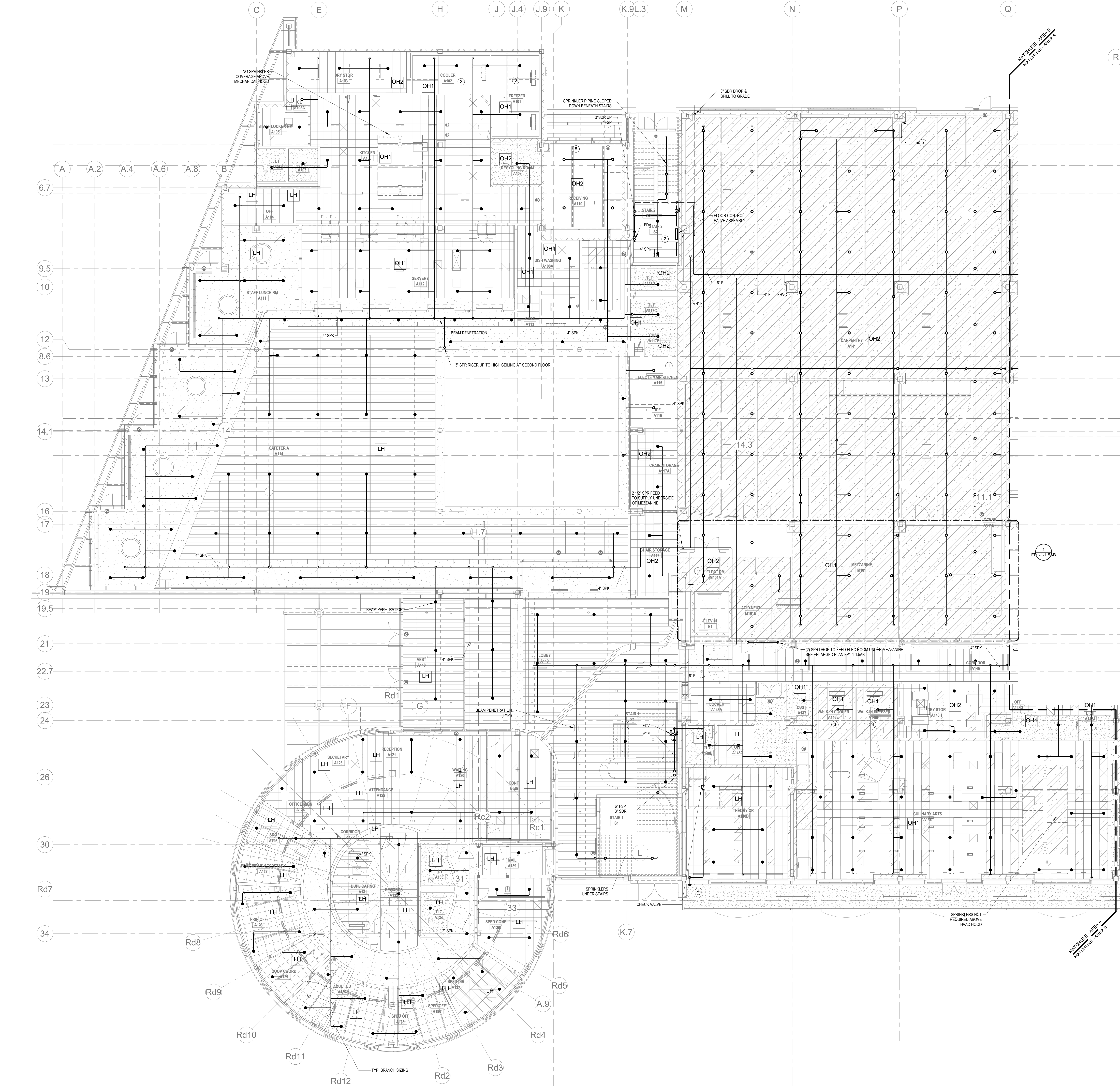
KEY PLAN



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



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

KEYNOTES

- LH LIGHT HAZARD OCCUPANCY
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3. PROVIDE DRY PENDENTS TO SERVE THE ROOM. NO SPRINKLER COVERAGE REQUIRED ABOVE WALK IN COOLER/FREEZER.
4. FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT. PROVIDE ELECTRIC ALARM BELL TO BE MOUNTED TO THE FDC.
5. PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.
6. PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK FIELD COORDINATE.

FP GENERAL NOTES

1. 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.
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 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 AND AT MAIN LANDINGS. LOCATION OF ALL EXPOSED PIPING SHALL BE FIELD COORDINATED WITH ARCHITECT.
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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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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 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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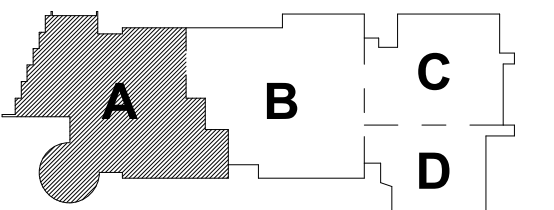
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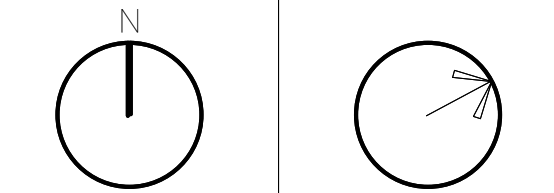


MSBA 90% CD
Construction Document
Submittal

May 12th, 2023



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

- 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 FOR ALL PIPING PASSING THROUGH COORDINATE Y9, PROVIDE AN EXPANSION LOOP AND ADD FLEXIBLE COUPLINGS ON EITHER SIDE.
3 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).
4 PROVIDE DRY PENDENTS WITH GUARDS BENEATH THE GARAGE DOOR TRACK.
5 PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
6 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.
7 FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT. PROVIDE ELECTRIC ALARM BELL TO BE MOUNTED TO THE FDC.

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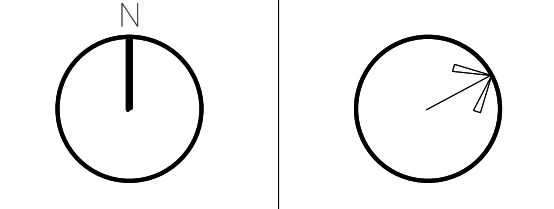
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A B C
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KEY PLAN

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"

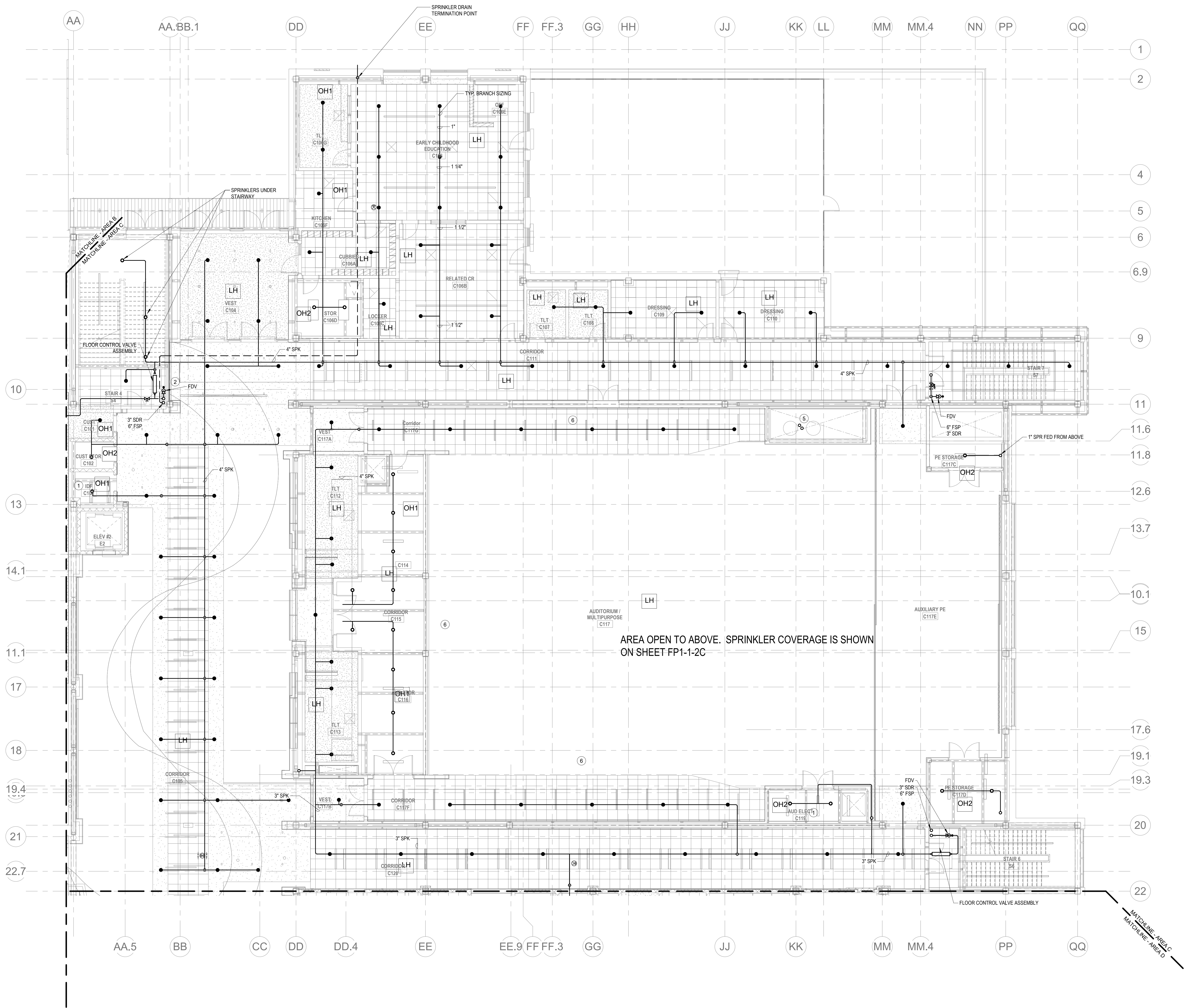
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3 PROVIDE A FIRE HOSE VALVE CABINET ON EACH SIDE OF THE STAGE IN ACCORDANCE WITH 160 CMR 6.05.3.4
4 PROVIDE SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.
5 PROVIDE SPRINKLER HEAD EVERY 12' WITHIN VERTICAL PORTION OF SPRAY PAINT EXHAUST DUCT.
6 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.

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1/8" = 1'-0"

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Studio 205
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06074
Tel: 817.984.1702
www.draam.com

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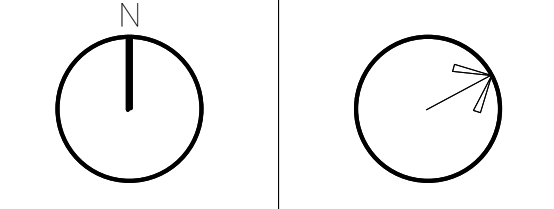
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KEY PLAN

PROJECT NORTH
MAGNETIC NORTH



FIRE
PROTECTION
FIRST FLOOR
PLAN - AREA C

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

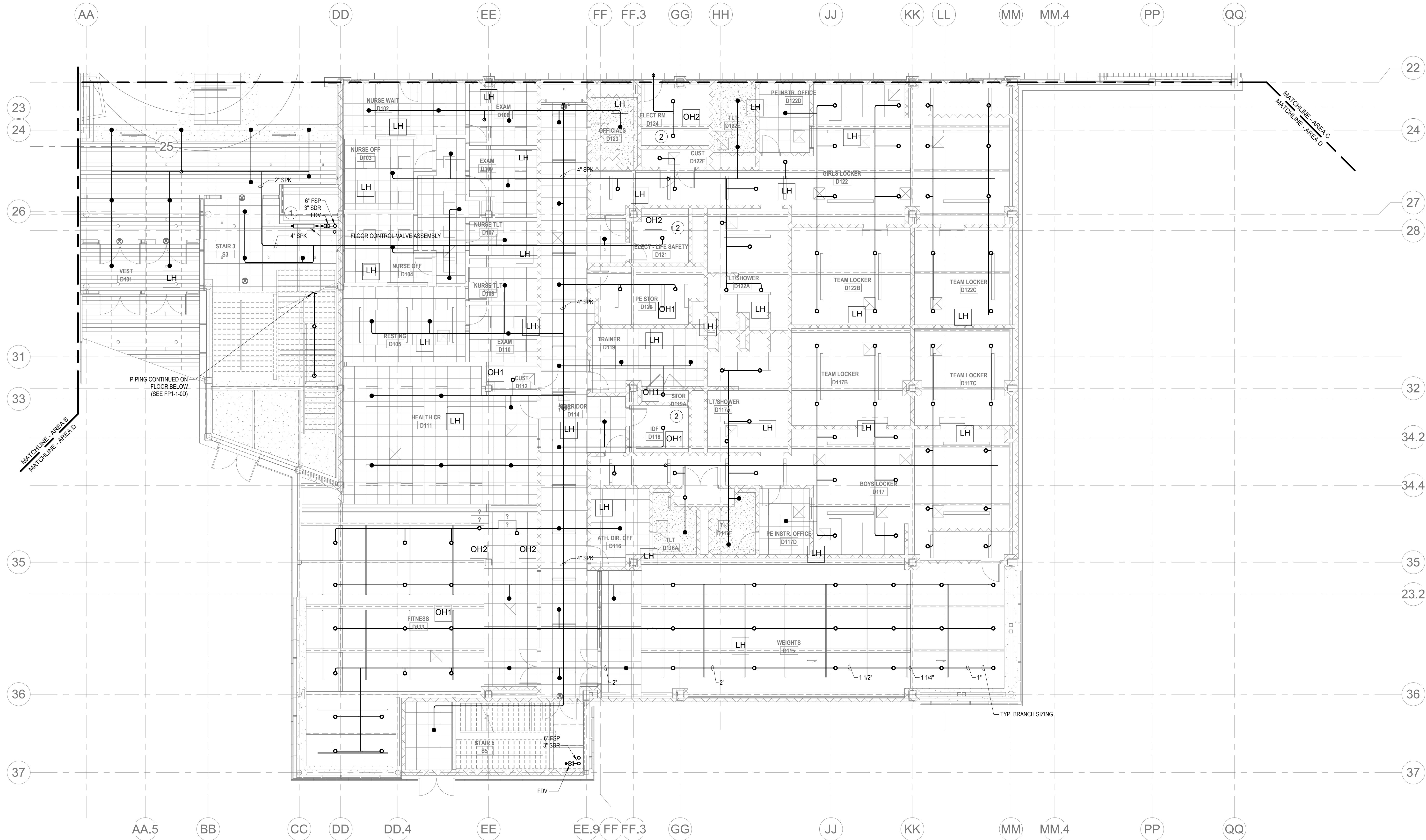
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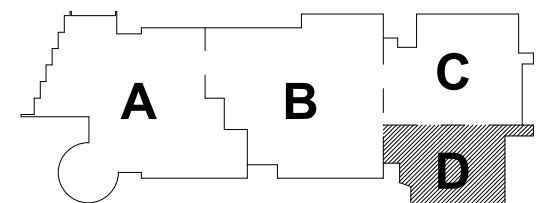
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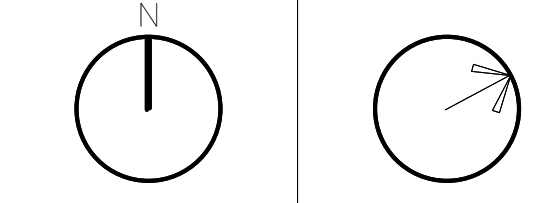
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KEY PLAN

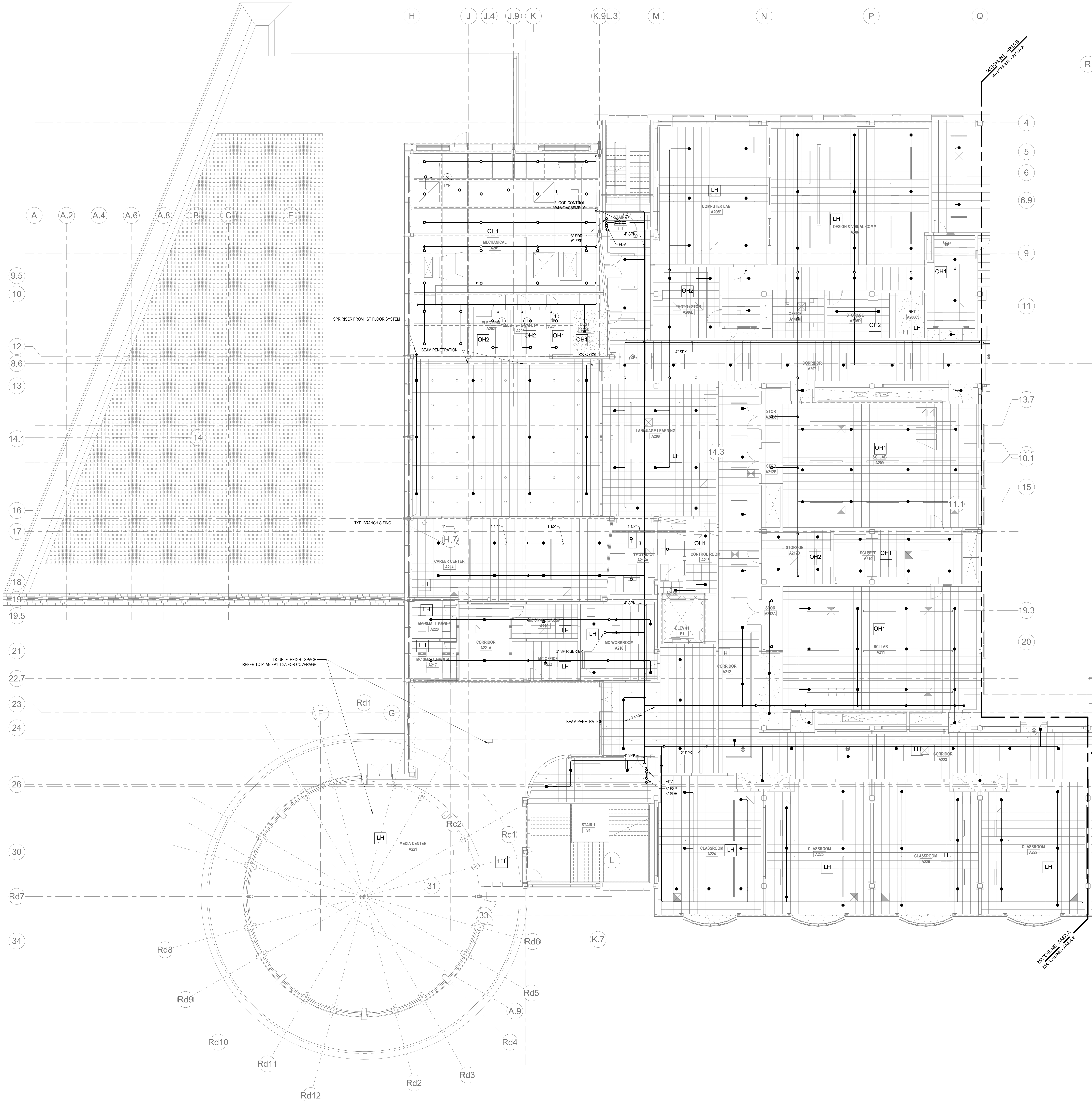
PROJECT NORTH MAGNETIC NORTH



FIRE
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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 INSPECTOR'S TEST CONNECTION. (AS REQUIRED PER DETAIL).
 - 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 SIZE BRANCH PIPING TO ALLOW FLOW 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.
 - 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 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.
 - 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 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.
 - 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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Drummeys Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Tel: 817.984.1700
www.dra.com

260 Charles Street
Studio 300
Waltham, MA 02453
Tel: 817.984.1700
www.dra.com

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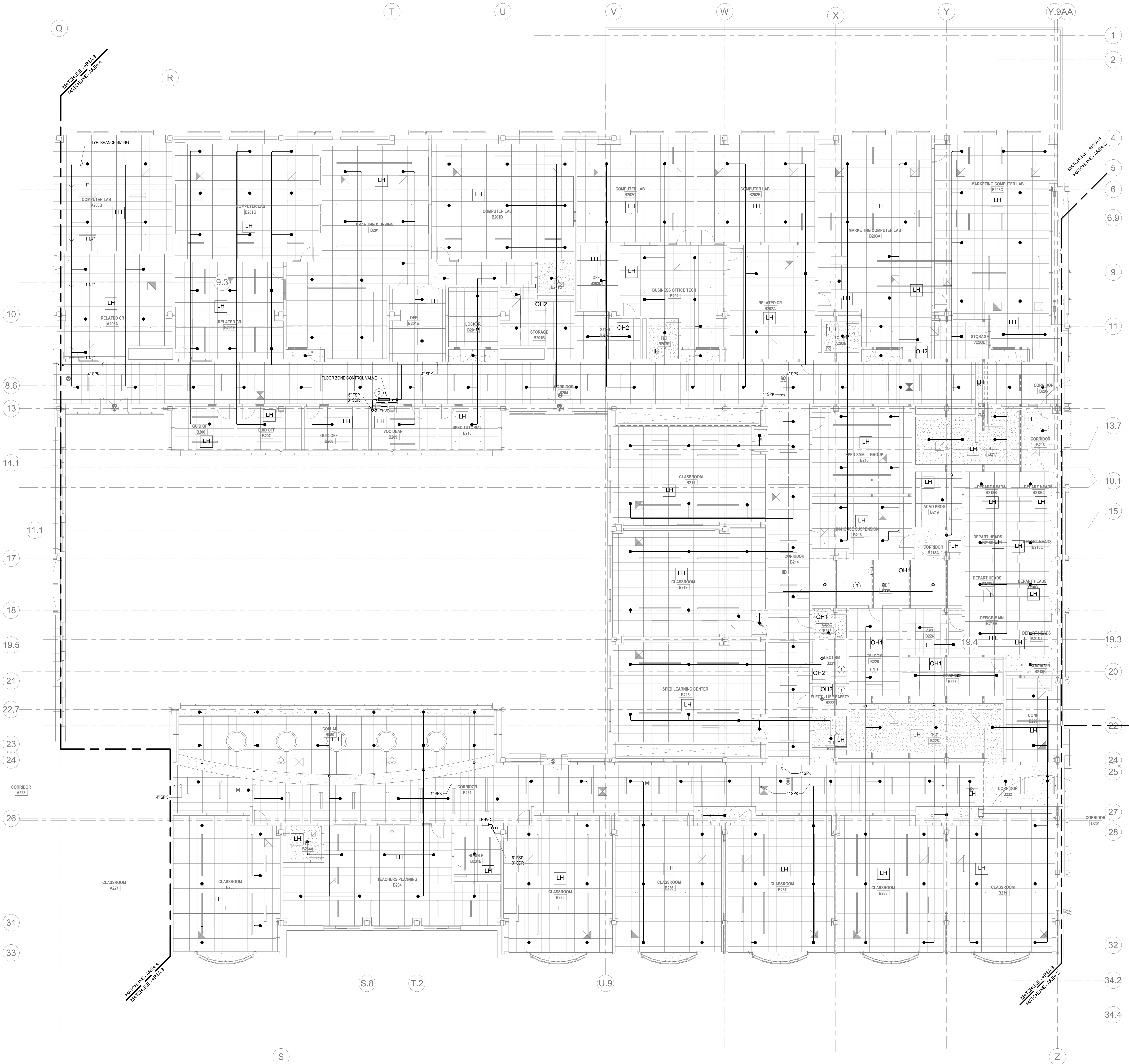
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MSBA 90% CD
Construction Document
Submittal
May 12th, 2023

**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.
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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" 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.T. IN MECHANICAL ROOMS, STORAGE ROOMS, PUMP ROOMS, SERVICE AREAS, DYNAMISMS REGARDLESS OF SPRINKLER HEAD ELEVATION AND WHERE OTHERWISE SUSCEPTIBLE TO DAMAGE.
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Drummett Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Tel: 817.984.1700
www.draan.com

260 Charles Street
Studio 300
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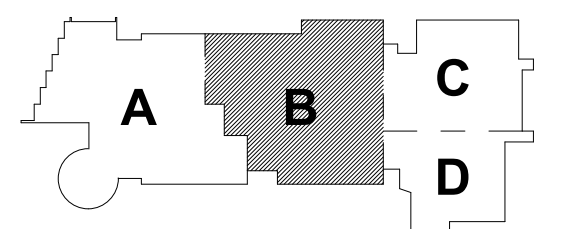
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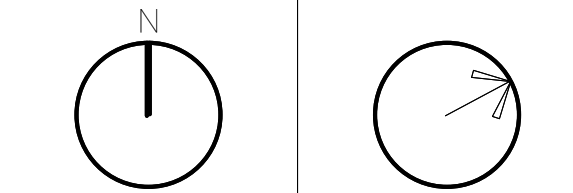
MECHANICAL ENGINEERING
1000 WASHINGTON STREET, SUITE 200
WALTHAM, MA 02453
TEL: 781.881.1100
WWW.BALA-ENGINEERS.COM

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



KEY PLAN

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

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Drummett Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning | Architecture | Interior Design
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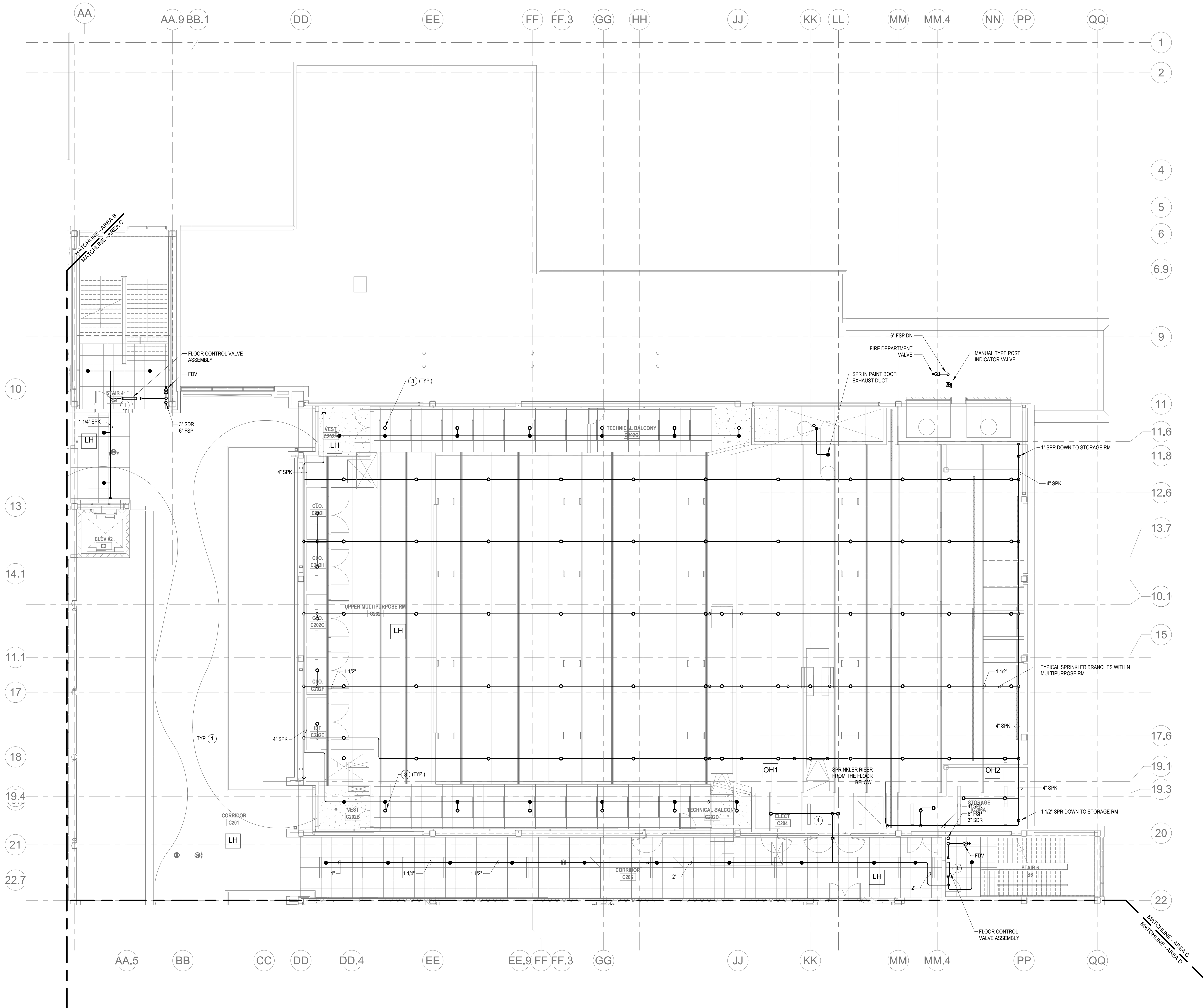
KEYNOTES

- LH LIGHT HAZARD OCCUPANCY
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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 ELECTRIC TYPE SPACES AND UTILITY ROOMS SHALL BE FIELD COORDINATED WITH ELECTRICAL CONTRACTOR AS TO VERIFY COMPLIANCE WITH ELECTRICAL CODES.

FP GENERAL NOTES

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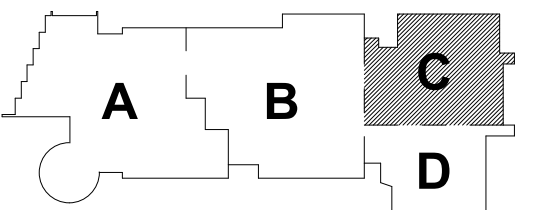


1 FIRE PROTECTION SECOND FLOOR PLAN - AREA C
1/8" = 1'-0"

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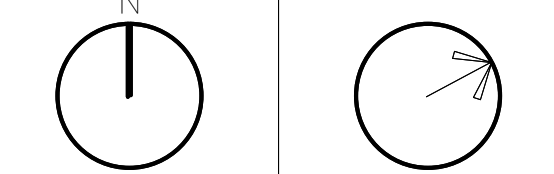
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BALA CONSULTING ENGINEERS, INC.
2000 E. 15th Ave., Suite 200
Denver, CO 80202
Tel: 303.733.1111 Fax: 303.733.1112
www.bala-engineers.com

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



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



FIRE
PROTECTION
SECOND FLOOR
PLAN - AREA C

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

FP1-1-2C

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Drumme

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
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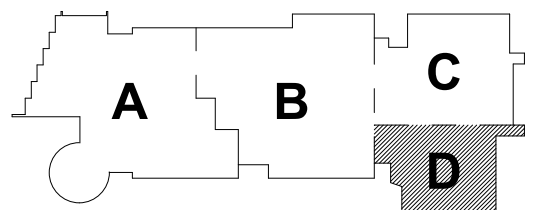
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300 NORTH 10TH STREET
SUITE 200
DALLAS, TEXAS 75201
TEL: 214.760.1000
FAX: 214.760.1001
WWW.BALA-ENG.COM

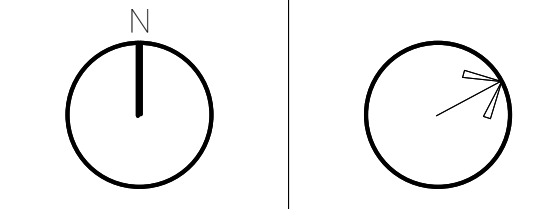
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May 12th, 2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



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

KEYNOTES

LH LIGHT HAZARD OCCUPANCY

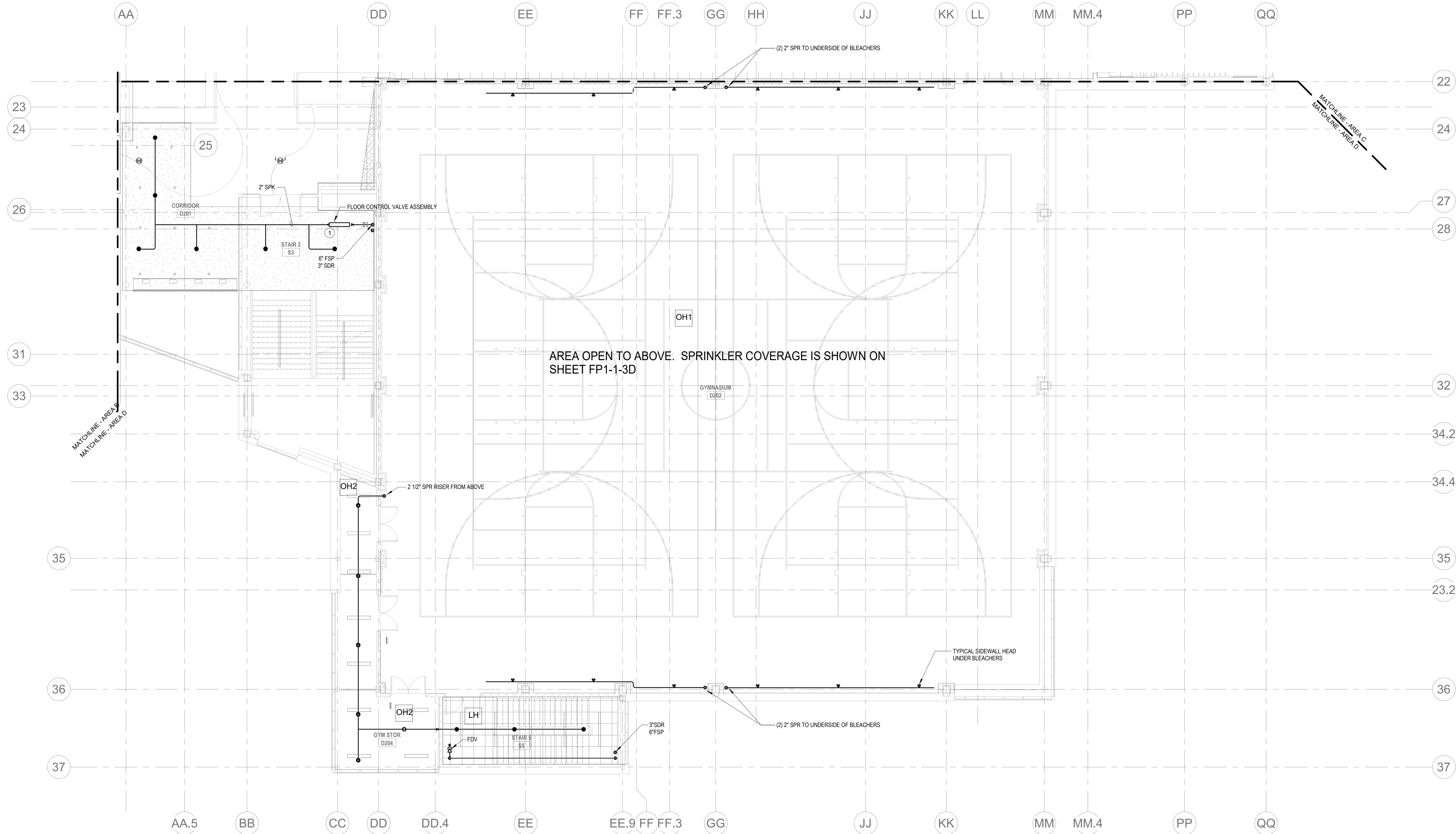
OH ORDINARY HAZARD OCCUPANCY

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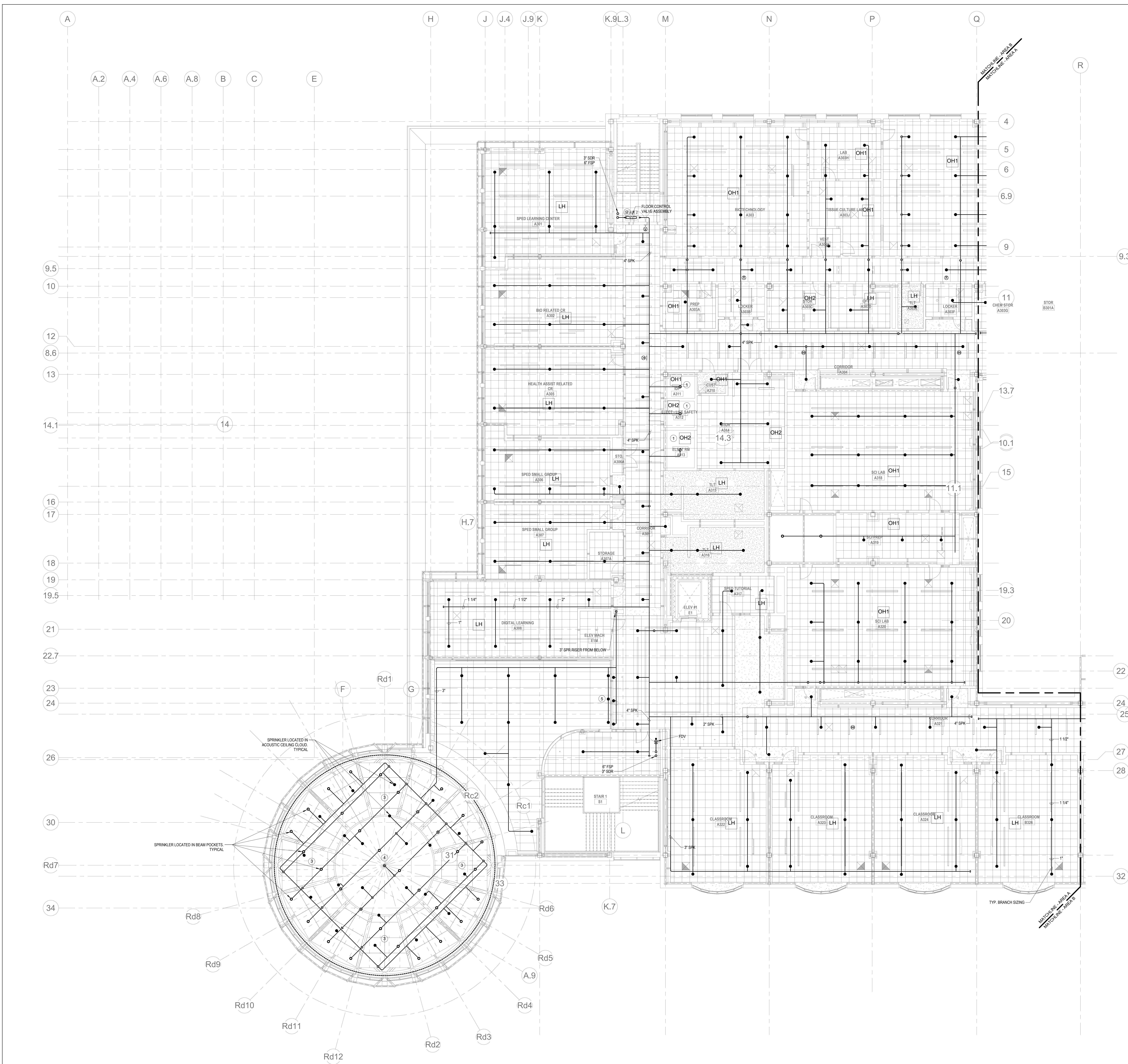
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1. FIRE PROTECTION SECOND FLOOR PLAN - AREA D
1/8" = 1'-0"



KEYNOTES

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- 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.)
- PROVIDE SPRINKLER COVERAGE ABOVE AND BELOW MEDIA CENTER. CEILING SPRINKLER COVERAGE ABOVE CEILING SHALL BE COORDINATED WITH STRUCTURAL ELEMENTS.
- PROVIDE CUSTOM COLOR SPRINKLER HEADS IN CIRCULAR PORTION OF MEDIA CENTER CEILING.
- PROVIDE WINDOW SPRINKLERS WITHIN 2 IN. OF THE GLASS PARTITIONS IN ACCORDANCE WITH NFPA 13 TABLE 7.8.4. THESE SPRINKLERS SHALL BE SPACED NOT MORE THAN 6 FT FROM EACH OTHER.

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" 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 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.
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- 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 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 TRACES 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 UNSTRUT SUPPORTS ATTACHED TO BOTTOM CORD OF STRUCTURAL STEEL BEAMS AS REQUIRED TO SUPPORT MEPPFP SYSTEMS COMPONENTS. SPECIALTY ACOUSTICALLY 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.

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



Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
Tel: 817.984.1700
www.dra.com

260 Charles Street
Studio 300
Waltham, MA
02453

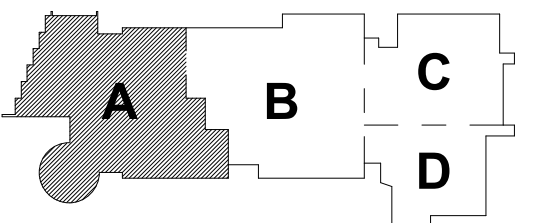
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Regional
Vocational High
School

Wakefield, MA 01880

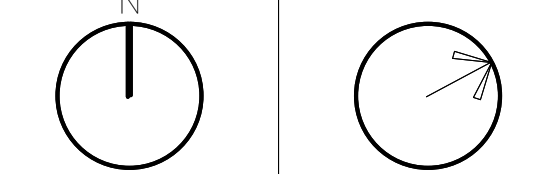
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MSBA 90% CD
Construction Document
Submittal
May 12th, 2023



PROJECT NORTH
MAGNETIC NORTH



FIRE
PROTECTION
THIRD FLOOR
PLAN - AREA A

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

FP1-1-3A

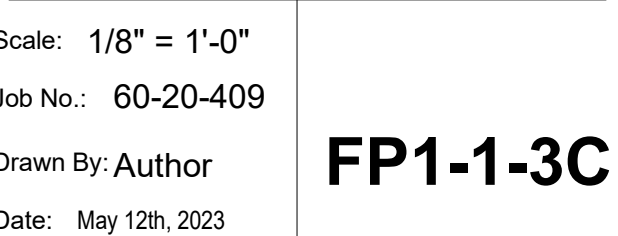


- ALL MECHANICAL SYSTEMS AND COMPONENTS THAT REQUIRE ATTACHMENT TO THE ARCHITECTURAL PRE-CAST CONCRETE PANELS SHALL BE COORDINATED WITH THE PRE-CAST CONCRETE SUB-CONTRACTOR DURING COORDINATION AND SHOP DRAWING PROCESS. NO ATTACHMENT OF THE MECHANICAL COMPONENTS TO THE PRE-CAST CONCRETE PANELS SHALL BE 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.

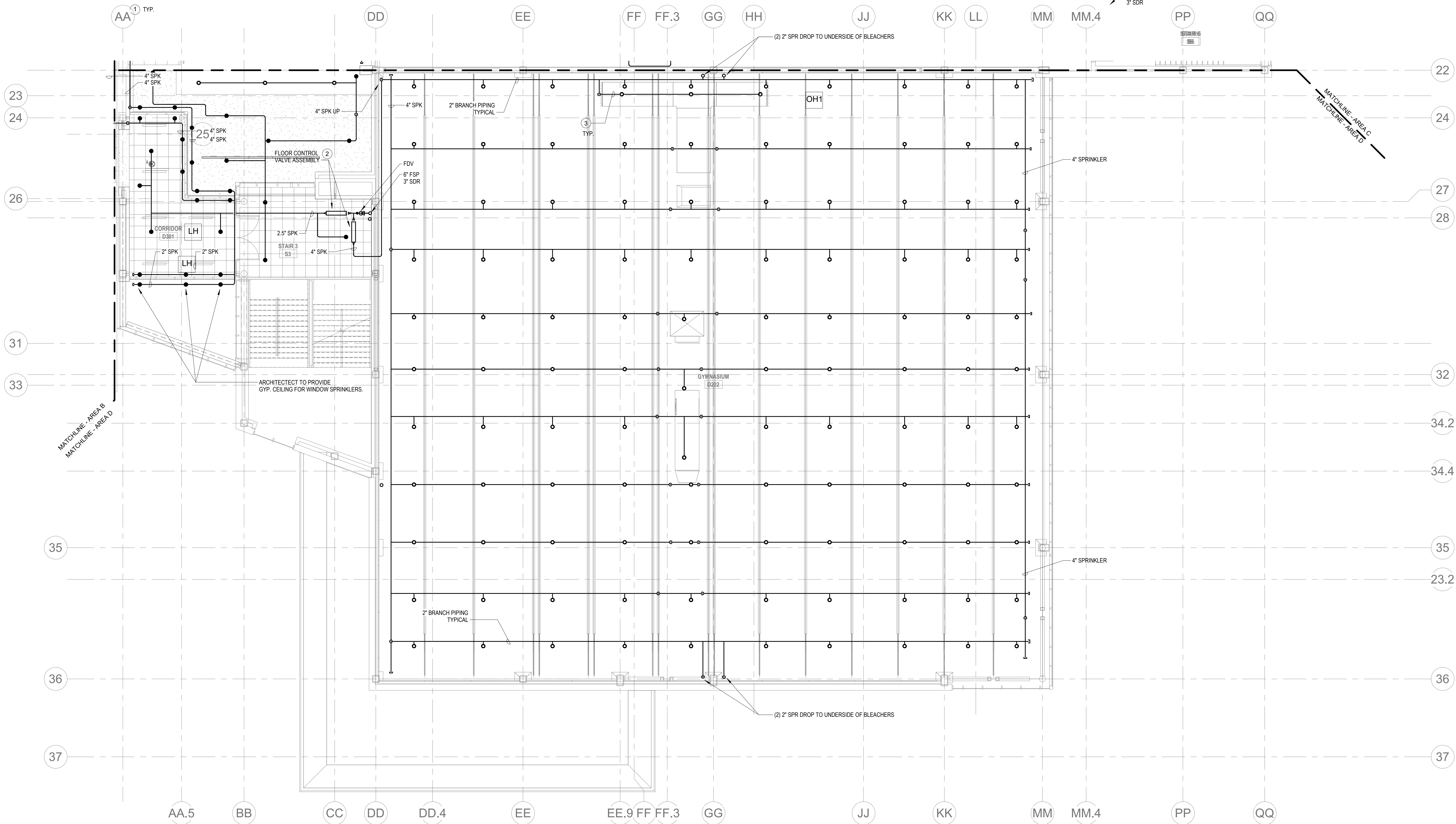
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Drawn By: Author
Date: May 12th, 2023



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4" SPK
4" SPK



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

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

- 1 PROVIDE WINDOW SPRINKLERS WITHIN 2 IN. OF THE GLASS PARTITIONS IN ACCORDANCE WITH NFPA 13 TABLE 7.8.4. THESE SPRINKLERS SHALL BE SPACED NOT MORE THAN 10 FT FROM EACH OTHER.
- 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 SPRINKLER UNDERSIDE OF DUCTWORK. FIELD COORDINATE.

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 OPENING AREAS AND CONCEALED PENDENTS IN AREAS WHERE DROP CEILINGS ARE INDICATED. EXTEND NEW 1" MINORERS 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 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.
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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.
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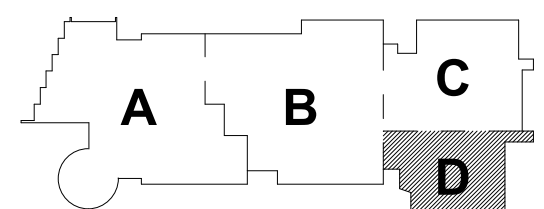
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Wakefield, MA 01880

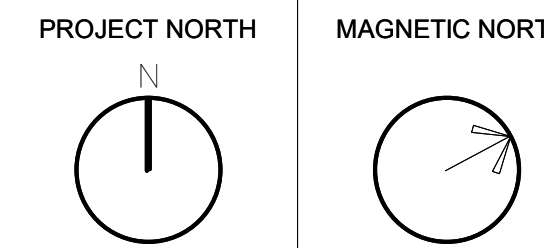
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ENGINEERS
BALA CONSULTING ENGINEERS, INC.
200 CHARLES STREET
STUDIO 300
WALTHAM, MA 02453
TEL: 617.984.1700 FAX: 617.984.1701
WWW.BALA-ENG.COM

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May 12th, 2023



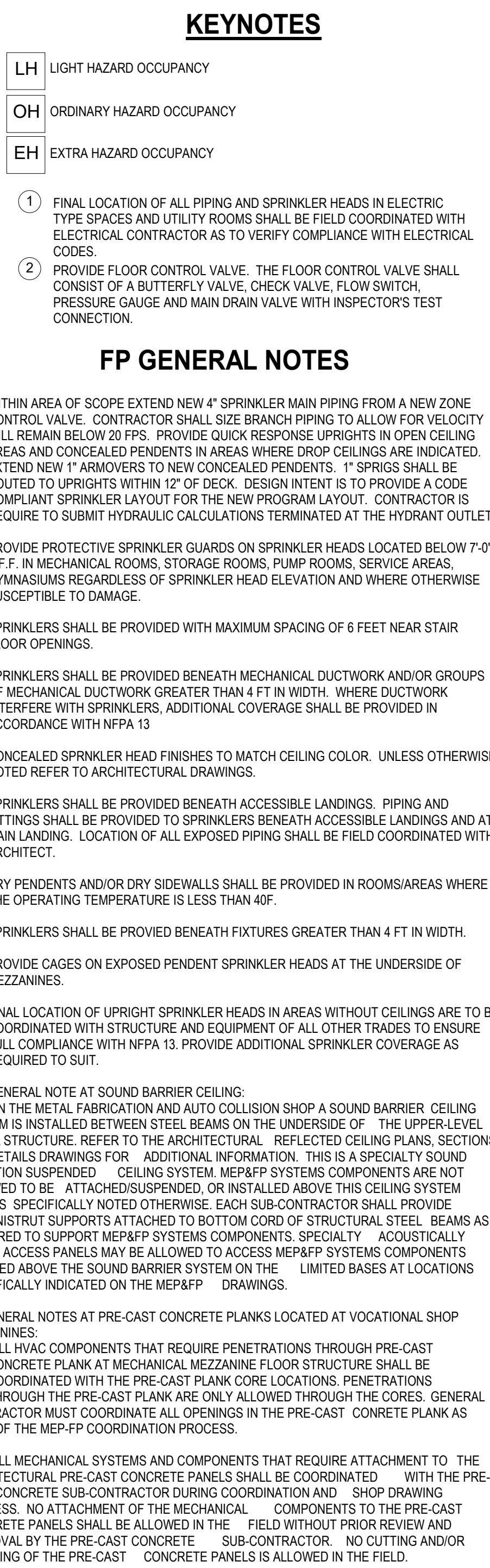
KEY PLAN



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



- 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.

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Studio 205
South Windsor, CT
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260 Charles Street
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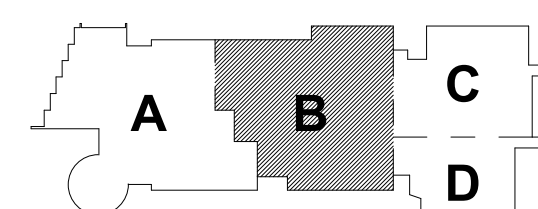
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ENGINEERS

BALA CONSULTING ENGINEERS, INC.
300 WEST 10TH STREET
SUITE 200
DALLAS, TEXAS 75201
TEL: 214.766.1000 FAX: 214.766.1001
WWW.BALA-ENG.COM

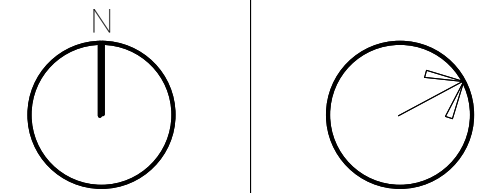
MSBA 90% CD
Construction Document
Submittal

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

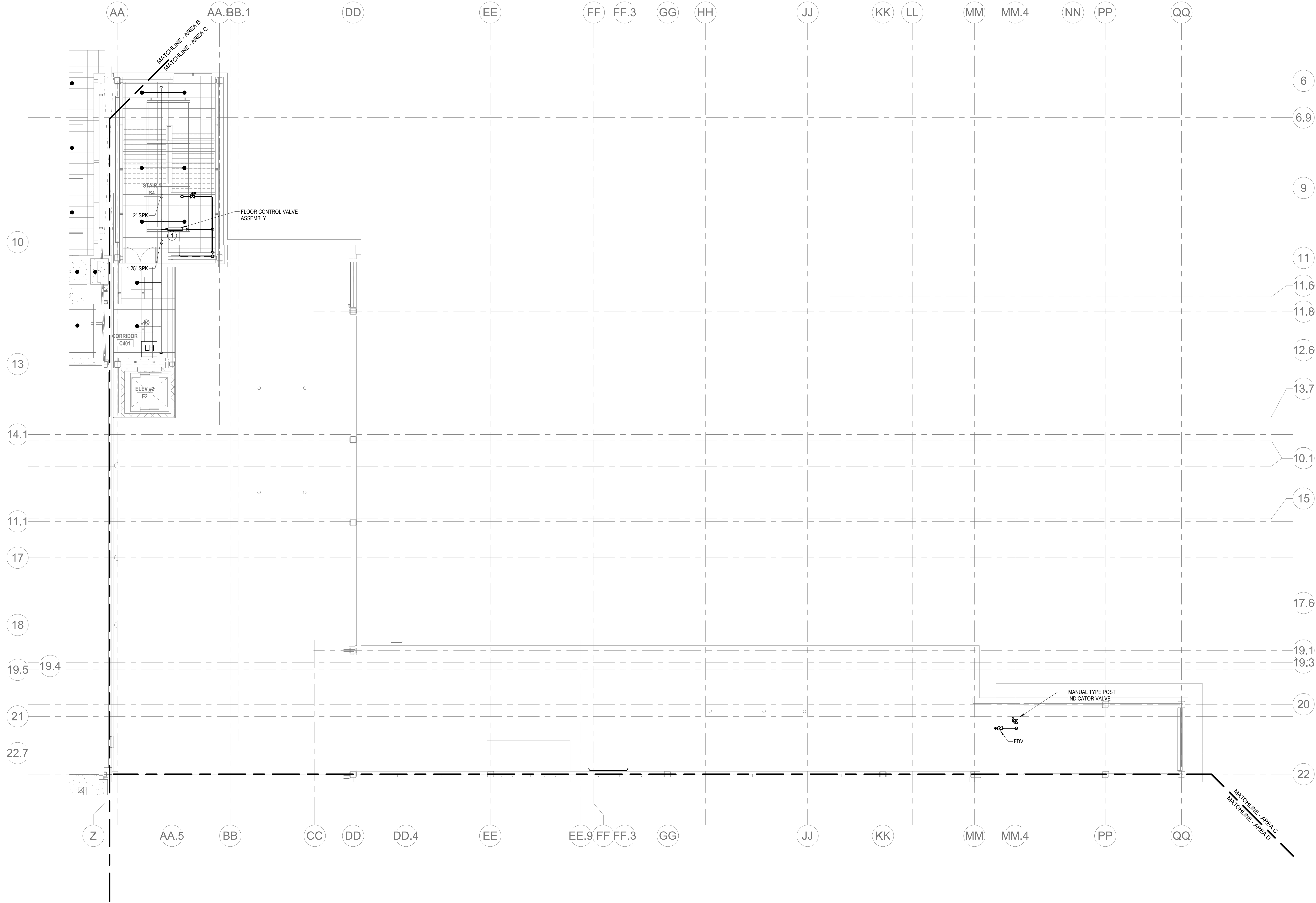
① FIRE PROTECTION Level 4 Area B
1/8" = 1'-0"

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

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

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225 Oakland Road
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South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

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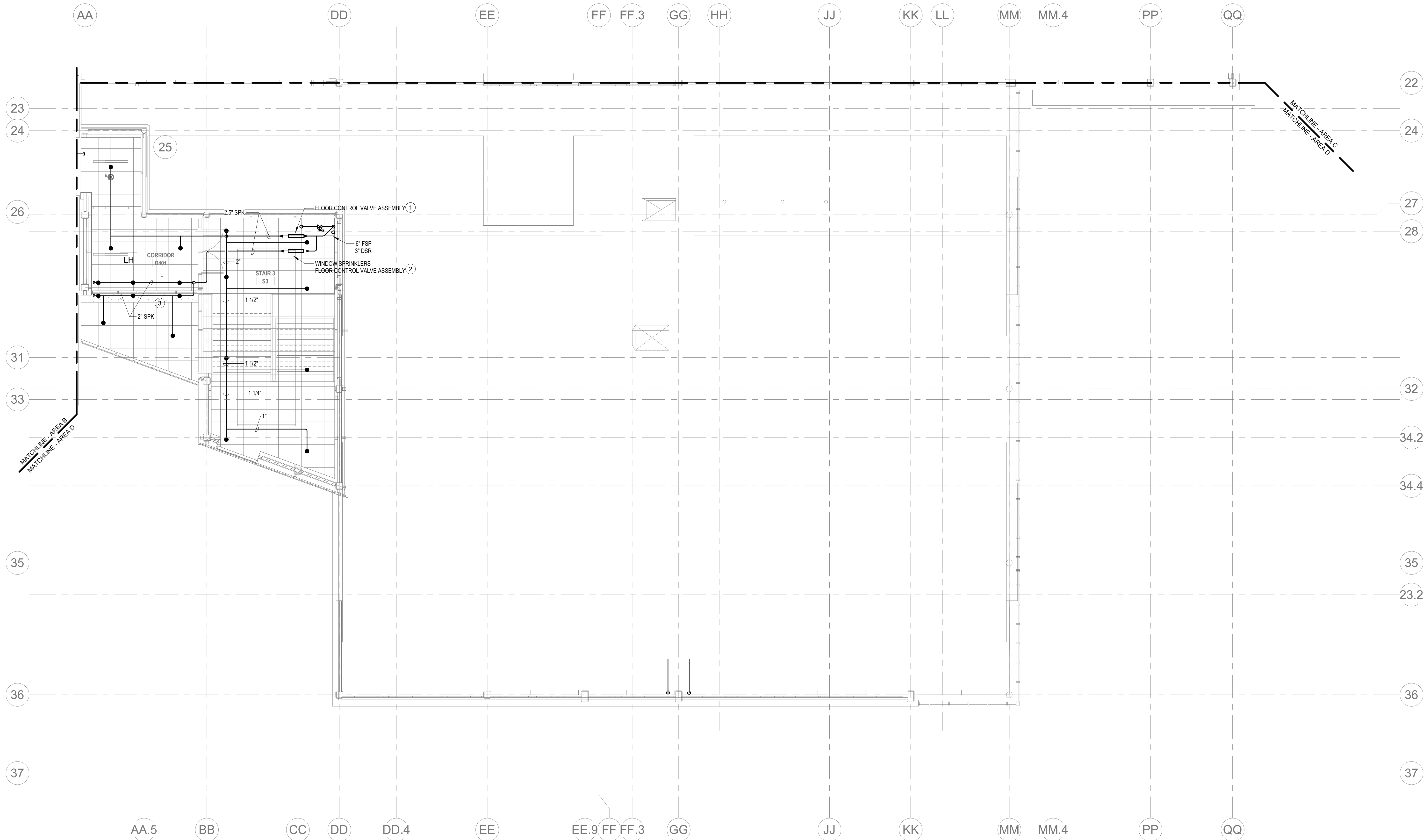
KEYNOTES

- 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 10 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.



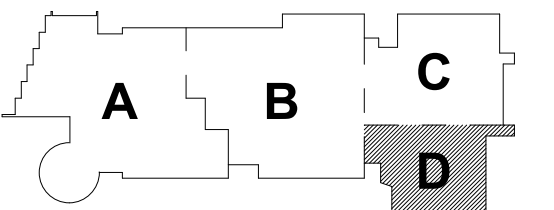
1 FIRE PROTECTION Level 4 Area D
1/8" = 1'-0"

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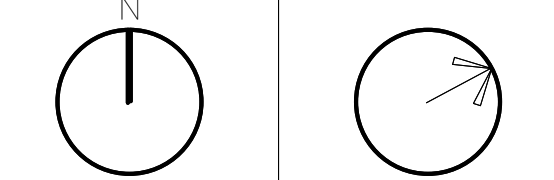
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May 12th, 2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



FIRE
PROTECTION
FOURTH FLOOR
PLAN - AREA D

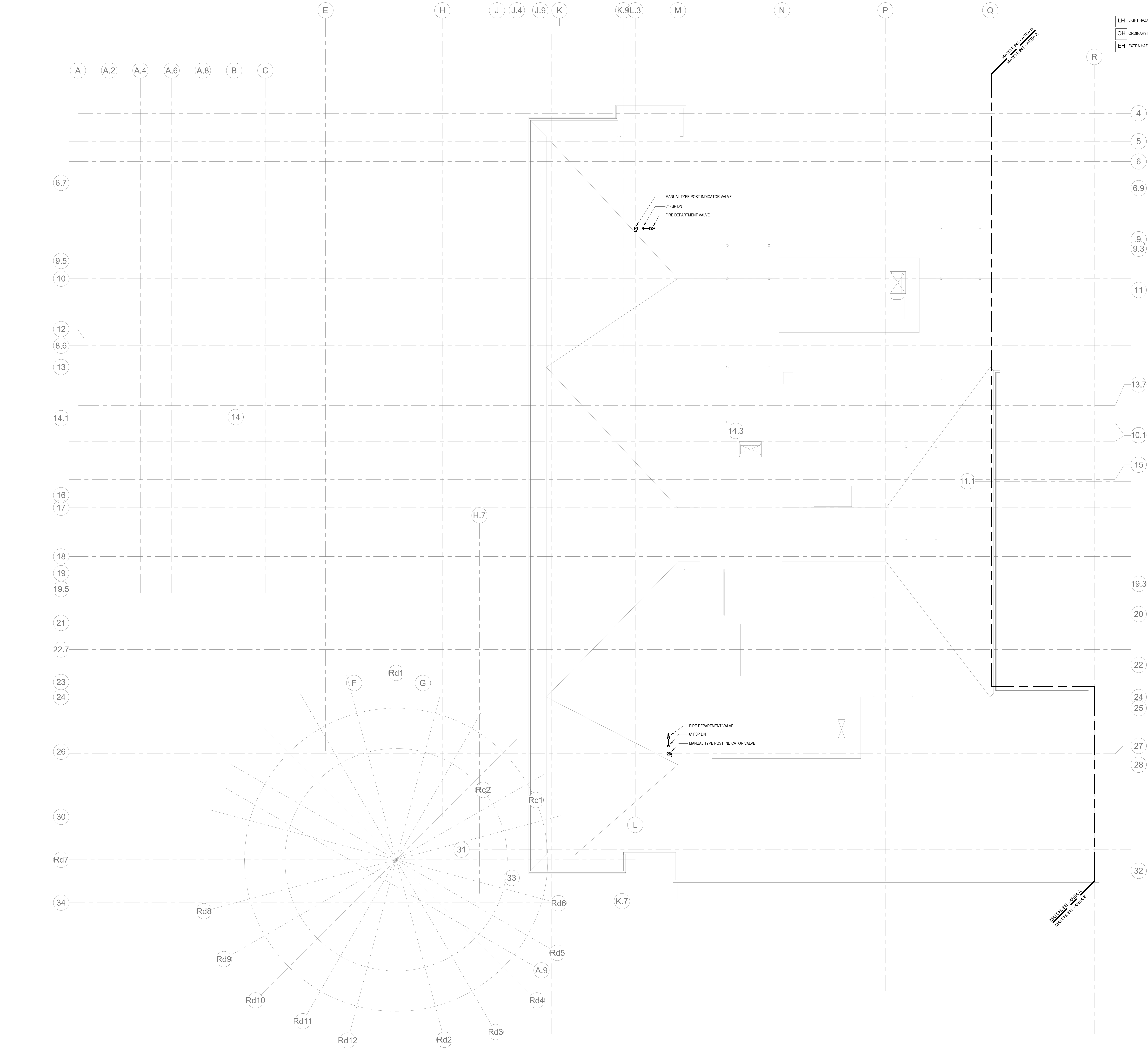
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Job No.: 60-20-409

Drawn By: Author

Date: May 12th, 2023

FP1-1-4D



KEYNOTES

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



Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
Tel: 817-984-1700
www.dra-inc.com

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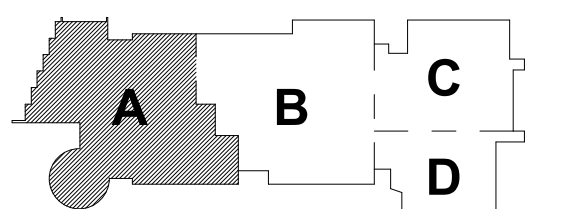
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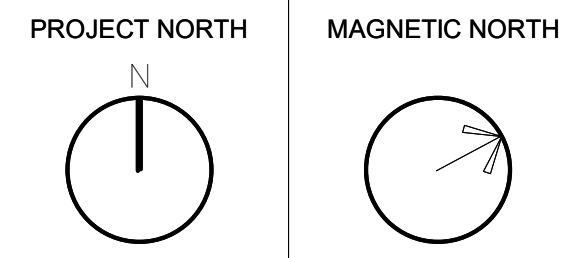
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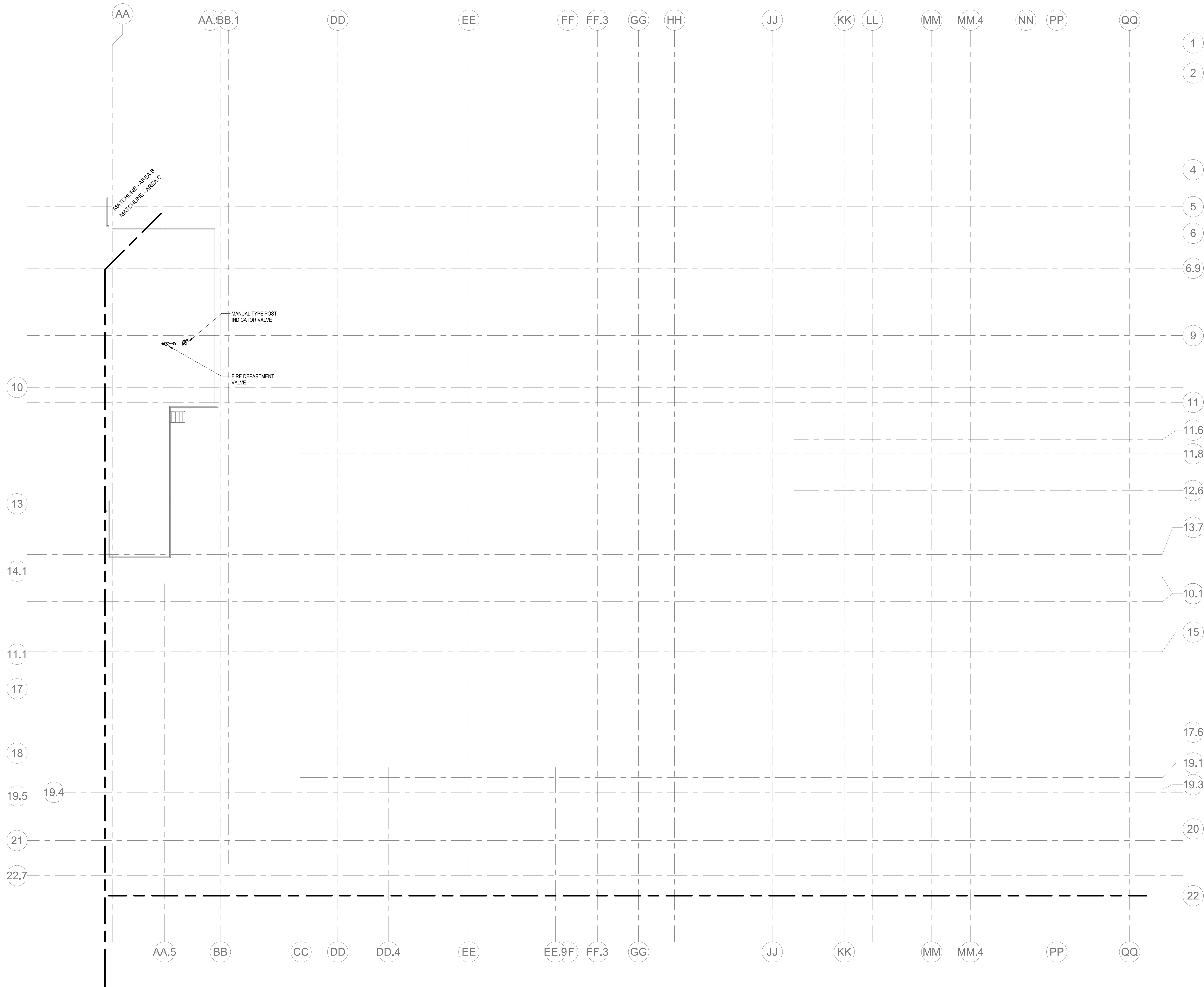
FIRE
PROTECTION
ROOF PLAN -
AREA A

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

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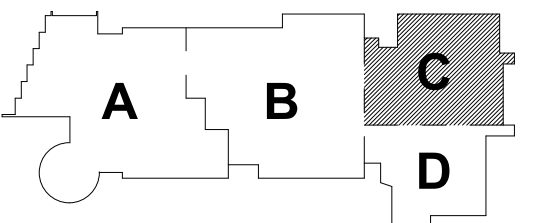
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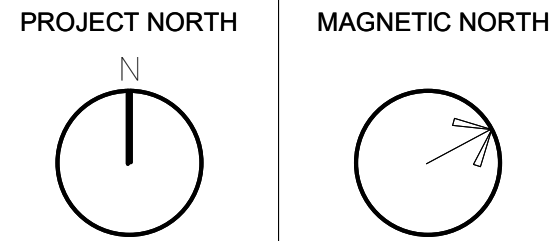
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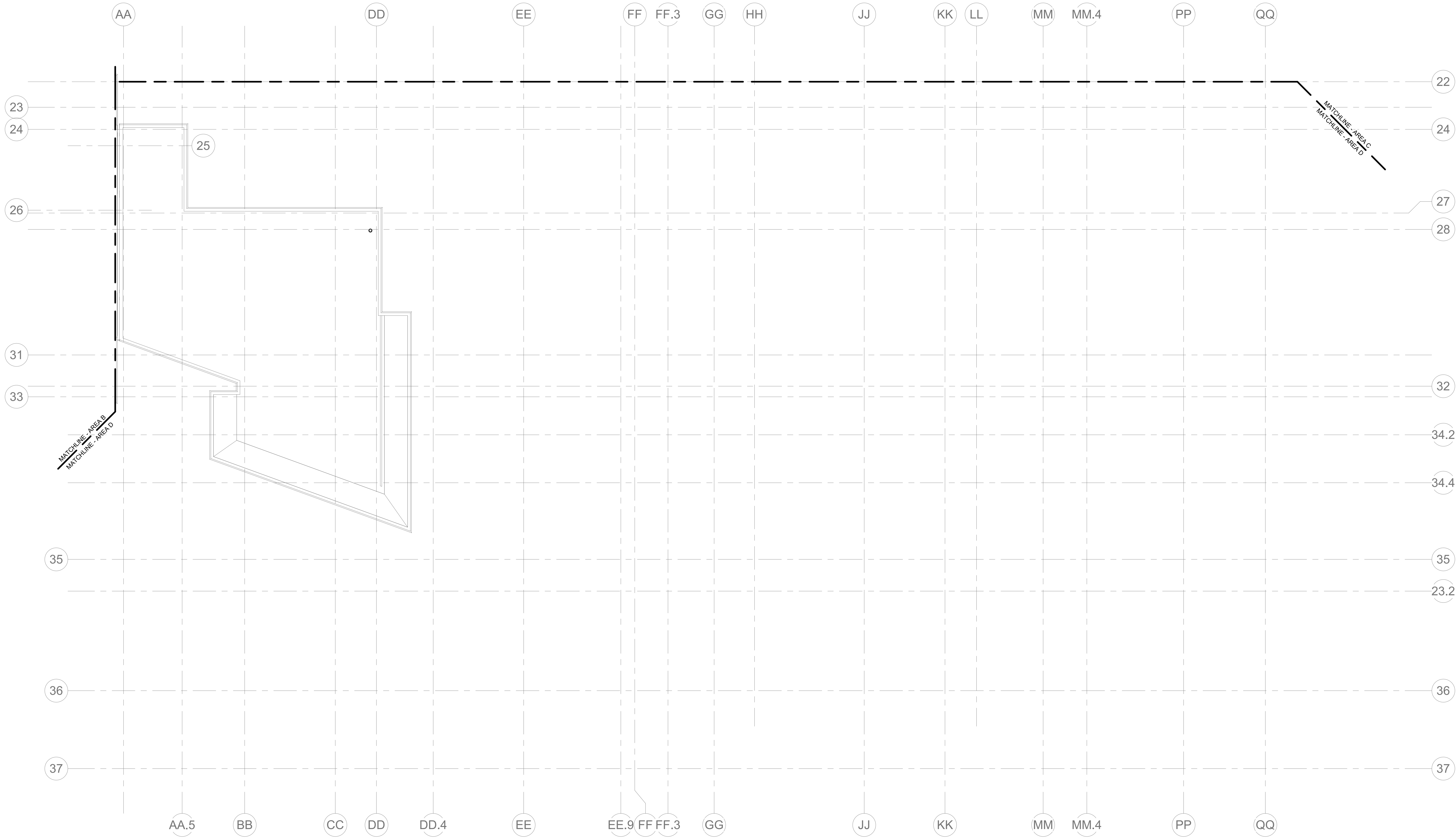
FIRE
PROTECTION
ROOF PLAN -
AREA C

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FP1-2-1C

KEYNOTES

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

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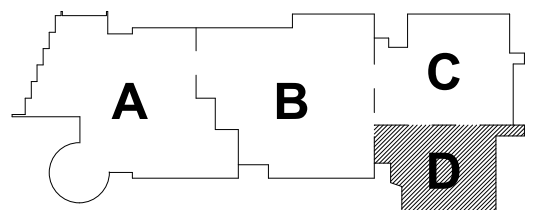
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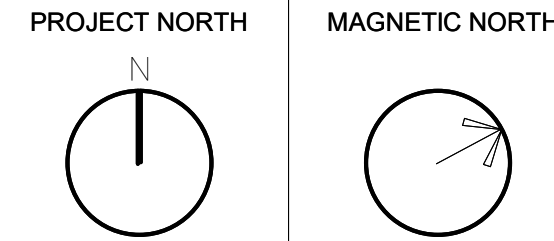
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AREA D

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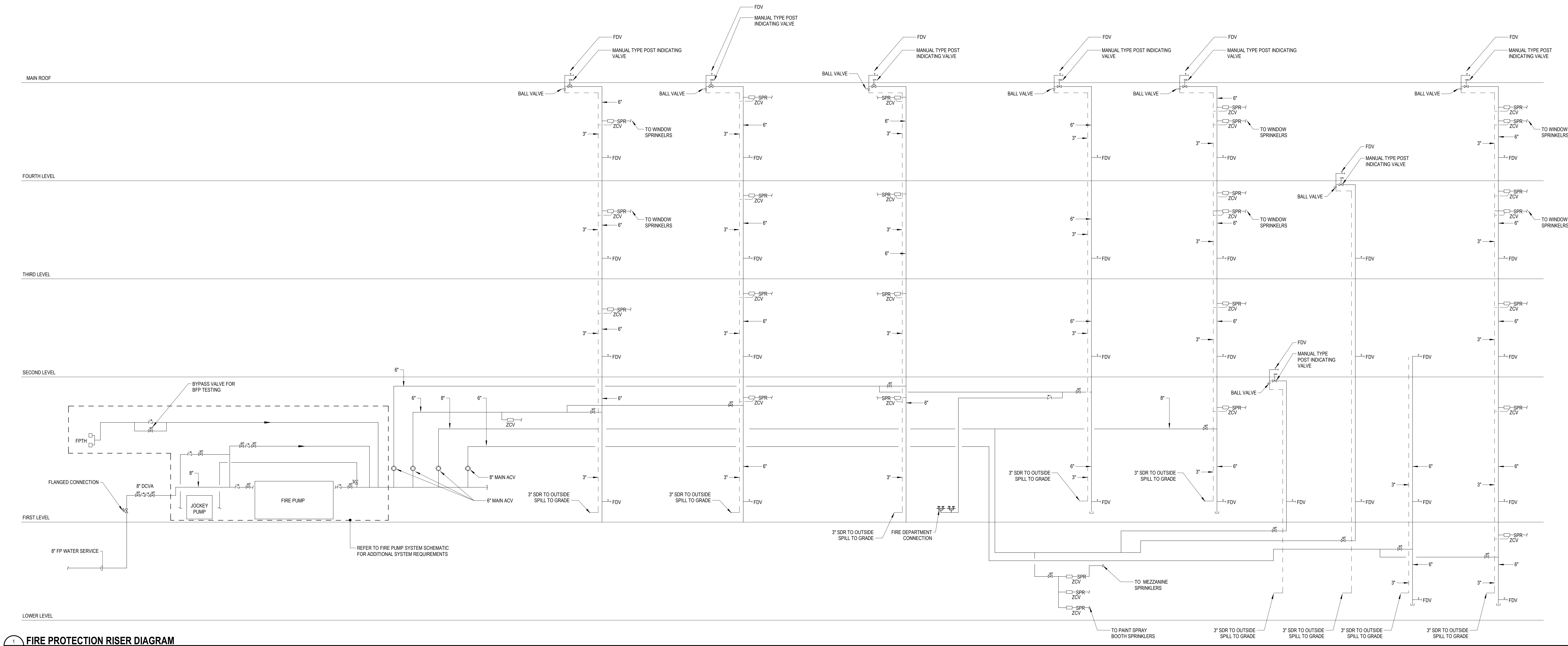
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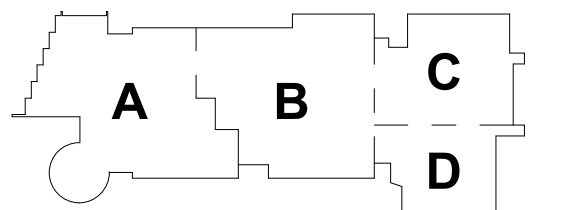


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FP5-0-1 NONE

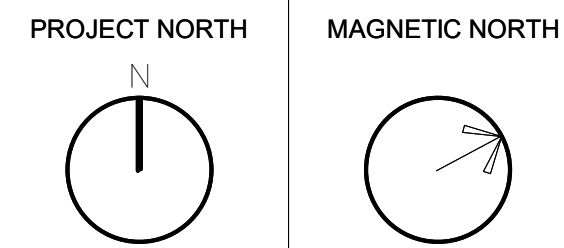
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FIRE
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RISER DIAGRAM

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