

**GENERAL NOTES:**

- 1. THE ENUMERATION OF PARTICULAR ITEMS OF WORK IN ONE PORTION OF THE CONTRACT DOCUMENTS SHALL NOT BE CONSTRUED TO EXCLUDE OTHER ITEMS NECESSARY OR IMPLIED THEREFROM.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL PARTS OF THE WORK SO THAT NO WORK SHALL BE LEFT IN AN UNFINISHED OR INCOMPLETE CONDITION, OWING TO ANY DISAGREEMENT BETWEEN THE VARIOUS SUBCONTRACTORS, OR THE SUBCONTRACTORS AND THE CONTRACTOR AS TO WHERE THE WORK OF ONE BEGINS OR ENDS IN RELATION TO THE WORK OF THE OTHER.
- 3. ALL WORK SHALL CONFORM TO APPLICABLE INDUSTRY AND MANUFACTURER'S PUBLISHED STANDARDS FOR ALL REQUIREMENTS IN THESE DRAWINGS AND SPECIFICATIONS. ANY CONFLICTING REQUIREMENTS OF THE SOURCES LISTED ABOVE SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO PROCEEDING WITH WORK.
- 4. ALL WORK NOTED 'N.I.C.' IS NOT MEANT TO BE PART OF THE CONSTRUCTION AGREEMENT.
- 5. THE CONTRACTOR SHALL PAY FOR AND COORDINATE THE REMOVAL AND LEGAL DISPOSAL OF MATERIALS AND RUBBISH WITH THE BUILDING OWNER.
- 6. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN: LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES, OMISSIONS AND/OR CONFLICTS BEFORE COMMENCEMENT OF WORK.
- 7. IF REQUIRED, ANY GYPSUM BOARD SURFACE TOUCH-UP REPAIRS ARE TO RECEIVE ONE FINISH COAT OF PAINT. FINISH COLORS TO MATCH EXISTING ADJACENT SURFACES.
- 8. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

**SAFETY AND SECURITY NOTES**

- 1. THE CONTRACTOR WILL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. HE/SHE WILL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND WILL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE, INJURY, OR LOSS TO ALL EMPLOYEES ON THE WORK AND OTHER PERSONS WHO MAY BE AFFECTED THEREBY. ALL THE WORK AND ALL MATERIALS OR EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, AND OTHER PROPERTY AT THE WORK AREA OR ADJACENT THERETO, INCLUDING ALL AREAS ALONG THE ROUTE BETWEEN THE BUILDING EXTERIOR ACCESS AND THE AREA OF WORK.
- 2. THE CONTRACTOR WILL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY PROTECTION. HE/SHE WILL NOTIFY OWNERS OF ANY AND ALL DISRUPTIONS OF SERVICES AND/OR ACCESS IMPACTING OTHER BUILDING TENANTS.
- 3. THE CONTRACTOR SHALL COMPLY WITH THE SAFETY STANDARDS PROVISIONS OF APPLICABLE LAWS, BUILDING AND CONSTRUCTION CODES AND THE MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (PUBLIC LAW 91-596).
- 4. THE CONTRACTOR SHALL MAINTAIN AT HIS/HER OFFICE OR OTHER WELL KNOWN PLACE AT THE JOB SITE, ALL ARTICLES NECESSARY FOR GIVING FIRST AID TO THE INJURED, AND SHALL MAKE STANDING ARRANGEMENTS FOR THE IMMEDIATE REMOVAL TO A HOSPITAL OR A DOCTOR'S CARE OF PERSONS (INCLUDING EMPLOYEES) WHO MAY BE INJURED AT THE JOB SITE. IN NO CASE SHALL EMPLOYEES BE PERMITTED TO WORK AT A JOB SITE BEFORE THE EMPLOYER HAS MADE A STANDING ARRANGEMENT FOR REMOVAL OF INJURED PERSONS TO A HOSPITAL OR A DOCTOR'S CARE.
- 5. THE CONTRACTOR, TO THE GREATEST EXTENT POSSIBLE, WILL MAINTAIN SAFE ACCESS TO THE WORK AREA DURING CONSTRUCTION, AND MAINTAIN SAFE EGRESS FROM THE WORK AREA AT ALL TIMES. ONCE CONSTRUCTION IS FINALIZED, ANY PROTECTIVE BARRIERS ARE TO BE REMOVED.
- 6. THE CONTRACTOR SHALL MAINTAIN THE AREA OF WORK TO REMAIN FREE FROM DEBRIS, BROOM-CLEAN, AND SECURE AT THE CONCLUSION OF EACH WORK DAY.
- 7. THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING FOR THE ENTIRE DURATION THAT EXISTING AND/OR NEW PERMANENT LIGHTING IS FUNCTIONAL.

**FUNDING SOURCE**

ATTENTION IS CALLED TO THE FACT THAT THIS PROJECT FALLS UNDER THE PENNSYLVANIA PREVAILING WAGE RATE STRUCTURE, AND A COPY OF THE WAGE DETERMINATION FOR THIS PROJECT IS INCLUDED.

**PROJECT NARRATIVE**

THE SITE ADDRESS IS 201 WEST FRONT STREET, LOCATED ON THE SECOND FLOOR OF THE SOUTHERN END OF THE GOVERNMENT CENTER BUILDING LOCATED IMMEDIATELY NORTH OF THE DELAWARE COUNTY COURTHOUSE BUILDING IN MEDIA, PA 19063. THE AREA OF WORK IS A 4,610 GROSS SQUARE FEET EXISTING OFFICE SUITE CURRENTLY DEMISED FROM ADJACENT BUILDING CORRIDORS BY FRAMED WALLS AND A SERIES OF INTERNAL LIGHT WELLS AND FROM OTHER TENANT SPACES BY A DEMOUNTABLE PARTITION SYSTEM.

THE PURPOSE OF THIS PLAN IS TO SHOW THE REQUIREMENTS NECESSARY TO RENOVATE THE EXISTING OFFICE SUITE AS INDICATED IN THE SCOPE OF WORK.

**SCOPE OF WORK**

ALTHOUGH THIS NEXT SECTION ATTEMPTS TO ASSIST BIDDERS WITH AN OVERALL UNDERSTANDING OF THE PROJECT, IT IS NOT NECESSARILY ALL INCLUSIVE. ALL WORK IDENTIFIED ON THE ACTUAL DRAWING MUST BE PROVIDED.

- 1. CONTRACTOR TO REMOVE ALL EXISTING INTERIOR DEMOUNTABLE PARTITIONS AND DOORS.
- 2. EXISTING 54"x54" CEILING GRID TO REMAIN.
- 3. ALL EXISTING FURNITURE & EQUIPMENT TO BE REMOVED BY OWNER (N.I.C.).
- 4. ALL NEW FURNITURE & EQUIPMENT TO BE PROVIDED BY OWNER (N.I.C.).

**WORKING CONDITIONS & INSTRUCTIONS**

- 1. A PROJECT SCHEDULE WITH SUMMARY OF ALL PHASES, FROM START TO DEADLINE COMPLETION DATE, IS TO BE DEVELOPED BY THE G.C. FOR EACH PROJECT.
- 2. CONTRACTOR SHALL PLAN HIS WORK TO PROVIDE ADEQUATE PROTECTION FOR THE PERSONS AND PROPERTY AT ALL TIMES AND EXECUTE THE WORK IN SUCH A MANNER TO AVOID ANY HAZARD TO PERSONS AND PROPERTY AS PER BOROUGH AND STATE CODE REQUIREMENTS.
- 3. ALL MEANS & METHODS OF DEMOLITION AND INSTALLATION, INCLUDING ALL SAFETY PRECAUTIONS, WILL BE STRICTLY THE OBLIGATION OF THE CONTRACTOR.

**PERMITS**

- 1. ALL REQUIRED PERMITS WILL BE APPLIED FOR AND PAID BY THE CONTRACTOR AS DEEMED NECESSARY BY THE BOROUGH OF MEDIA WITH A \$15,000 PERMIT ALLOWANCE.

**CHANGE OF WORK**

- 1. THE OWNER RESERVES THE RIGHT TO MAKE, AT ANY TIME DURING THE PROGRESS OF THE WORK, SUCH INCREASES OR DECREASES IN QUANTITIES AND SUCH ALTERATIONS IN DETAILS OF WORK AS MAY BE DEEMED NECESSARY OR DESIRABLE. SUCH INCREASES OR DECREASES AND ALTERATIONS SHALL NOT INVALIDATE THE CONTRACT NOR RELEASE THE SURETY, AND THE CONTRACTOR AGREES TO PERFORM THE WORK AS ALTERED, THE SAME AS IF IT HAD BEEN A PART OF THE ORIGINAL CONTRACT.
- 2. AUTHORIZED ALTERATIONS IN PLANS OR QUANTITIES OF WORK INVOLVING WORK NOT COVERED BY UNIT PRICES IN THE PROPOSAL SHALL BE PAID FOR AS STIPULATED IN THE CHANGE ORDER AUTHORIZING SUCH WORK.
- 3. NO CHANGES IN WORK COVERED BY THE APPROVED CONTRACT SHALL BE MADE WITHOUT HAVING PRIOR WRITTEN APPROVAL OF THE OWNER.

**BIDDING FORMAT**

ALL WORK TO BE PRICED WITH A FIXED FEE LUMP SUM AMOUNT.

**THE FOLLOWING ALTERNATIVE PRICING IS REQUESTED:**

- 1. PROVIDE NEW EXHAUST FAN & VENTING IN NEW BREAK ROOM, SEE DRAWING M-2.
- 2. PROVIDE 10% ATTIC STOCK ACOUSTIC CEILING TILE, SEE A-2
- 3. PROVIDE 10% ATTIC STOCK CARPET TILE, SEE A-2

**PROJECT TEAM:**

**OWNER**

DELAWARE COUNTY  
201 W. FRONT STREET  
MEDIA, PA 19063

**ARCHITECTURE**

LINN ARCHITECTS  
1140 N. PROVIDENCE ROAD  
MEDIA, PA. 19063  
CONTACT: MICHAEL KINSLEY, RA  
(P) 610-566-7044  
mkinsley@linn.com

**MECHANICAL & ELECTRICAL ENGINEERING**

ADVANCED ENGINEERING INC.  
5562 PENNELL ROAD  
MEDIA, PA 19063  
CONTACT: JERRY FINK, PE  
(P) 610-361-0700  
jfink@advenginc.com

**BUILDING CODE DATA**

THESE DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE. ALL CONTRACTORS SHALL PERFORM WORK IN ACCORDANCE WITH THIS CODE AND THE REQUIREMENTS AND CODES OF ALL GOVERNING AGENCIES HAVING JURISDICTION. CONTRACTORS SHALL OBTAIN ALL REQUIRED LICENSES AND PERMITS AS REQUIRED.

**CODE REFERENCES WITH APPLICABLE PA AMENDMENTS:**

- 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
- 2018 INTERNATIONAL BUILDING CODE (IBC)
- 2009 ANSI A117.1 w/o AMENDMENTS

**2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)**  
PROPOSED WORK IS CLASSIFIED AS A LEVEL TWO ALTERATION

**2018 INTERNATIONAL BUILDING CODE (IBC)**  
CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION  
CURRENT USE: 'B' BUSINESS (OFFICES)

**CHAPTER 8 INTERIOR FINISH CLASSES W/O SPRINKLER SYSTEM**  
TABLE 803.13 FINISH REQUIREMENTS (B, BUSINESS)

- EXIT ENCLOSURES & PASSAGEWAYS: A
- CORRIDORS: B
- ROOMS & ENCLOSED SPACES: C

**CHAPTER 9 FIRE PROTECTION SYSTEMS**  
EXISTING BUILDING IS NOT PROTECTED WITH AN AUTOMATIC SPRINKLER SYSTEM

**CHAPTER 10 MEANS OF EGRESS**  
SECTION 1004, TABLE 1004.5  
**AREA OCCUPANT LOAD CALCULATION**  
BUSINESS = 150 GROSS SQ. FT./OCCUPANT  
4610 GSF / 150 = 30 OCCUPANTS

**SECTION 1006 NUMBER OF EXITS & TRAVEL DISTANCE (NON-SPRINKLERED)**  
(1) EXIT/100 FEET MAX. COMMON PATH OF EGRESS REQUIRED (B, ≤ 30 OCCUPANTS)

- SECTION 1008.1 MEANS OF EGRESS ILLUMINATION - REQUIRED
- SECTION 1013 EXIT SIGNS - REQUIRED
- SECTION 1013.4 TACTILE EXIT SIGNS - REQUIRED AT ALL EXITS
- SECTION 1017.2 MAX. EXIT TRAVEL DISTANCE - 200 FT. MAX (B, NON-SPRINKLERED)

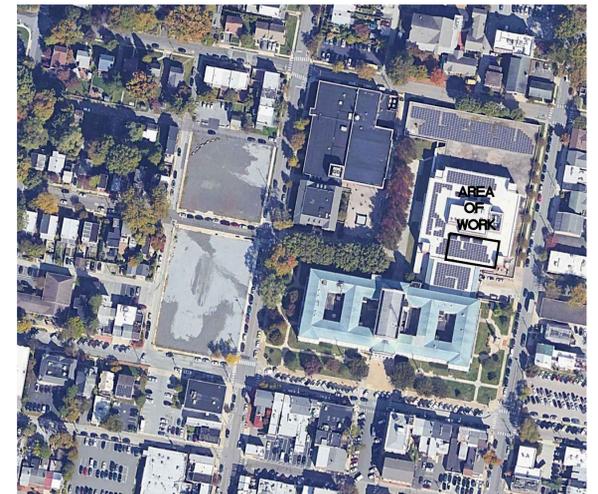
**CHAPTER 11 ACCESSIBILITY**  
BUILDING SHALL COMPLY WITH 2018 IBC CHAPTER 11 AND ANSI A117.1-2009

**INTERIOR OFFICE IMPROVEMENTS**  
for the  
**DELAWARE COUNTY GOVERNMENT CENTER**  
201 W. FRONT STREET  
MEDIA BOROUGH, PA 19063

LINN PROJECT #23222 01-02-2024

DRAWING INDEX table with columns SHEET NO., SHEET TITLE, and ISSUE FOR BID 01/02/2024. Rows include CS-1 COVER SHEET, D-1 DEMOLITION PLANS, A-1 PROPOSED FLOOR & CEILING PLANS, A-2 FURNITURE/EQUIPMENT & FINISH PLANS, A-3 SCHEDULES & DETAILS, M-1 MECHANICAL COVER SHEET, M-2 MECHANICAL FLOOR PLAN, MD-2 MECHANICAL DEMO FLOOR PLAN, E-1 ELECTRICAL COVER SHEET, E-1.1 ELECTRICAL DETAILS, E-2 ELECTRICAL POWER PLAN, E-3 ELECTRICAL LIGHTING PLAN, E-4 ELECTRICAL SPECIFICATIONS.

**PROJECT LOCATION**



**GENERAL CONDITIONS**

- 1. **GENERAL CONDITIONS:** General Conditions are Standard Documents of the American Institute of Architects and are included in this contract. Copies of these documents and all referenced materials are available from the Architect upon request. Consult the provisions of the General Condition in detail for applicable information as they have important legal consequences.
- 2. **LAWS, ORDINANCES AND PERMITS:** The Contractor(s) shall give all notices and comply with all applicable Federal, State, Municipal and local codes, laws, regulations, rules, ordinances and lawful orders of any public authority bearing on the performance of the work. The owner shall secure and pay for the building permits and for all other permits, agency fees, licenses, certificates of inspection and approval necessary for the proper execution and completion of the work.
- 3. **QUALITY OF WORK:** All work shall be in accordance with accepted trade practices, and all materials shall be of the proper grade for their purpose. The Contractor is responsible to notify the Architect of any discrepancies or non-conformities in the documents, and to bear all costs arising from rectifying work performed contrary to law or best practices. Substitutions for specified products shall only be approved in writing and must be coordinated with adjacent materials.
- 4. **WARRANTY:** The Contractor guarantees that all work performed under the Contract shall be of good quality using new materials and equipment unless otherwise stated. Any work found to be defective or not in accordance with the Contract Documents within one (1) year of Owner Acceptance shall be promptly corrected by the Contractor. Any corresponding damage caused during the repair work shall also be repaired at the Contractor's expense.
- 5. **PROTECTION OF PERSONS AND PROPERTY:** The contractor shall comply with all laws, codes, and ordinances necessary to adequately protect all persons and property associated with the Contract from injury, damage, or loss. He shall install and maintain all reasonable safeguards, notices, barriers, scaffolding, ladders, and precautions required to provide this protection.
- 6. **INSURANCE:** The Contract shall provide the Owner with Certificates of Insurance at adequate amounts for liability, property damage, and workmen's compensation as required by local codes and accepted practice. The Owner will provide theft, vandalism, malicious mischief, and fire insurance on 100% of insurable value of the structure. The Owner's insurance will no duplicate coverage of Contractor's tools or equipment.

**SUBMITTALS**

- A. Shop Drawings: Submit newly prepared information drawn to scale. Indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information. Do not use Shop Drawings without an appropriate final stamp indicating action taken. Include the following information:
  - 1. Dimensions
  - 2. Identification of products and materials included by sheet and detail number.
  - 3. Compliance with standards.
  - 4. Notation of coordination requirements.
  - 5. Notation of dimensions established by field measurement.
  - 6. Sheet Size: Except for templates and full-size Drawings, submit one correctable, reproducible print and one blue- or black-line print on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no longer 56 by 48 inches (840 by 1220 mm). The architect will return the reproducible print.

- B. Product Data: Collect Product Data into single submittal for each element of construction. Mark each copy to show applicable choices and options. Where Product Data includes information on several products, mark copies to indicate applicable information.
  - 1. Include the following applicable information:
    - a. Manufacturer's printed recommendations.
    - b. Compliance with trade association standards.
    - c. Compliance with recognized testing agency standards.
    - d. Application of testing agency labels and seals.
    - e. Notation of dimensions verified by field measurements.
    - f. Notation of coordination requirements.
  - 2. Distribution: Furnish copies to installers, subcontractors, suppliers, and others required for performance of construction activities. Show distribution on transmittal forms. Do not proceed with installation until a copy of Product Data is in the installer's possession. Do not use unmarked Product Data for construction.
  - 3. Samples: Submit Samples for review of size, kind, color, pattern, and textures, for a check of these characteristics, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed. Samples to be cured and finished as specified and identical with the material proposed. Where variations are inherent in the material, submit at least 3 units that show limits of the variations. Include the following:
    - 1. CSI Section number and reference
    - 2. Generic description of the Sample.
    - 3. Sample Source.
    - 4. Product name or name of the manufacturer.
    - 5. Compliance with recognized standards.
    - 6. Availability and delivery time.

**PROJECT CLOSEOUT**

The Contractor shall file the guarantee release or waiver of liens, Certificate of Occupancy and three (3) complete sets of operation & maintenance manuals, and as-built record drawings with the architect prior to final payment. The manuals shall contain all manufacturer's instructions for maintenance and operation for each item of equipment furnished under the Contract. Arrange the manuals in proper order with indexed sections and a proper binding.

**DIVISION 8 - DOORS AND WINDOWS**

- 1. **FINISH HARDWARE**
  - A. Submit for the Architect's approval a finish hardware schedule organized by sets indicating furnished products for each door item. A list of manufacturers may be used upon approval of the Architect.
  - B. Key all locks to a Master System

**2. HOLLOW METAL FRAMES:**

- A. Frames:
  - A. Interior Frames: Fabricated form cold-rolled steel sheet
    - 1. Fabricate frames with mitered or coped corners
    - 2. Fabricate frames as knock down unless otherwise noted.
    - 3. Frames for Level 2 Steel Doors: 0.053-inch-(1.3-mm-) thick steel sheet
    - 4. Frames for Borrowed Lights: 0.53-inch-(1.3-mm-) thick steel sheet same as adjacent door frame.
  - B. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.
- B. Manufacturer's subject to compliance provide one of the following:
  - Ceco Corp.
  - Curries Company
  - Pioneer Industries
  - Steelcraft Manufacturing Co.
- 3. **SOLID CORE WOOD DOORS:**
  - A. Flush Doors:
    - A. Interior Doors: Solid composite lumber core with WDMA A-grade 3/8" nominal thickness wood veneer and matching hardwood vertical edges.
    - B. Manufacturers subject to compliance provide one of the following:
      - USA wood door
    - C. Submitted Requirements: Provide sample veneer with stain for approval by architect.

**DIVISION 9 - FINISHES**

- 1. **GYPSUM WALLBOARD**
  - A. Gypsum wall and ceiling boards shall be 5/8" thick, except fire rated walls shall be 5/8" fire code gypsum wall board as per applicable UL number. Provide tapered edges for Per-A-Tape joint system as manufactured by US Gypsum Ceiling and Walls; tape and spackle all joints with three (3) coats of spackle and make ready for painting and finishing. Exterior corners shall receive metal corner beads and exposed edges shall receive USS 200 A or 200 B spackle mold as appropriate.
  - B. Drywall control joints shall not exceed what is recommended by the product manufacturer to maintain the product warranty.
  - C. Trim and Miscellaneous Accessories include
    - 1. Gypsum board screws and nails must be galvanized or cadmium plates
    - 2. Acoustical sealant - concealed or exposed
    - 3. Sound attenuation blankets - mineral or glass fiber board
    - 4. Paper joint tape and joint compound (vinyl interior type or chemical hardening for exterior work).
    - 5. Trim materials of metal or plastic include: corner beads, L, J, or U edge trim, use L trim for drywall abutting tightly to other work. Use J trim at exposed edges. H-molding or beaded type control joint.

- D. Manufacturers of gypsum drywall and accessories include:
  - United States Gypsum Co.
  - American Gypsum
  - Flintkote Products, genstar Building Materials Co.
  - Georgia-Pacific Co.
  - Gold Bond Building Products Division, National Gypsum Co.
- 2. **PAINTING**
  - C. Painting shall include surface preparation, cleaning, painting, finishing, protecting and cleaning of finished work including but not limited to all wood, gypsum board, unfinished or shop primed ferrous metals, and all other surfaces throughout interior and exterior of building as specified.
  - D. Apply three (3) coats of paint on all surfaces unless otherwise noted. Colors for paint and stain shall be as selected by Architect.
  - E. All gypsum board shall receive on (1) prime coat and two (2) finish coats of eggshell (washable) interior latex.
  - F. Paint grade trim shall receive one (1) prime coat and two (2) finish coats of semi-gloss latex enamel.
  - G. All HM doors and frames to be painted as specified on the door schedule and notes.
  - H. Painting Procedure: Painting shall vary in tone as follows:
    - 1. Primer coat
    - 2. 1st finish coat
    - 3. 2nd finish coat
  - I. Submittal Requirements: Provide up to (8) 24"x24" field-painted mock-up applications on constructed walls for final color selection by client and/or architect.
- 3. **FLOORING**
  - A. Floor as indicated on Floor/Finish Plan and Finish Legend Sheet.
  - B. Submittal Requirements: Provide up to (3) different 4 sq.ft. product samples of carpet tile and (3) different 4 sq.ft. product samples of LVT flooring for final selection by client and/or architect.
- 4. **CEILING**
  - A. Ceiling grid: See Finish Schedule
  - B. Ceiling Tiles: See Finish Schedule
  - C. Seismic Bracing where acoustic tile assemblies exceed 12' O.C. in each direction horizontally, install seismic bracing at 12" O.C. minimum each way. Bracing shall consist of 12 gauge metal wire ties, installed at 45 degrees each way, securely fastened to ceiling grid and to structure above. Do not fasten to metal deck. Locate bracing points in the field to avoid conflicts with mechanical and electrical equipment above ceiling. Verify all locations with Architect prior to installation.

ARCHITECTS  
LINN ARCHITECTS  
1140 N. PROVIDENCE ROAD  
MEDIA, PENNSYLVANIA 19063  
ARCHITECTURE  
ENGINEERING  
SITE PLANNING  
CODE SERVICES  
TEL: 610-566-7044  
FAX: 610-566-3258

COVER SHEET  
HR SUITE EQUIPMENT RECONFIGURATION  
DELAWARE COUNTY GOVERNMENT CENTER  
201 W. FRONT STREET  
MEDIA, PA 19063

Table with columns: DATE, SCALE, AS NOTED, DRAWN BY, CHECKED BY, PROJ. NO., SHEET NO. Values include 01.02.24, 1/8" = 1'-0", GP, MJK, 23222, 5.

SHEET NO.  
**CS-1**  
OF 5  
SHEET 1 OF 5

**GENERAL DEMOLITION NOTES:**

1. GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
2. G.C. SHALL BE RESPONSIBLE FOR AND COORDINATE DEMOLITION WORK REQUIRED.
3. G.C. IS RESPONSIBLE FOR ALL DEMOLITION, SHORING & BRACING, CUTTING, CORING, NEEDLING ETC.
4. IN AREA OF WORK, G.C. SHALL BE RESPONSIBLE TO PATCH AND REPAIR ALL EXISTING CONSTRUCTION WHICH IS TO REMAIN.
5. G.C. SHALL BE RESPONSIBLE FOR ALL ASSOCIATED DEMOLITION WORK LOCATED OUTSIDE THE "AREA OF WORK", REQUIRED TO PROVIDE COMPLETE INSTALLATION OF ALL BUILDING SYSTEMS IDENTIFIED IN THE PROJECT SCOPE.
6. IF ANY QUESTIONS ARISE AS TO THE REMOVAL OF ANY MATERIAL, CLARIFY THE POINT IN QUESTION WITH THE ARCHITECT BEFORE PROCEEDING.
7. DEMOLITION IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON DRAWINGS. THE INTENT IS TO INDICATE THE GENERAL SCOPE OF DEMOLITION REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS.
8. ALL DRAWINGS ARE DIAGRAMATIC. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT BUILDING BEFORE ANY DEMOLITION WORK IS TO BE STARTED. PROMPTLY REPORT ANY DISCREPANCIES TO ARCHITECT.
9. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH LOCAL ORDINANCES AND ALL APPLICABLE CODES.
10. AIA GENERAL CONDITIONS A-201 1997 IS INCORPORATED BY REFERENCE.
11. THE G.C. SHALL FURNISH A SYSTEM OF TEMPORARY LIGHT AND POWER IN THE SPACE DURING DEMOLITION AND CONSTRUCTION. LIGHTING IS TO BE ADEQUATE FOR PROVIDING A SAFE WORKING ENVIRONMENT FOR FUTURE FIT-OUT, AND LEFT SWITCHED IN THE "ON" POSITION.
12. AFTER COMPLETED DEMOLITION, SPACE TO REMAIN WEATHER & WATER TIGHT, LIGHTED (TEMP.), & SECURED BY LOCKING. (BROOM CLEAN) WITH NO UNSAFE CONDITIONS REMAINING AS DETERMINED BY OWNER AND/OR ARCHITECT.
13. NOT USED.
14. REMOVE ALL PARTITIONS, DOORS, FINISHES, FIXTURES AND EQUIPMENT INDICATED BY DASHED LINES.
15. ALL DOORS, FRAMES, HARDWARE, MECHANICAL ITEMS, PLUMBING FIXTURES, LIGHT FIXTURES, AND SPECIAL EQUIPMENT SHOWN TO BE REMOVED SHALL BE CLEAN AND FREE OF DEFECTS, PROTECTED, SAVED, AND RE-USED AS DIRECTED HEREIN, RETURNED TO BUILDING STOCK, OR DISPOSED OF AS DIRECTED.
16. NOT USED.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND/OR REPAIRING ANY DAMAGE CAUSED BY THEM OR THEIR SUBCONTRACTORS TO ANY EXISTING CONDITIONS IN COMMON STAIRS, ELEVATOR LOBBIES, PUBLIC CORRIDORS, RESTROOMS, OR OTHER TENANT SPACES. REFINISH TO MATCH EXISTING ADJACENT FINISH, OR AS NOTED HEREIN. IT SHALL BE THE G.C.'S RESPONSIBILITY TO DOCUMENT ANY PREEXISTING DAMAGE AND NOTIFY ARCHITECT OF ANY SUCH DAMAGE PRIOR TO PRICING OR BIDDING.
18. REMOVE ALL EXISTING IRREGULAR MATERIALS WHICH CAUSE RISES OR DEPRESSIONS IN FLOORING SURFACE, SUCH AS FASTENERS, OUTLET CORES, COVER PLATES, RESILIENT FLOOR COVERINGS, CARPET, CARPET PAD, FLASH PATCH, CONCRETE FILL, PLYWOOD, ETC. CONTRACTOR TO PREPARE EXISTING SLAB AS REQUIRED FOR NEW FLOOR FINISHES.
19. CONTRACTOR TO PREPARE EXISTING SLAB AS REQUIRED FOR NEW FLOOR FINISHES.
20. ALL FLOORING OPENINGS ARE TO BE SEALED TEMPORARILY AND MADE STRUCTURALLY SAFE UNTIL NEEDED FOR NEW CONSTRUCTION.
21. ANY/ALL EXISTING FIREPROOFING FOUND ON EXISTING STRUCTURE (COLUMNS, BEAMS, SLABS,) SHALL BE PROTECTED & REMAIN INTACT. (DO NOT REMOVE).
22. STAIRWAYS MUST REMAIN ACCESSIBLE AT ALL TIMES DURING DEMOLITION.
23. CAREFULLY REMOVE ALL EXISTING WALL FINISHES AT EXISTING PARTITIONS AND/OR COLUMNS, AS NOTED. PROTECT SUBSTRATE. REMOVE ALL EXISTING FLOOR AND CEILING FINISHES THROUGHOUT. PATCH AND REPAIR AS NEEDED TO ACCEPT NEW FINISHES.
24. NOT USED.
25. NOT USED.
26. NOT USED.
27. NOT USED.

**DEMO LEGEND:**

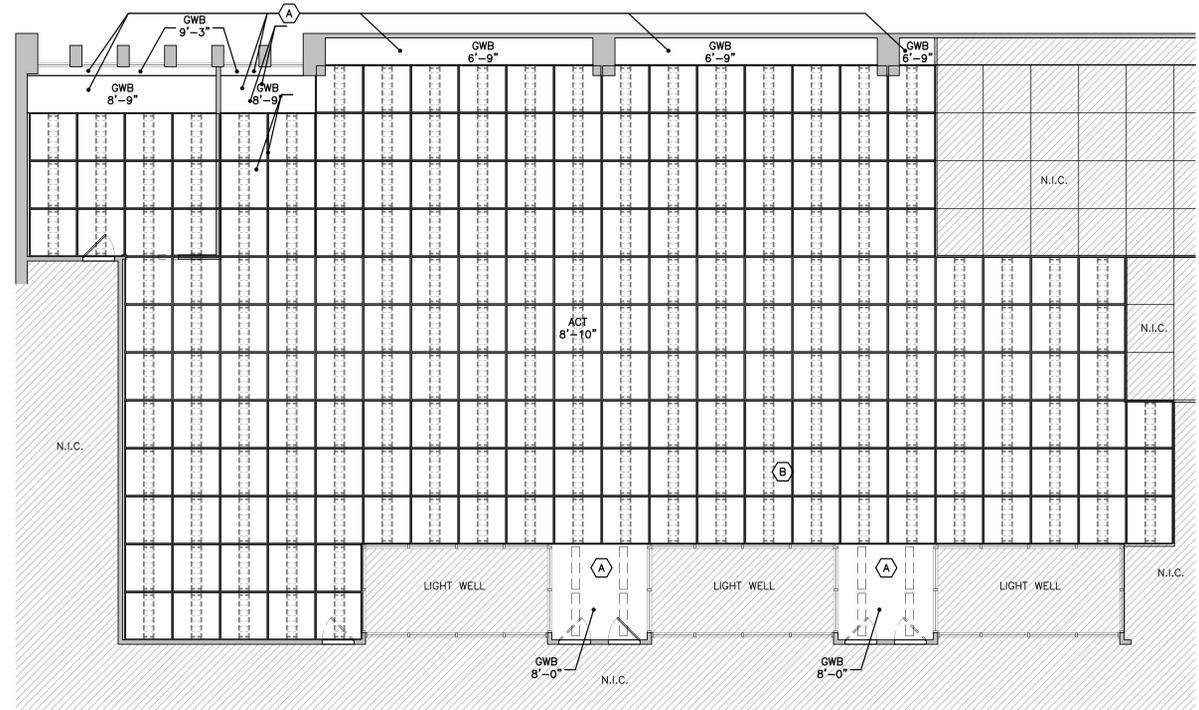
	EXISTING WALL TO REMAIN		EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO REMAIN		EXISTING DOOR TO BE REMOVED
	EXISTING WINDOW TO REMAIN		EXISTING WINDOW TO BE REMOVED
	EXISTING FIXTURES/CASEWORK TO REMAIN		EXISTING FIXTURES/CASEWORK TO BE REMOVED
	EXISTING 54"x54" SLOTTED CEILING GRID TO REMAIN		EXISTING GRID-INTEGRATED LINEAR HVAC AIR DIFFUSER, SEE MECHANICAL PLAN FOR MORE INFO
	REMOVE EXISTING LIGHT & END FILLER PANELS		
	REMOVE EXISTING 22"x54" ACT PANELS		

**FLOOR DEMO KEY NOTES**

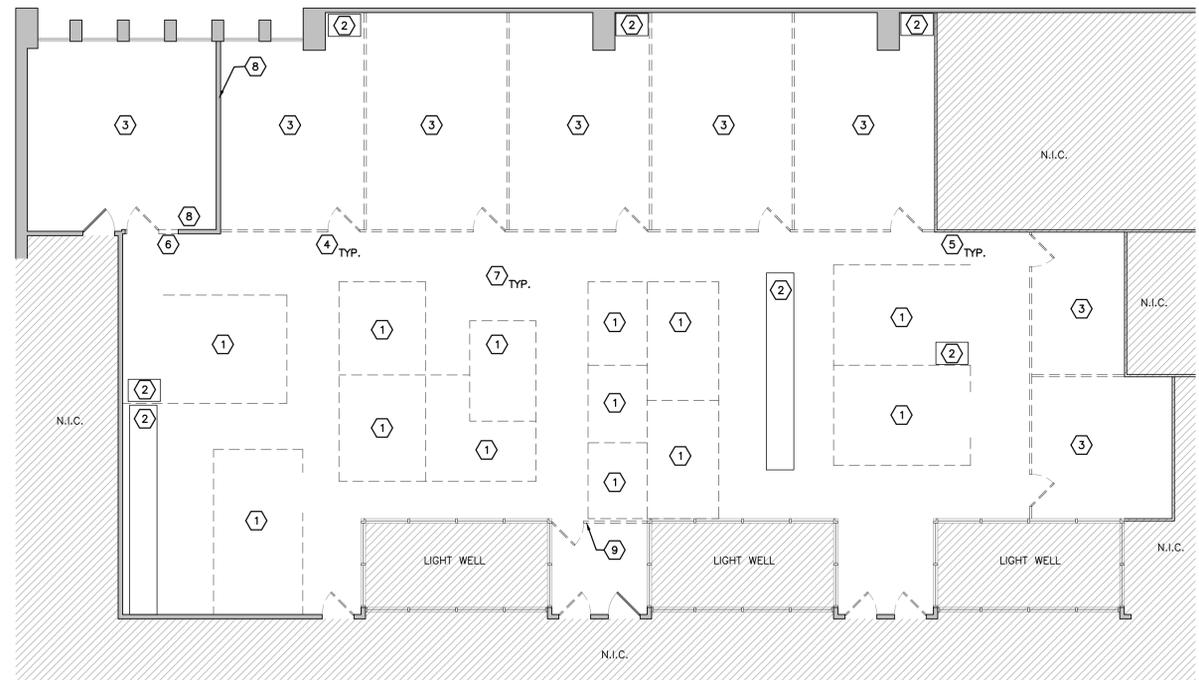
- 1 EXISTING SYSTEMS FURNITURE & CHAIRS TO BE REMOVED BY OWNER (N.I.C.)
- 2 EXISTING HIGH-DENSITY FILES TO BE REMOVED & STORED BY OWNER FOR RE-INSTALLATION AFTER PROPOSED WORK IS COMPLETE (N.I.C.)
- 3 EXISTING OFFICE FURNITURE TO BE REMOVED BY OWNER (N.I.C.)
- 4 REMOVE EXISTING INTERIOR SYSTEMS PARTITIONS AND DOORS
- 5 EXISTING PERIMETER SYSTEMS PARTITIONS TO REMAIN
- 6 REMOVE PORTION OF EXISTING STUD WALL TO ALLOW FOR NEW DOOR & SIDELITE
- 7 REMOVE ALL CARPET THROUGHOUT
- 8 REMOVE EXISTING GWB AT ONE SIDE OF EXISTING WALL TO ALLOW FOR NEW ACOUSTIC BATT INSULATION.
- 9 REMOVE EXISTING SYSTEMS PARTITION, DOOR, AND ELECTRIC STRIKE/CARD READER. CAP ELECTRICAL NEW ENTRY DOOR, ELECTRIC STRIKE, AND CARD READER INSTALLATION.

**CEILING DEMO KEY NOTES**

- A EXISTING GWB CEILING/SOFFIT TO REMAIN, REMOVE EXISTING LIGHTS, PATCH & REPAIR AS REQ'D TO COORDINATE WITH PROPOSED WORK
- B EXISTING 54"x54" CEILING GRID TO REMAIN, REMOVE EXISTING LIGHTING, ACT, INTERMEDIATE GRID, AND METAL FILLER PANELS. SEE LEGEND FOR ADDITIONAL INFORMATION



**2 DEMO CEILING PLAN**  
D-1 SCALE: 1/8"=1'-0"



**1 DEMO FLOOR PLAN**  
D-1 SCALE: 1/8"=1'-0"

**ARCHITECTS**

**LINN ARCHITECTS**  
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ARCHITECTURE  
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FAX: 610-566-3258

**DEMOLITION PLANS**

**HR SUITE EQUIPMENT RECONFIGURATION**  
**DELAWARE COUNTY GOVERNMENT CENTER**  
201 W. FRONT STREET  
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NO.	DESCRIPTION	DATE
1	ISSUE FOR BID	01.02.24

DATE: 01.02.24  
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CHECKED BY: MJJK  
PROJ. NO.: 23222  
**SHEET NO. 5**  
**SHEET 2 OF 5**

**RCP LEGEND:**  
NOTE: LIGHTING FIXTURES SHOWN FOR LOCATION ONLY. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURE SPECS AND LOCATIONS OF EMERGENCY/EXIT LIGHTING.

- RECESSED HI-HAT LED LIGHT
- RECESSED WALL WASHER LED LIGHT
- ▭ 24x24 LAY-IN INDIRECT TROFFER LED LIGHT
- LINEAR SUSPENDED LED LIGHT
- 24x24 HVAC SUPPLY AIR DIFFUSER
- ▧ 24x24 HVAC RETURN AIR DIFFUSER
- 48x6 LINEAR HVAC SUPPLY AIR DIFFUSER
- EXISTING GRID-INTEGRATED LINEAR HVAC AIR DIFFUSER, SEE MECHANICAL PLAN FOR MORE INFO
- ⊙ ILLUMINATED EXIT SIGN
- ⚡ EMERGENCY LIGHT W/ BATTERY PACK
- ▭ NEW 5/8" ARMSTRONG INTERMEDIATE CEILING GRID
- ▭ NEW 24"x54" OPTIMA LAY-IN ACOUSTIC CEILING TILE CENTER PANEL
- ▭ NEW 15"x54" OPTIMA LAY-IN ACOUSTIC CEILING TILE SIDE PANELS

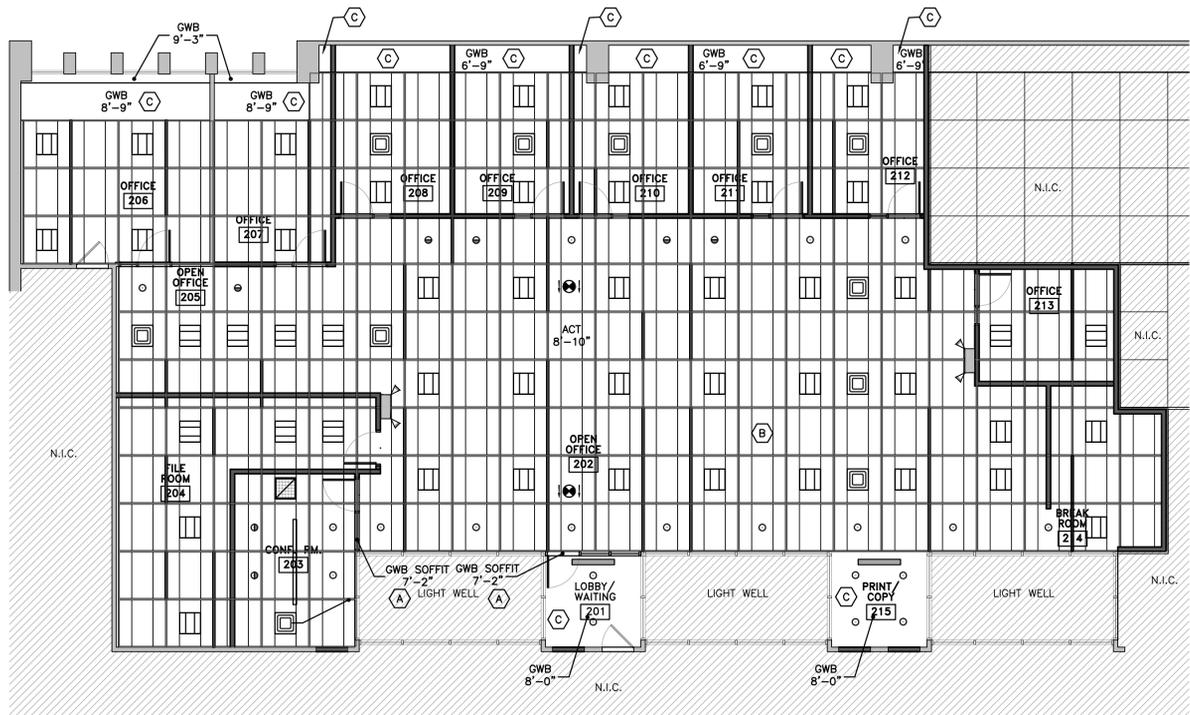
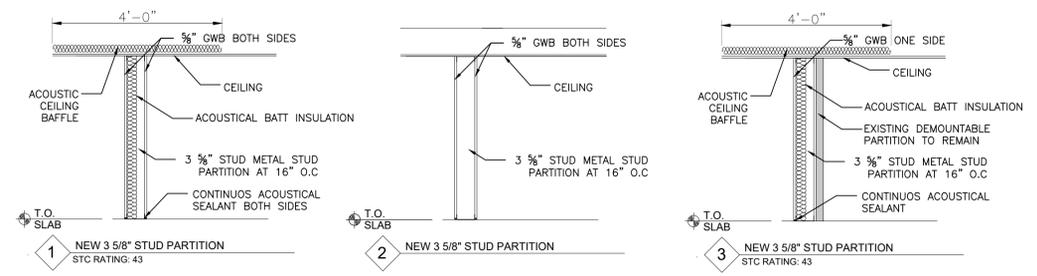
**CEILING PLAN KEY NOTES**

- (A) PROVIDE 5" WIDE FRAMED GWB CEILING BULKHEAD FOR NEW STOREFRONT FRAME BELOW.
- (B) EXISTING 54"x54" CEILING GRID TO REMAIN, INFILL W/ NEW INTERMEDIATE GRID, ACT, AND LIGHTING. SEE RCP LEGEND FOR ADDITIONAL INFO.
- (C) PRIME/PAINT ALL NEW AND EXISTING GWB CEILINGS, SEE FINISH SCHEDULE.

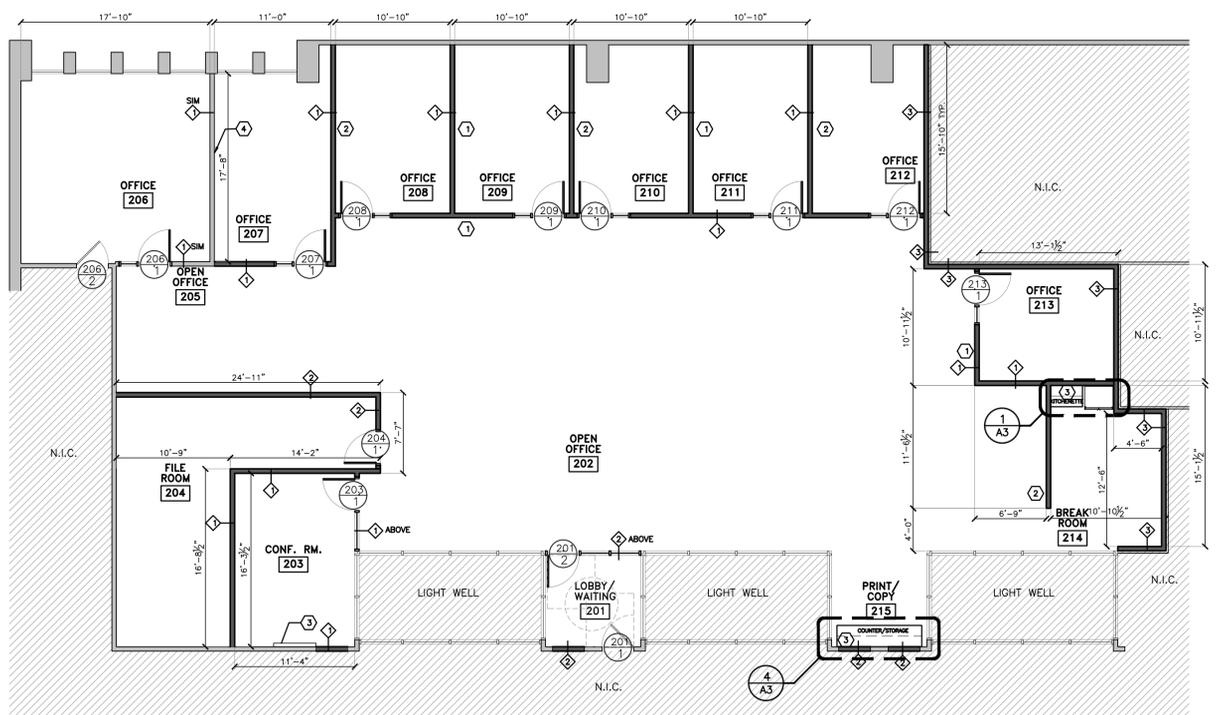
**FLOOR PLAN KEY NOTES**

- (1) CENTER NEW PARTITION ON EXISTING CEILING GRID ABOVE.
- (2) CENTER NEW PARTITION BETWEEN EXISTING CEILING GRID ABOVE.
- (3) PROVIDE BLOCKING IN WALL-MOUNTED CABINETS AND EQUIPMENT, SEE DETAILS.
- (4) REMOVE AND REPLACE GWB AT ONE SIDE OF EXISTING STUD WALL TO ALLOW ACOUSTIC BATT INSULATION INSTALLATION.

**WALL TYPES**



**2 REFLECTED CEILING PLAN**  
SCALE: 1/8"=1'-0"



**1 PROPOSED FLOOR PLAN**  
SCALE: 1/8"=1'-0"

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**PROPOSED FLOOR PLAN & CEILING PLANS**  
HR SUITE EQUIPMENT RECONFIGURATION  
DELAWARE COUNTY GOVERNMENT CENTER  
201 W. FRONT STREET  
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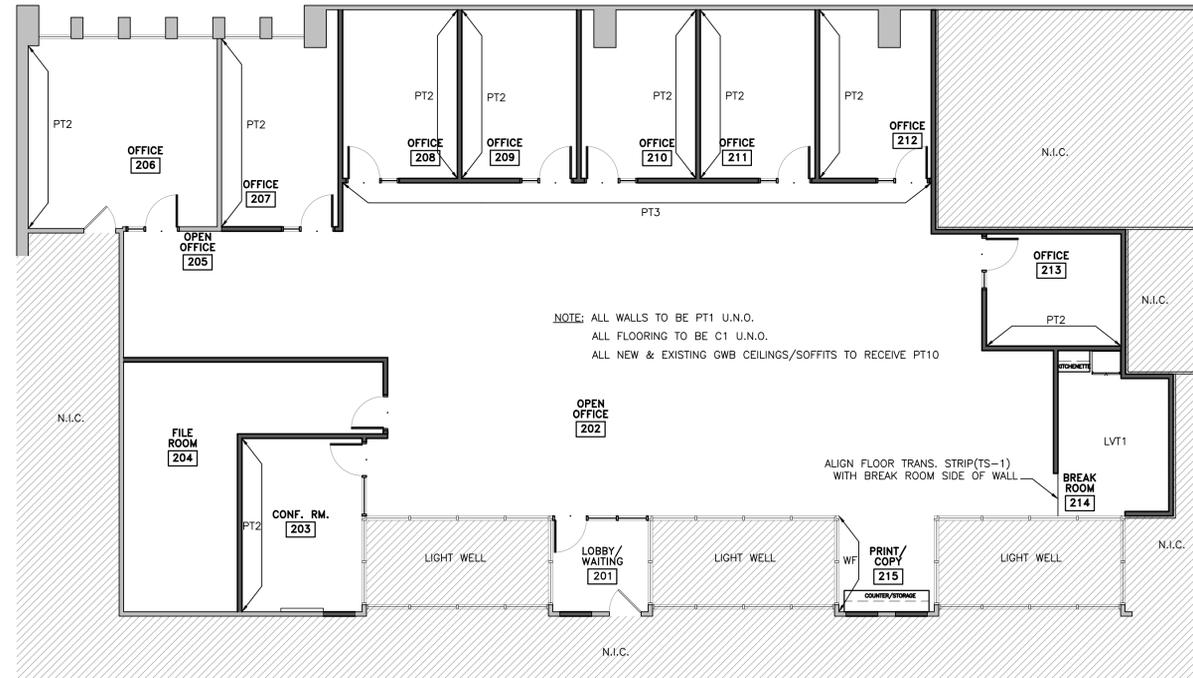
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**SHEET NO. A-1**  
SHEET 3 OF 5

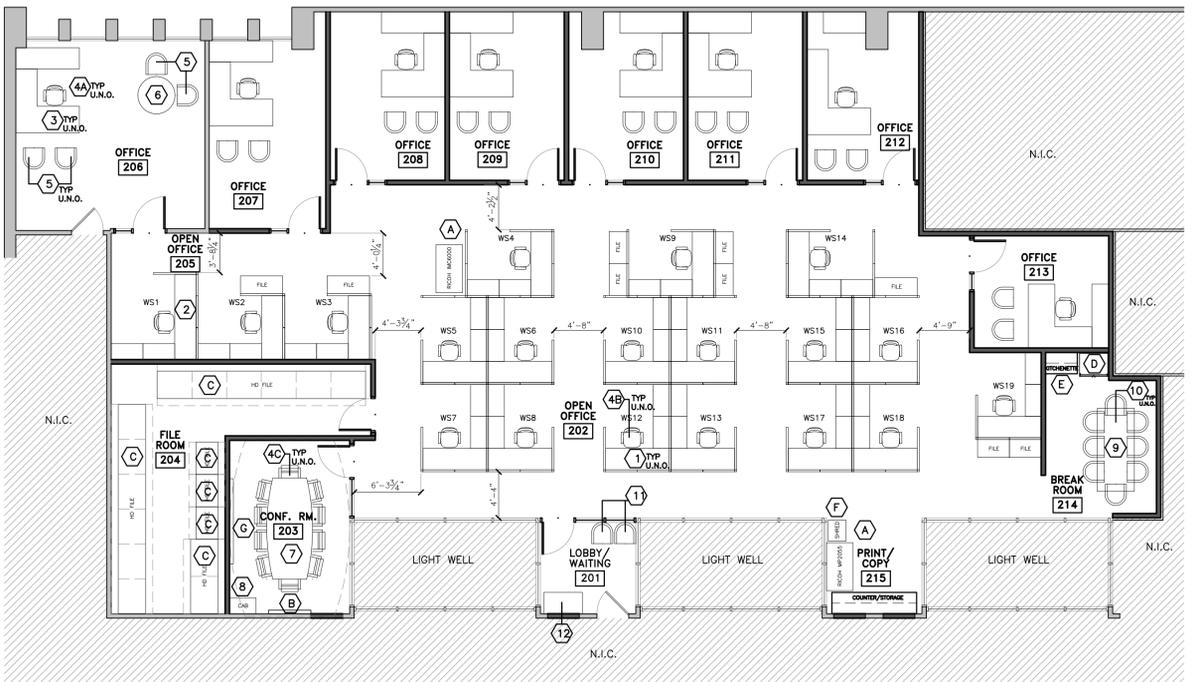
INTERIOR ROOM FINISH SCHEDULE															
ROOM	ROOM NAME	FLOORS			BASES				WALLS				CEILINGS		REMARKS
		LVT	CARPET	TSI	VINYL	N	S	E	W	PT	PT	PT	PT	PT	
201	LOBBY/WAITING	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	
202	OPEN OFFICE	●	●	●					PT 1/PT 3	PT 1	PT 1	PT 1	PT 1	PT 1	
203	CONF. ROOM	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	
204	FILE ROOM	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	
205	OPEN OFFICE	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	
206	OFFICE	●	●	●					PT 1	PT 1	PT 1	PT 2	PT 2	PT 2	
207	OFFICE	●	●	●					PT 1	PT 1	PT 1	PT 2	PT 2	PT 2	
208	OFFICE	●	●	●					PT 1	PT 1	PT 2	PT 2	PT 2	PT 2	
209	OFFICE	●	●	●					PT 1	PT 1	PT 1	PT 2	PT 2	PT 2	
210	OFFICE	●	●	●					PT 1	PT 1	PT 2	PT 2	PT 2	PT 2	
211	OFFICE	●	●	●					PT 1	PT 1	PT 1	PT 2	PT 2	PT 2	
212	OFFICE	●	●	●					PT 1	PT 1	PT 2	PT 2	PT 2	PT 2	
213	OFFICE	●	●	●					PT 1	PT 2	PT 1	PT 1	PT 1	PT 1	
214	BREAK ROOM	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	
215	PRINT/COPY ROOM	●	●	●					PT 1	PT 1	PT 1	PT 1	PT 1	PT 1	

MATERIAL SPECIFICATIONS				
ITEM	MANUFACTURER	STYLE OR CATALOG #	COLOR	REMARKS
<b>FLOORS</b>				
LVT (LVT1)	SHAWCONTRACT	RESIDE 20 MIL	ABODE 94506	STAGGER INSTALL PATTERN
CARPET 1 (C1)	SHAWCONTRACT	SURROUND TILE 5T125	BLUE HERRING 1748	QUARTER TURN INSTALL PATTERN, ADD ALTERNATE: SUPPLIER TO PROVIDE 10% ATTIC STOCK.
TRANSITION STRIP (TS-1)	ROPPE	#34 UNDERLAP CARPET	667 GALACTIC	
		EDGE 3/16"		
<b>BASE</b>				
RUBBER BASE	ROPPE	PINACLE 4 1/2"x1/8"	667 GALACTIC	
		RUBBER COVE BASE		
<b>WALLS</b>				
PAINT 1 (PT 1)	SHERWIN WILLIAMS	TBD	TBD	BASE COLOR
PAINT 2 (PT 2)	SHERWIN WILLIAMS	TBD	TBD	ACCENT COLOR #1
PAINT 3 (PT 3)	SHERWIN WILLIAMS	TBD	TBD	ACCENT COLOR #2
PAINT 4 (PT 4) NOT USED	SHERWIN WILLIAMS	TBD	TBD	ACCENT COLOR #2
PAINT 5 (PT 5)	SHERWIN WILLIAMS	TBD	TBD	HOLLOW METAL DOOR/WINDOW FRAMES, SEMI-GLOSS FINISH
<b>CEILING</b>				
ACOUSTIC CEILING TILE	ARMSTRONG	OPTIMA	WHITE	CUSTOM SIZES: 24"x54" & 15"x54", 9/16" ARMSTRONG INTERMEDIATE GRID. ADD ALTERNATE: SUPPLIER TO PROVIDE 10% ATTIC STOCK.
PAINT 10 (PT 10)	SHERWIN WILLIAMS	SW 7007	CEILING BRIGHT WHITE	GWB CEILINGS & SOFFITS, FLAT FINISH
<b>MILLWORK</b>				
PLAM 1 (PL 1)	WILSONART	D354-60	DESIGNER WHITE	WHITE
PLAM 2 (PL 2)	WILSONART	4830K-18	SATIN STAINLESS	SILVER
PLAM 3 (PL 3)	WILSONART	D379-60	INDIGO	BLUE
PLAM 4 (PL4)	TBD	TBD	TBD	INTERIOR/CONCEALED SURFACES
<b>MISCELLANEOUS</b>				
WINDOW FILM (WF)	3M	7725SE-314	DUSTED CRYSTAL	APPLY TO GLASS UP TO 42" A.F.F.

FURNITURE & EQUIPMENT SCHEDULE			
NOTE: ALL FURNITURE & EQUIPMENT TO BE PROVIDED AND INSTALLED BY OWNER			
DESIGNATION	ITEM	REMARKS	
1	6X8 WORK STATION (BY OWNER)		
2	8X8 WORK STATION (BY OWNER)		
3	OFFICE WORK STATION (BY OWNER)		
4A	OFFICE TASK CHAIR (BY OWNER)		
4B	OPEN OFFICE TASK CHAIR (BY OWNER)		
4C	MEETING CHAIR (BY OWNER)		
5	OFFICE GUEST CHAIR (BY OWNER)		
6	42" DIA. TABLE (BY OWNER)		
7	MEETING TABLE (BY OWNER)		
8	MEETING CABINET (BY OWNER)		
9	BREAK ROOM TABLE (BY OWNER)		
10	BREAK ROOM CHAIR (BY OWNER)		
11	WAITING CHAIR (BY OWNER)		
12	LAPTOP TABLE (BY OWNER)		
A	PRINTER/COPIER (BY OWNER)	EXISTING TO BE RELOCATED	
B	TV SCREEN (BY OWNER)	GC TO PROVIDE WOOD WALL BLOCKING BETWEEN 42"-72" A.F.F.	
C	HIGH DENSITY STORAGE UNIT (BY OWNER)	EXISTING TO BE RELOCATED	
D	30" REFRIGERATOR		
E	TRASH/RECYCLING BINS		
F	SHREDDER (BY OWNER)		
G	GLASS WHITEBOARD	96X48	



2 FINISH PLAN  
A-2 SCALE: 1/8"=1'-0"



1 FURNITURE PLAN  
A-2 SCALE: 1/8"=1'-0"

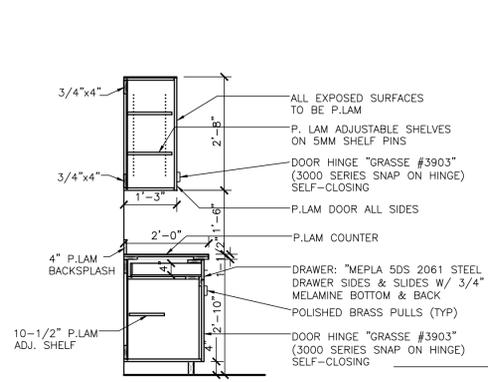
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FURNITURE & FINISH PLANS  
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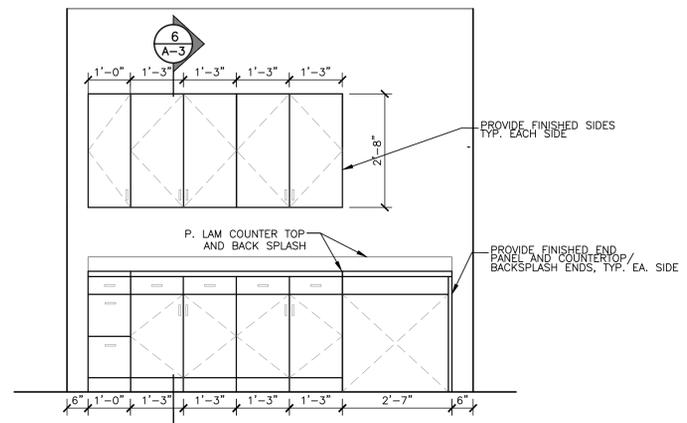
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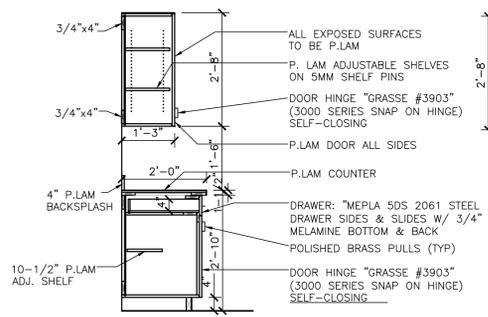
**A-2**  
SHEET 4 OF 5



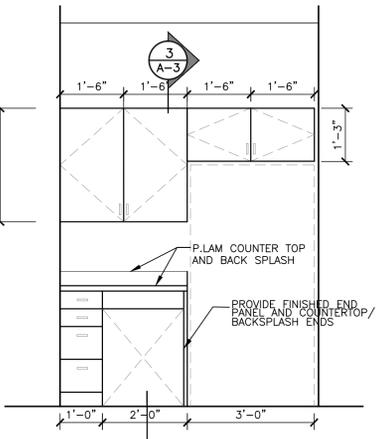
**6 PRINT/COPY ROOM SECTION**  
SCALE: 1/2"=1'-0"



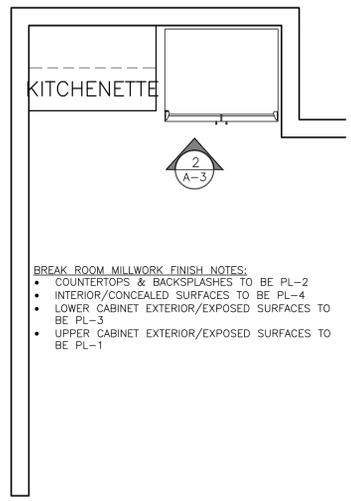
**5 PRINT/ COPY ROOM ELEVATION**  
SCALE: 1/2"=1'-0"



**3 BREAK ROOM SECTION**  
SCALE: 1/2"=1'-0"

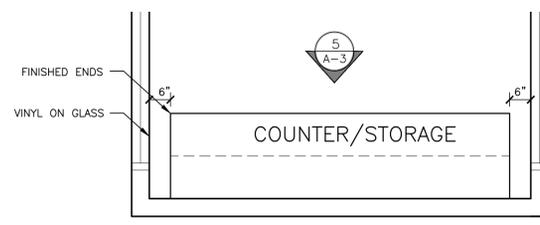


**2 BREAK ROOM ELEVATION**  
SCALE: 1/2"=1'-0"



**1 BREAK ROOM PLAN**  
SCALE: 1/2"=1'-0"

- BREAK ROOM MILLWORK FINISH NOTES:**
- COUNTERTOPS & BACKSPLASHES TO BE PL-2
  - INTERIOR/CONCEALED SURFACES TO BE PL-4
  - LOWER CABINET EXTERIOR/EXPOSED SURFACES TO BE PL-3
  - UPPER CABINET EXTERIOR/EXPOSED SURFACES TO BE PL-1



**4 PRINT/COPY ROOM PLAN**  
SCALE: 1/2"=1'-0"

- COPY MILLWORK FINISH NOTES:**
- COUNTERTOPS & BACKSPLASHES TO BE PL-1
  - INTERIOR/CONCEALED SURFACES TO BE PL-4
  - LOWER CABINET EXTERIOR/EXPOSED SURFACES TO BE PL-2
  - UPPER CABINET EXTERIOR/EXPOSED SURFACES TO BE PL-1

DOOR AND FRAME SCHEDULE															
		D O O R					F R A M E					HARDWARE SET	SIGN TYPE	DOOR STOP TYPE	REMARKS
FROM / TO	NO.	W	H	T	TYPE	MAT.	CORE	GLASS	TYPE	MAT.	DETAILS HEAD & JAMB				
CORRIDOR/WAITING	201-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		1	HM		3	3	FLOOR	EXISTING DOOR/FRAME TO REMAIN
WAITING/OPEN OFFICE	201-2	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		3	HM		2	3	FLOOR	WOOD DOOR VENEER TO MATCH EXISTING DOOR 201-1
OFFICE/CONF. ROOM	203-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		4	HM		4	2	WALL	
OPEN OFFICE/OFFICE	204-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		1	HM		5	2	WALL	
OPEN OFFICE/OFFICE	206-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	-	
OPEN OFFICE/OFFICE	206-2	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		1	HM		3	-	-	EXISTING DOOR/FRAME TO REMAIN
OPEN OFFICE/OFFICE	207-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	208-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	209-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	210-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	211-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	212-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	
OPEN OFFICE/OFFICE	213-1	3 <sup>0</sup>	7 <sup>0</sup>	1 3/4	A	WD	SC		2	HM		1	1	WALL	

NOTE: GC TO COORDINATE AND VERIFY OPENING SIZES WITH NEW DOORS IN FIELD

**HARDWARE MANUFACTURERS**

- HINGES - HAGER #BB1279, 4 1/2" X 4 1/2"  
 LOCKS - SARGENT 10XLINE, B LEVER  
 CLOSERS - LCN 4110 SERIES PARALLEL  
 DOOR STOPS - FLOOR - ROCKWOOD 480  
 WALL - ROCKWOOD 608  
 SILENCER - ROCKWOOD 608
- SET 1:**  
 1 LEVER PRIVACY LOCK SET (A.D.A COMPLIANT)  
 3 BUTT HINGES  
 3 SILENCERS
- SET 2:**  
 1 LEVER ENTRANCE LOCK SET (A.D.A COMPLIANT)  
 3 BUTT HINGES (INC. FINISH)  
 3 SILENCERS  
 1 DOOR CLOSER  
 1 ELECTRIC STRIKE (FAIL-SECURE FUNCTION)  
 1 CARD/KEYPAD, PROVIDED BY OWNER (GC TO PROVIDE POWER AS REQUIRED)
- SET 3:**  
 1 LEVER ENTRANCE LOCK SET (A.D.A COMPLIANT)  
 3 BUTT HINGES  
 3 SILENCERS  
 1 DOOR CLOSER
- SET 4:**  
 1 LEVER PASSAGE LOCK SET (ADA COMPLIANT)  
 3 BUTT HINGES  
 3 SILENCERS
- SET 5:**  
 1 LEVER PASSAGE LOCK SET (ADA COMPLIANT)  
 3 BUTT HINGES  
 3 SILENCERS  
 1 DEAD BOLT

**HARDWARE NOTES**

- ALL DOORS TO BE PROVIDED WITH LEVER HANDLES
- ALL HOLLOW METAL DOORS TO BE 16 GAUGE. ALL EXTERIOR HOLLOW METAL FRAMES TO BE 14 GAUGE. ALL HOLLOW METAL FRAMES SHALL BE PROVIDED WITH REINFORCING AT THE HINGE, JAMB STRIKE, AND CLOSER LOCATIONS. HOLLOW METAL FRAMES IN FRAME OPENINGS SHALL BE KNOCKDOWN FRAMES.
- ALL HOLLOW METAL DOORS AND FRAMES SHALL BE PAINTED PER COLOR LISTED
- ALL RATED DOORS TO HAVE UL LABELS
- THRESHOLDS, WEATHERSTRIPPING & SWEEPS TO BE INSTALLED PER MANF. INSTRUCTIONS
- ALL INTERIOR DOOR TO BE USA WOOD DOOR, LIVESAWN RED OAK VENEER, 'CANE' STAIN COLOR FINISH.
- FIRE GLASS IN RATED DOOR AND SIDELITES AS INDICATED IN THE DOOR AND FRAME TYPES SHALL MAINTAIN A 45 MIN RATING FOR INSTALLING IN A 1 HOUR RATED DEMISING WALL ASSEMBLY. USE FIRELITE PLUS OR APPROVED EQUAL.
- ALL DOOR HARDWARE TO RECEIVE A.D.A. COMPLIANT LEVER SET @ 36" A.F.F. U.N.O
- ALL NEW DOOR CLOSERS SHALL BE A.D.A COMPLIANT. CLOSERS SHALL TAKE 3 SECONDS TO OPERATE FROM AN OPEN POSITION OF 70° TO A POINT 3" FROM THE LATCH. MAXIMUM OPENING FORCE IS NOT TO EXCEED 5 LBS.
- ALL DOOR HARDWARE TO BE 609/US5 SATIN BRASS, BLACKENED, SATIN RELIEVED, CLEAR COATED.

DOOR TYPES	FRAME TYPES	SIGNAGE
<p>AS SCHED.</p> <p>(A)</p>	<p>T.G.: PROVIDE 1/4" TEMPERED GLASS PANELS ALL FRAMES TO BE PRIMED &amp; PAINTED PT-5</p> <p>1 2 3 4</p>	<p>OFFICE 108 STORAGE 135 EXIT</p> <p>1 ROOM TITLE &amp; ROOM NUMBER VARIES SLOT INSERT</p> <p>2 ROOM TITLE &amp; ROOM NUMBER VARIES</p> <p>3 REQUIRED AT ALL EGRESS DOORS</p> <p>LOCATE ROOM SIGN ON GLAZING WHERE NO WALL EXISTS ON LATCH SIDE OF DOOR. PROVIDE SOLID COVER PLATE AT OPPOSITE SIDE OF GLAZING.</p>

\*\* PROVIDE BACKER PLATES FOR ALL SIGNS INSTALLED ON GLASS

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**SCHEDULES & DETAILS**

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REVISIONS

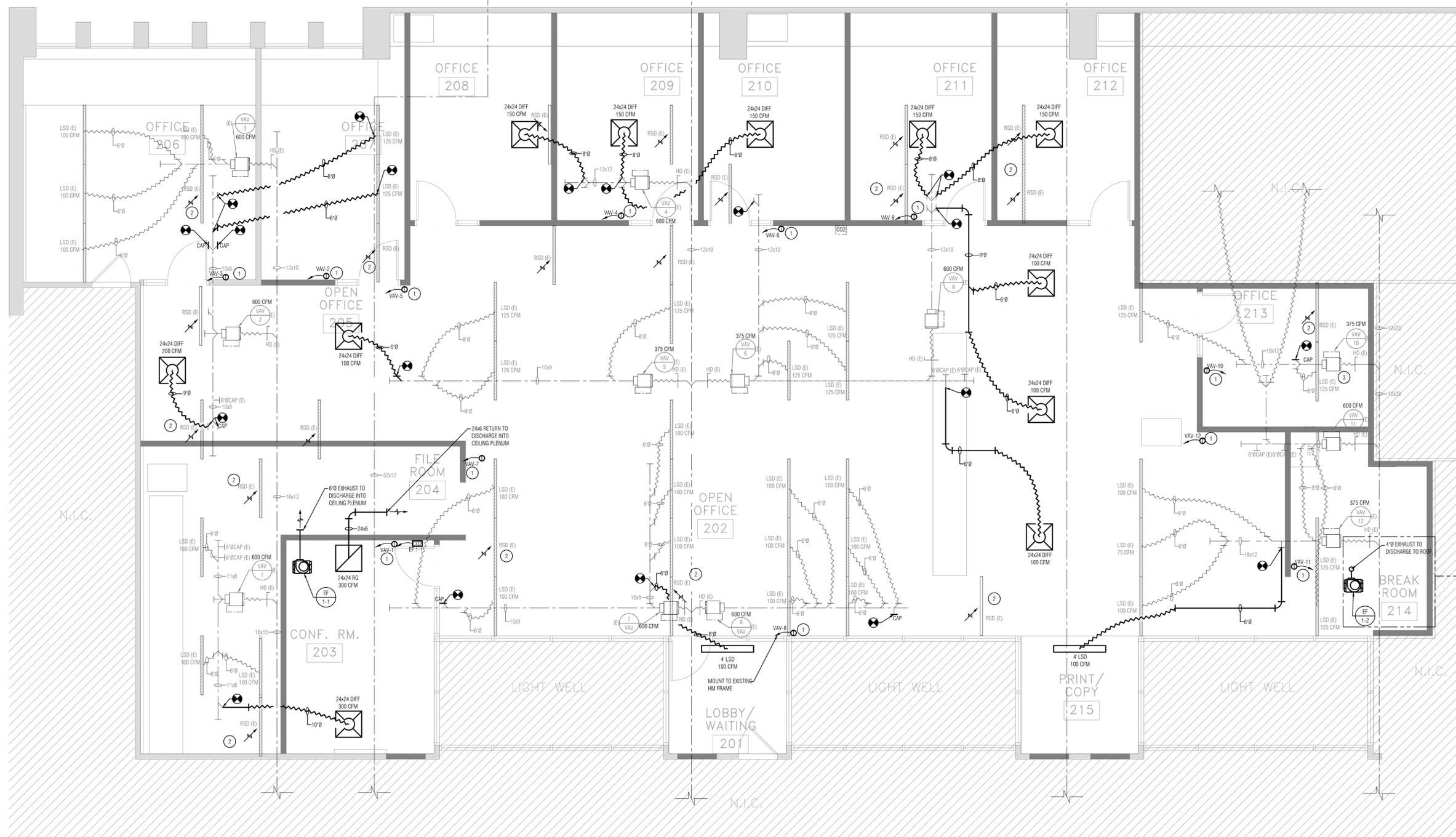
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 SHEET 5 OF 5

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**1 MECHANICAL PARTIAL FLOOR PLAN**  
 M-2 SCALE - 1/4" = 1'-0"

- GENERAL MECHANICAL CONSTRUCTION NOTES**
- INTEGRAL OPPOSED BLADE DAMPERS SHALL BE PROVIDED AT ALL NEW AIR DEVICES. FINAL SUPPLY AIR DEVICE BALANCING SHALL BE PERFORMED VIA INTEGRAL AIR DEVICE DAMPER.
  - ALL DUCT PENETRATIONS THRU RATED ASSEMBLIES SHALL BE PROVIDED WITH RADIANT DAMPERS.
  - ALL NEW FLEX DUCT WORK LENGTHS SHALL BE LIMITED TO 10'
  - REFER TO M-1 FOR ADDITIONAL REQUIREMENTS FOR DUCTWORK, EQUIPMENT, PIPING, AND GENERAL SYSTEMS.
  - ALL RETURN/EXHAUST REGISTERS SHALL HAVE 45° FIXED BLADES.
  - ALL SUPPLY MAINS AND BRANCH DUCTWORK SHALL BE EXTERNALLY WRAPPED. FLEX DUCT TO HAVE 1" EXTERNAL INSULATION WITH VAPOR JACKET.
  - ALL DUCT SIZES ARE INSIDE DUCT DIMENSIONS.
  - COORDINATE THERMOSTAT LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.

- HVAC NEW WORK NOTES**
- AT INCEPTION OF WORK, CONTRACTOR TO HAVE AIR READINGS TAKEN, DOCUMENTED AND SUBMITTED TO DESIGN ENGINEER TO CONFIRM FUNCTIONALITY AND PERFORMANCE OF EXISTING AIR DEVICES.
  - ALL VAV BOXES HAVE PNEUMATIC THERMOSTATS THAT ARE TO BE REPLACED WITH NEW. THE THERMOSTATS SHALL INTEGRATE INTO THE EXISTING PNEUMATIC CONTROL SYSTEM. COORDINATE MANUFACTURER MODEL NO. WITH THE FACILITY CONTROL MAINTENANCE CONTRACTOR TO ASSURE COMPATIBILITY. THE ROOM SENSOR IS TO BE A BLANK WHITE ENCLOSURE WITH REMOTE SETPOINTS CAPABILITY INTEGRATED INTO THE BUILDING PNEUMATIC CONTROL INFRASTRUCTURE.
  - IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO PRESERVE, OR IN THE EVENT OF ACCIDENTAL DEMOLITION, REPLACE, AIR SYSTEM MATERIALS WHERE EXISTING DUCTWORK IS SHOWN AS REUSED OR RELOCATED.
  - MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND FUNCTIONAL CHECK OF THE CENTRAL SYSTEM OF THE BUILDING. THE RETROFITTING OF THE EXISTING VAVS WITHIN THE SPACE WITH NEW PNEUMATIC THERMOSTATS TO SERVE THE PROPOSED REMODELED SPACE.
  - ALL WIRING AND PNEUMATIC TUBING INSTALLED IN THE CEILING RETURN AIR PLENUM SHALL BE PLENUM RATED.

- MECHANICAL NEW WORK NOTES BY SYMBOL**
- EXISTING VAVS TO BE EQUIPPED WITH NEW PNEUMATIC THERMOSTATS. TAG AND LABEL VAVS WITH CORRESPONDING THERMOSTATS. COORDINATE EXACT LOCATIONS WITH ARCHITECT.
  - UNUSED AIR DEVICES TO BE DISCONNECTED AT BRANCH TAKE OFF AND REMAIN IN PLACE. CAP AND SEAL EXISTING UNUSED BRANCH TAKE OFFS AIRTIGHT.

**FAN SCHEDULE**

UNIT NO.	DUTY	TYPE	CFM	ESP	HP	RPM	FLA	ELECTRICAL CHARACTERISTICS	WEIGHT	CONTROL	STANDARD OF DESIGN		REMARKS
											MFGR	MODEL	
EF 1-1	203 CONF RM	CEILING	50	0.31	0.01	900	0.16	115/1/60	9	CO2 SENSOR	GREENHECK	SP-880	①
EF 1-2 (ALTERNATE M1)	214 BREAK RM	CEILING	50	0.31	0.01	900	0.16	115/1/60	9	CONTINUOUS	GREENHECK	SP-880	①

① PROVIDE VIBRATION ISOLATION HANGERS, DISCONNECT SWITCH, INTEGRAL GRAVITY BACKDRAFT DAMPER, SPEED CONTROLLER.

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**AG** ENGINEERING INC.  
 5556 Pennell Road | Media, PA 19063  
 Project No. 23040

MECHANICAL PARTIAL FLOOR PLAN  
 HR SUITE RECONFIGURATION  
 DELAWARE COUNTY GOVERNMENT CENTER  
 201 W. FRONT STREET  
 MEDIA, PA 19063

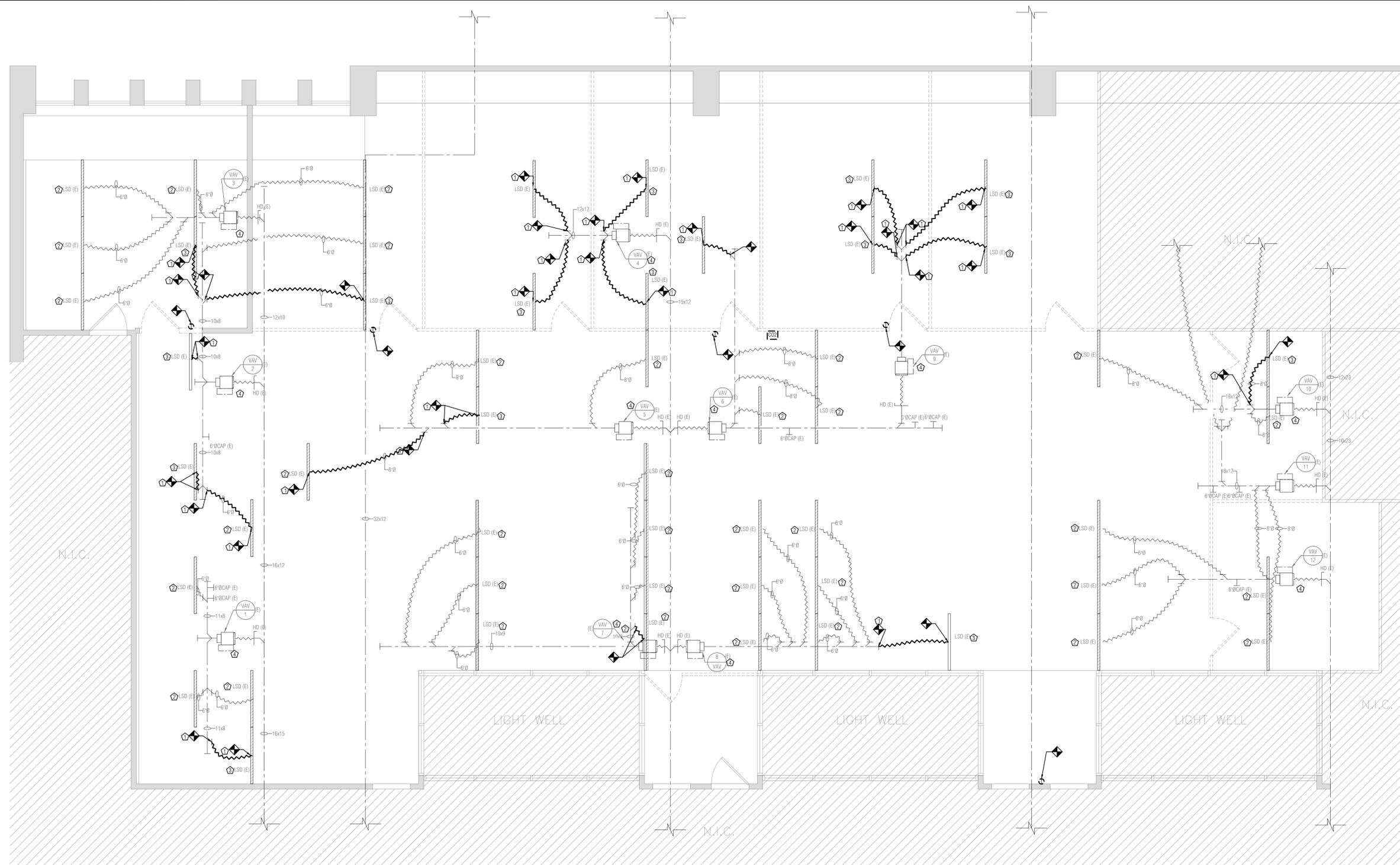
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**1 MECHANICAL PARTIAL FLOOR PLAN - DEMO**  
 MD-2 SCALE - 1/4" = 1'-0"

**HVAC DEMOLITION NOTES**

- PROJECT CONDITIONS**
  - THE CONTRACTOR SHALL COMPLETELY FAMILIARIZE HIMSELF WITH ALL EXISTING BUILDING AND SITE CONDITIONS AND LIMITATIONS WHICH MAY HAVE A BEARING ON THE OPERATIONS HEREIN SPECIFIED, AND SHALL INCLUDE ALL WORK REQUIRED TO COMPLETE THE PROJECT AS SHOWN ON THE DRAWINGS. NO EXTRA COMPENSATION WILL BE ALLOWED FOR UNFORESEEN CONDITIONS THAT CAN BE DETERMINED FROM A CAREFUL EXAMINATION OF THE SITE, BUILDING AND DRAWINGS.
  - ITEMS OF VALUE WHICH ARE NOT INDICATED TO BE RETURNED TO THE OWNER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR. STORAGE OR SALE OF ITEMS ON THE PROJECT SITE IS PROHIBITED.
  - PROTECTION: ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST.
  - UTILITIES: MAINTAIN ALL UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. KEEP UTILITIES IN SERVICE AND PROTECT FROM DAMAGE. DO NOT INTERRUPT UTILITIES SERVING USED AREAS WITHOUT FIRST OBTAINING PERMISSION FROM OWNER.
- REGULATION REQUIREMENTS**
  - STRICTLY COMPLY WITH APPLICABLE CODES, REGULATIONS AND REQUIREMENTS OR AUTHORITY HAVING JURISDICTION.
- HANDLING OF MATERIALS**
  - REMOVE DEBRIS FROM THE SITE AS IT ACCUMULATES. DO NOT STORE, SELL, BURN, OR OTHERWISE DISPOSE OF DEBRIS ON SITE. REMOVE ALL MATERIAL IN SUCH MANNER AS TO PREVENT SPILLAGE.
  - TRANSFER OF RESPONSIBILITY AND DISPOSITION OF MATERIALS
  - UPON RECEIPT OF NOTICE TO PROCEED WITH THE WORK, THE TITLE TO ALL MATERIALS FOR DEMOLITION SHALL BE VESTED. THE CONTRACTOR WHEREUPON THE OWNER WILL NOT BE RESPONSIBLE FOR THE CONDITION, LOSS, OR DAMAGE TO SAID PROPERTY. ALL SUCH ITEMS SHALL BE REMOVED FROM THE OWNER'S PROPERTY.
- DISPOSAL OF DEMOLISHED MATERIALS**
  - REMOVE UNUSED FIXTURES AND ALL PIPING / DUCTWORK SERVING EQUIPMENT INCLUDING ABANDONED PIPING / DUCTWORK NOT ASSOCIATED WITH SAID EQUIPMENT. REMOVE PIPING / DUCTWORK BACK TO THE NEXT LIVE BRANCH WHICH WILL NOT OBSTRUCT THE NEW WORK AND CAP AIRTIGHT. TRANSPORT AND LEGALLY DISPOSE OF MATERIALS OFF SITE.
  - ANY DEMOLITION SHALL BE COORDINATED WITH OWNER, ENGINEER, AND GENERAL CONTRACTOR. ALL DEBRIS SHALL BE CLEANED UP AND REMOVED FROM THE SITE BY THE END OF EVERY WORK DAY. PRIOR TO DISPOSAL OF EQUIPMENT AND MATERIALS, TURN OVER TO OWNER ANY REMOVED EQUIPMENT AND MATERIALS PER OWNER'S REQUEST.
- CLEAN UP AND REPAIR**
  - UPON COMPLETION OF DEMOLITION WORK, REMOVE TOOLS, EQUIPMENT AND DEMOLISHED MATERIALS FROM SITE. REMOVE PROTECTION AND LEAVE INTERIOR AREAS BROOM CLEAN.
  - REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN STRUCTURES AND SURFACES TO REMAIN IN CONDITION EXISTING PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION WORK. REPAIR ADJACENT CONSTRUCTION OR SURFACES SOILED OR DAMAGED BY SELECTIVE DEMOLITION WORK.

**MECHANICAL DEMOLITION NOTES BY SYMBOL**

- EXISTING DUCTWORK TO BE DISCONNECTED AT POINT OF DEMOLITION TO THE NEXT POINT OF DEMOLITION. NEW AIR DEVICES TO BE CONNECTED AND INSTALLED ALONG WITH REPLACEMENT FLEX DUCT.
- EXISTING AIR DEVICES TO REMAIN AND BE REUSED WITH EXISTING DUCTWORK.
- EXISTING UNUSED AIR DEVICE TO BE DISCONNECTED AT POINT OF DEMOLITION AND ABANDONED IN PLACE WITHIN EXISTING CEILING GRID. CAP AND SEAL CONNECTION AT MAIN TRUNK. ALL EXISTING AIR DEVICES TO REMAIN WITHIN CEILING GRID.
- EXISTING EQUIPMENT TO REMAIN.

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**MECHANICAL PARTIAL FLOOR PLAN - DEMO**  
 HR SUITE RECONFIGURATION  
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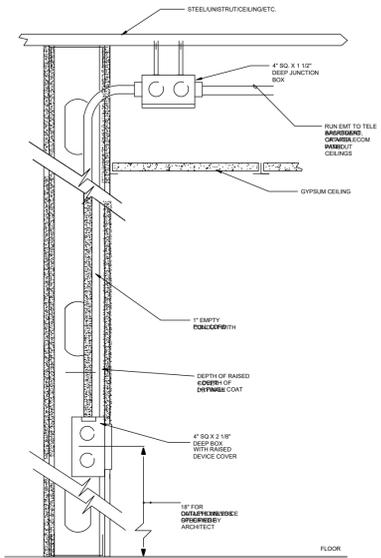
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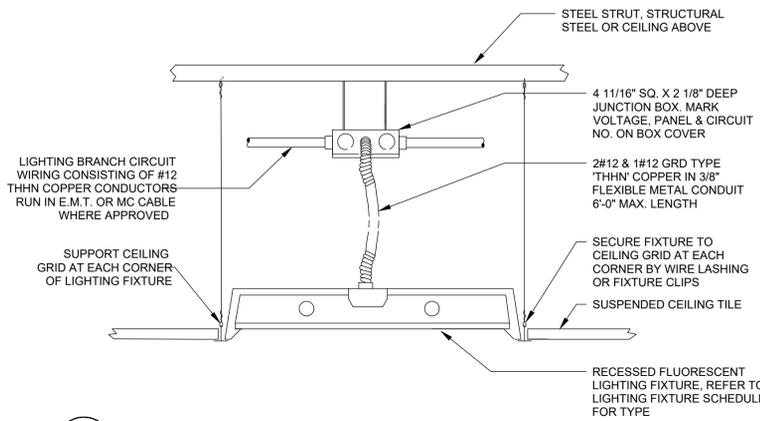
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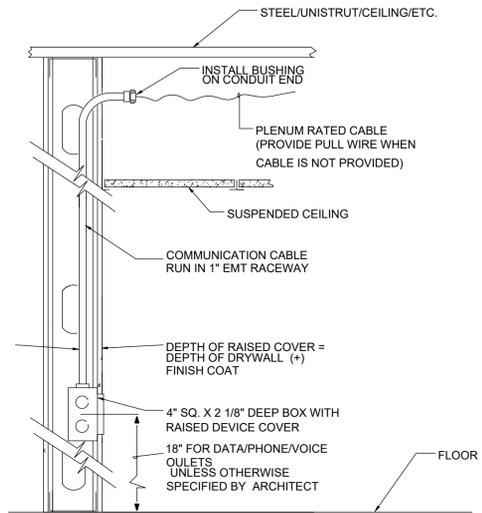




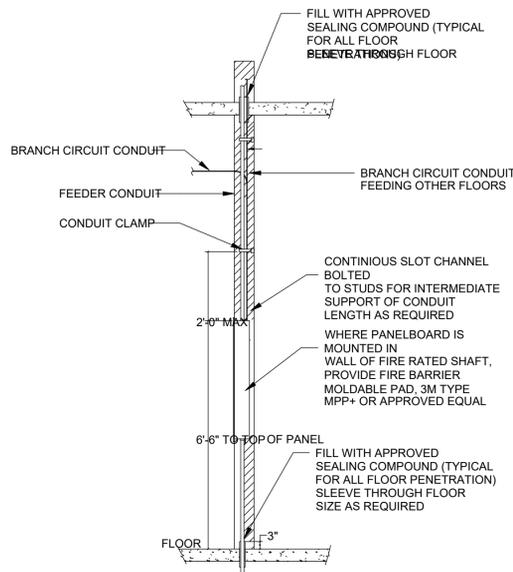
**1** DEVICE INSTALLATION IN HOLLOW PARTITIONS(DATA AND VOICE)  
E-1.1 SCALE - 1/4" = 1'-0"



**2** TYPICAL RECESSED LIGHT FIXTURE INSTALLATION DETAIL  
E-1.1 SCALE - 1/4" = 1'-0"



**3** DEVICE INSTALLATION IN HOLLOW PARTITIONS  
E-1.1 SCALE - 1/4" = 1'-0"



**4** TYPICAL FLUSH MOUNTED PANELBOARD MOUNTING DETAIL  
E-1.1 SCALE - 1/4" = 1'-0"

PANEL 11A(EXISTING)													
LOCATION: FIRST FLOOR ELECTRICAL ROOM													
VOLTAGE: 120/208 V, 3ø, 4W MAIN: 225A MLO													
CKT NO.	WIRE ID	CB AMP/POLE	DESCRIPTION	LOAD (KW)						DESCRIPTION	CB AMP/POLE	WIRE ID	CKT NO.
				A	B	C	A	B	C				
1	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	2	
3	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	4	
5	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	6	
7	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	8	
9	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	10	
11	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	12	
13	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	14	
15	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	16	
17	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	18	
19	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	20	
21	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	22	
23			PANEL HR							SPARE*	20A/1P	24	
25	125W3	125A/2P	PANEL HR							EXISTING CIRCUIT	20A/1P	26	
27	20A/1P		SPARE*							SPARE*	20A/1P	28	
29	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	30	
31	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	32	
33	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	34	
35	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	36	
37	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	38	
39	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	40	
41	20A/1P		EXISTING CIRCUIT							EXISTING CIRCUIT	20A/1P	42	
SUB TOTAL KW				0	0	0	0	0	0	SUB TOTAL KW			
TOTAL CONNECTED KW LOAD				0.0 KVA									
TOTAL CONNECTED AMPERE LOAD				0.0 A									

EC TO CONFIRM SPARE CIRCUITS THROUGH CIRCUIT TRACE. CIRCUIT NUMBERS SHOWN DO NOT INDICATE EXACT SPARE BRANCH POSITIONS IN PANEL 11A. EC SHALL EXAMINE EXISTING CONDITION AT PANEL 11A TO DETERMINE THE EXACT POLE POSITIONS WHICH ARE AVAILABLE FOR LOADS INDICATED. EC SHALL PROVIDE A COMPLETED SCHEDULE FOR PANEL 11A RECONCILING ALL EXISTING AND NEW LOAD POSITIONS FOR APPROVAL PRIOR TO INSTALLATION. NEW CIRCUITS IN BOLD

PANEL HR (NEW)											
LOCATION: HR SUITE BREAK ROOM											
MOUNTING: RECESSED											
VOLTAGE: 120/208 V, 1ø, 3 WIRE MAIN: 125 A MCB NEUTRAL: 100%											
CKT NO.	WIRE ID	CB AMP/POLE	DESCRIPTION	LOAD (KW)				DESCRIPTION	CB AMP/POLE	WIRE ID	CKT NO.
				A	B	A	B				
1	20W2	20A/1P	OFFICE 212 POWER	500		500		OFFICE 211 POWER	20A/1P	20W2	2
3	20W2	20A/1P	OFFICE 210 POWER		500		500	OFFICE 209 POWER	20A/1P	20W2	4
5	20W2	20A/1P	OFFICE 208 POWER	500		500		OFFICE 207 POWER	20A/1P	20W2	6
7	20W2	20A/1P	OFFICE/CORRIDOR CONV RECEPTS		1260		1440	OFFICE/CORRIDOR CONV RECEPTS	20A/1P	20W2	8
9	20W2	20A/1P	OFFICE 213 POWER	360		500		OFFICE 213 POWER	20A/1P	20W2	10
11	20W2	20A/1P	BREAK ROOM RECEPTS/EXHAUST FAN					BREAK ROOM KIT COUNTER QUAD	20A/1P	20W2	12
13	20W2	20A/1P	BREAK ROOM KIT COUNTER	1700	360	900	1800	CONFERENCE ROOM RECEPTS	20A/1P	20W2	14
15	20W2	20A/1P	RICOH MULTI FUNCTION PRINTER(RM. 215)		1440		1200	SHREDDER (RM. 215)	20A/1P	20W2	16
17	20W2	20A/1P	PRINT/COPY COUNTER RECEPTS	540		1025		SYSTEMS FURNITURE POWER	20A/1P	20W2	18
19	20W2	20A/1P	SYSTEMS FURNITURE POWER		375		1025	SYSTEMS FURNITURE POWER	20A/1P	20W2	20
21	20W2	20A/1P	SYSTEMS FURNITURE POWER	375		1025		SYSTEMS FURNITURE POWER	20A/1P	20W2	22
23	20W2	20A/1P	SYSTEMS FURNITURE POWER		375		1025	SYSTEMS FURNITURE POWER	20A/1P	20W2	24
25	20W2	20A/1P	SYSTEMS FURNITURE POWER	375		750		SYSTEMS FURNITURE POWER	20A/1P	20W2	26
27	20W2	20A/1P	SYSTEMS FURNITURE POWER		625		750	SYSTEMS FURNITURE POWER	20A/1P	20W2	28
29	20W2	20A/1P	SYSTEMS FURNITURE POWER	625		750		SYSTEMS FURNITURE POWER	20A/1P	20W2	30
31	20W2	20A/1P	SYSTEMS FURNITURE POWER		625		750	SYSTEMS FURNITURE POWER	20A/1P	20W2	32
33	20W2	20A/1P	SYSTEMS FURNITURE POWER	625				SYSTEMS FURNITURE POWER	20A/1P	20W2	34
35											36
37											38
39											40
41											42
43											44
45											46
47											48
49											50
51											52
53											54
SUB-TOTAL KW				5.6	5.6	6.0	8.5	SUB-TOTAL KW			
TOTAL CONNECTED KVA LOAD				25.6 KVA							
TOTAL CONNECTED AMP LOAD				123.1 A							
TOTAL DEMAND AMP LOAD				86 A							

NOTES:

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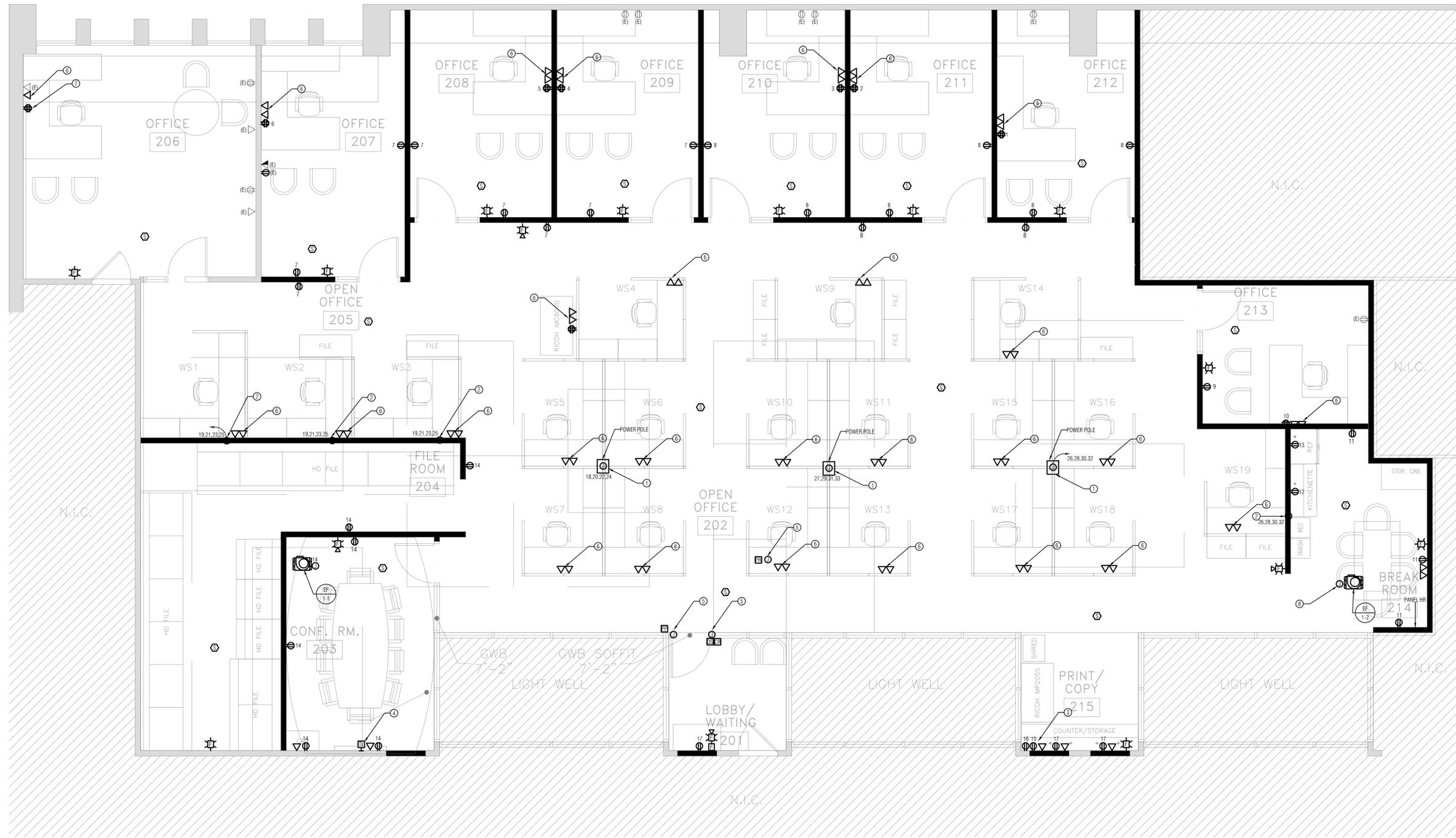
ELECTRICAL DETAILS  
HR SUITE RECONFIGURATION  
DELAWARE COUNTY GOVERNMENT CENTER  
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E-1.1

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**1 ELECTRICAL PARTIAL FLOOR PLAN - POWER**  
 E-2 SCALE - 1/4" = 1'-0"

**GENERAL DEMOLITION NOTES**

- EC TO TRACE ALL EXISTING HR SUITE CIRCUITS IN FIELD. DISCONNECT AND REMOVE CONDUIT AND WIRE BACK TO SOURCE OF EXISTING SYSTEMS FURNITURE. EC TO TEST FUNCTIONALITY OF CIRCUIT BREAKER. RETAIN CIRCUIT BREAKER FOR FUTURE WORK IF IN FUNCTIONING CONDITION. DEMO EXISTING POWER POLES.
- EC TO TRACE ALL EXISTING HR SUITE CIRCUITS IN FIELD. RETAIN RECEPTACLES/DATA POWER, CONDUIT, WIRING, AND DEVICES LOCATED IN WALLS EXISTING TO REMAIN (U.O.N). REMOVE ALL RECEPTACLES/DATA OUTLETS THAT ARE NOT IN FUNCTIONING CONDITION AND REPLACE IN KIND.
- REVISE PANEL SCHEDULES LABELING ACCORDING TO CHANGES MADE DURING DEMOLITION/ INVESTIGATIVE FINDINGS.

**GENERAL ELECTRICAL NOTES**

- SYSTEMS FURNITURE INSTALLER RESPONSIBLE FOR PROPER BALANCING OF LOADS ACROSS FURNITURE BUS.
- COORDINATE WIRING REQUIREMENTS WITH SYSTEMS FURNITURE MANUFACTURER PRIOR TO INSTALLATION.
- CONNECT NEW FIRE ALARM DEVICES TO EXISTING BUILDING FIRE ALARM SYSTEM. MODIFY SYSTEM TO ACCOMMODATE NEW DEVICE CONNECTIONS.
- ALL WIRING AND CABLE NEEDS TO BE PLENUM RATED.

**ELECTRICAL KEY NOTES**

- JUNCTION BOX FOR POWER AND DATA CONNECTION TO OFFICE FURNITURE SYSTEM/CONDUIT AND WIRE THROUGH POWER POLE. COORDINATE POWER AND DATA REQUIREMENTS AND EXACT LOCATION WITH ARCHITECT AND FURNITURE VENDOR. COORDINATE FINAL POWER POLE LOCATION WITH ARCHITECT.
- JUNCTION BOX FOR POWER AND DATA CONNECTION TO OFFICE FURNITURE SYSTEM/HP LOCATED IN WALL. COORDINATE POWER AND DATA REQUIREMENTS AND EXACT LOCATION WITH ARCHITECT, IT DEPARTMENT, AND FURNITURE VENDOR.
- CONDUIT IN CHASE CASEWORK BELOW COUNTER FOR POWER AND DATA. CIRCUIT PRINTER TO CIRCUIT 15 ON HR SUITE SUBPANEL. CIRCUIT SHREDDER TO CIRCUIT 16.
- COORDINATE POWER/DATA REQUIREMENTS AND LOCATIONS WITH IT DEPARTMENT/ARCHITECT FOR CONFERENCE ROOM TV PRIOR TO ROUGH-IN.
- PROVIDE 3/4" EMPTY CONDUIT FOR SECURITY DOOR POWER/CONTROL S. COORDINATE/CONFIRM POWER REQUIREMENTS WITH OWNER SECURITY VENDOR. COORDINATE NUMBER OF CONDUITS/CONDUIT DROP LOCATIONS WITH OWNER SECURITY VENDOR.
- PROVIDE 2 DATA OUTLETS AT EACH WORKSTATION. COORDINATE FINAL LOCATION WITH IT DEPARTMENT.
- REPLACE EXISTING DUPLEX RECEPTACLE WITH NEW QUAD RECEPTACLE. RETAIN EXISTING CONDUIT, WIRING, AND CIRCUITING.
- ADD ALTERNATE M-1 JUNCTION BOX FOR EXHAUST FAN 1-2. CIRCUIT TO NEAREST RECEPTACLE CIRCUIT.

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**ELECTRICAL PARTIAL FLOOR PLAN - POWER**

**HR SUITE RECONFIGURATION**

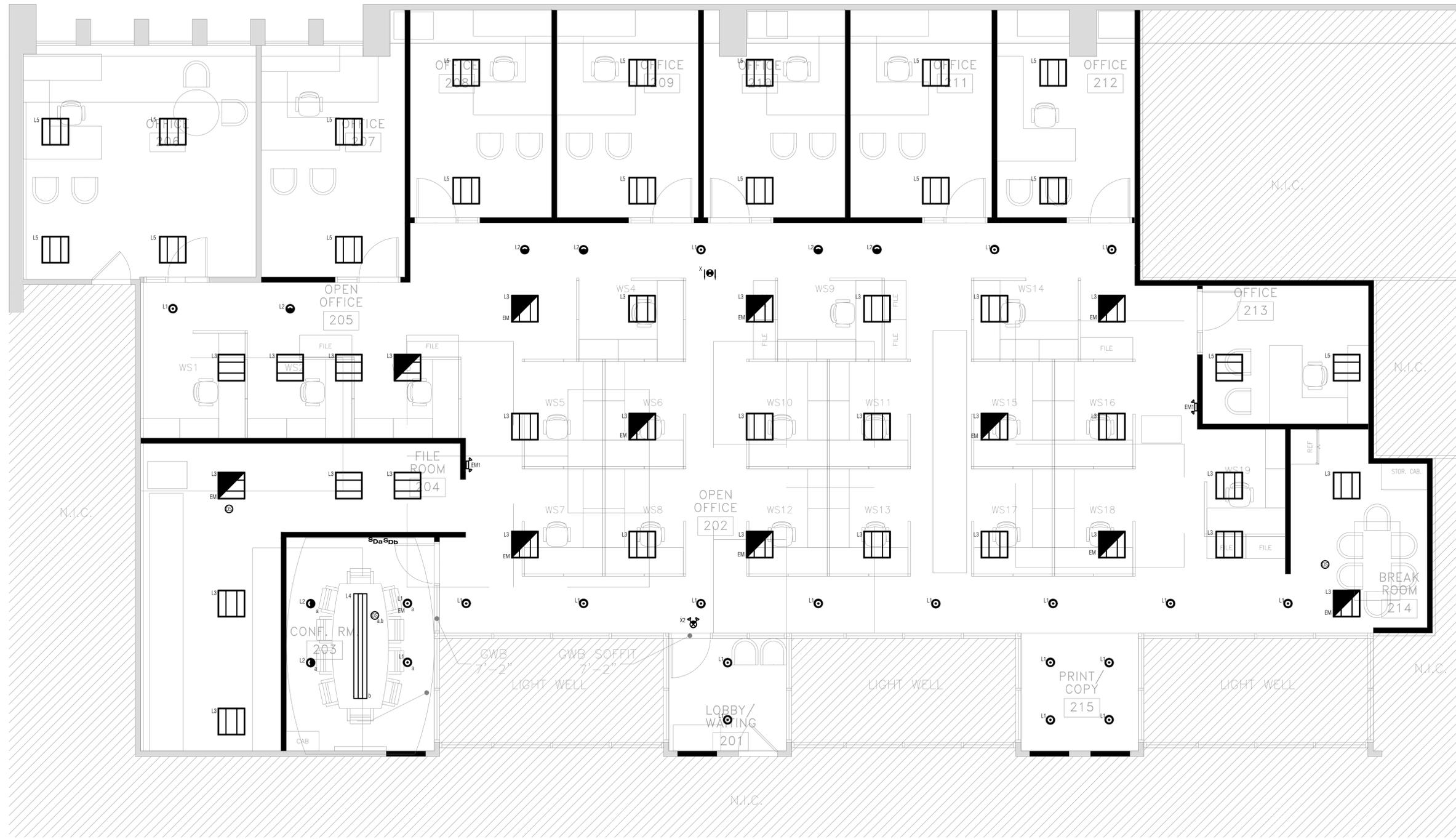
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 SHEET 3 OF 5



**1 ELECTRICAL PARTIAL FLOOR PLAN - LIGHTING**  
 E-3 SCALE - 1/4" = 1'-0"

**GENERAL DEMOLITION NOTES**

- DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES. RETAIN EXISTING CONDUIT AND WIRE AND EXTEND TO NEW FIXTURE LOCATIONS.
- GENERAL LIGHTING NOTES**
- PATH OF EGRESS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS. FINAL LOCATION OF EXIT SIGNS SHALL BE COORDINATED ACCORDINGLY.
  - CONFIRM LIGHTING CONTROL COMPONENT FINAL LOCATIONS WITH OWNERSHIP/ARCHITECT PRIOR TO ROUGH-IN. PROVIDE A POWER/RELAY PACK FOR EACH CONTROL ZONE INDICATED ON DRAWINGS.
  - REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR FINAL LIGHT FIXTURE LOCATIONS.
  - LIGHTING IN HR SUITE TO BE CONTROLLED BY EXISTING BUILDING AUTOMATION SYSTEM. RETAIN EXISTING OVERRIDE SWITCH LOCATED ADJACENT TO ELEVATOR.
  - EC TO TRACE EXISTING HR SUITE LIGHTING CIRCUITS IN FIELD. CIRCUIT EMERGENCY LIGHT FIXTURES AND EXIT SIGNS TO HR SUITE EMERGENCY LIGHTING CIRCUIT. EC TO CONFIRM SUFFICIENT CAPACITY ON EMERGENCY LIGHTING CIRCUIT FOR ADDITIONAL FIXTURES.
  - FIXTURES, SWITCHES, AND OCCUPANCY SENSORS SHALL BE GROUPED TOGETHER BY ZONE DESIGNATION AS INDICATED ON DRAWING.
  - WHERE CONTROL SWITCH IS SHOWN WITH OCCUPANCY SENSOR, THE SWITCH SHALL BE USED FOR OCCUPANCY SENSOR OVERRIDE.
  - ALL OCCUPANCY SENSORS SHALL BE PROVIDED, INSTALLED, AIMED, AND CALIBRATED BY THE E.C. ALL OCCUPANCY SENSORS AND POWER PACKS SHALL BE INSTALLED AND WIRED PER MANUFACTURERS RECOMMENDATIONS.
  - CIRCUIT EXIT SIGNS TO NEAREST LIGHTING CIRCUIT AHEAD OF ALL SWITCHING.
  - ALL WIRING AND CABLE NEEDS TO BE PLENUM RATED.

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**ELECTRICAL PARTIAL FLOOR PLAN - LIGHTING**  
 HR SUITE RECONFIGURATION  
 DELAWARE COUNTY GOVERNMENT CENTER  
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**ELECTRICAL SPECIFICATIONS NOTES:**

**GENERAL REQUIREMENTS:**

- A. GENERAL - THE CONDITIONS OF CONTRACT AND SPECIAL CONDITIONS ARE A PART OF THIS CONTRACT FOR ELECTRICAL WORK
- B. SCOPE OF WORK - FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, INSURANCES, PERMITS, AND INSPECTIONS NECESSARY FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS AS SHOWN AS SPECIFIED. THE SCOPE OF THE WORK SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
  - B.1. REVISE HR SUITE POWER INCLUDING NEW PANELBOARD
  - B.2. REVISE LIGHTING
  - B.3. REVISE FIRE ALARM SYSTEM
  - B.4. GROUNDING OF ENTIRE SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE SECTION 250.
- C. REGULATIONS - ALL WORK SHALL CONFORM TO THE NEC, NFPA, ADA, AND LOCAL AUTHORITIES HAVING JURISDICTION. SUBMIT CERTIFICATES OF UNDERWRITER INSPECTION FROM A RECOGNIZED AGENCY UPON COMPLETION OF THE WORK.
- D. FASTENINGS AND SUPPORTS AS FOLLOWS:
  - D.1. HOLLOW TIE - TOGGLE BOLTS
  - D.2. WOOD - LAG SCREWS OR BOLTS
  - D.3. SOLID MASONRY - METALLIC EXPANSION SHIELDS AND MACHINE BOLTS.
  - D.4. DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILINGS. ALL SUPPORT SHALL COME FROM BUILDING STRUCTURE.
- E. SUBMIT ELECTRICAL EQUIPMENT SHOP DRAWINGS ELECTRONICALLY FOR APPROVAL.
- F. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS. CONTRACTOR TO FOLLOW LOCK-OUT/TAG-OUT PROCEDURES.
- G. PRODUCTS SUBMITTED & APPROVED FOR USE THAT NECESSITATE CHANGES TO THE WORK OF OTHER TRADES OF CONTRACT SHALL BE COORDINATED & ARRANGED BY THE CONTRACTOR WITHOUT ADDITIONAL COST TO THE OWNER.
- H. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH EACH TRADE CONTRACTOR FOR THE ELECTRICAL REQUIREMENTS OF THEIR WORK PRIOR TO THE SHOP DRAWINGS SUBMISSIONS.
- I. ELECTRICAL CONTRACTOR SHALL PROVIDE & INSTALL AN APPROVED FIRE STOP SEALANT TOTALLY ENCLOSING ALL CONDUIT PENETRATION THRU CEILINGS, WALLS, AND FLOORS. THIS CODE REQUIREMENT DOES NOT ALLOW ANY EXCEPTIONS.
- J. ELECTRICAL CONTRACTOR SHALL COORDINATE CEILING MOUNTED EQUIPMENT WITH OTHER TRADE CONTRACTORS PRIOR TO INSTALLATION TO AVOID CONFLICTS.
- K. ELECTRICAL CONTRACTOR SHALL UPON COMPLETION OF THE PROJECT SUBMIT A SET OF RECORD DRAWINGS ("AS BUILTS" DRAWINGS) SHOWING ALL CHANGES FROM THE CONTRACT DRAWINGS MADE DURING INSTALLATION OF ELECTRICAL EQUIPMENT AND SHOWING DIMENSIONED LOCATIONS OF BURIED, OR CONCEALED, EQUIPMENT.
- L. ELECTRICAL CONTRACTOR TO VERIFY LOCATIONS AND CONDITIONS OF ALL EXISTING DEVICES
- M. ELECTRICAL CONTRACTOR TO VERIFY LOCATION OF ALL NEW DEVICES IN COMPLIANCE WITH NFPA/NEC, ADA, AND LOCAL JURISDICTIONS.

**WIRING METHODS AND MATERIALS**

- A. WIRING TYPES AND SIZING
  - A.1. SIZE #10 AND SMALLER SOLID, #8 AND LARGER - STANDARD. MINIMUM SIZE FOR POWER AND LIGHTING WIRING - #12 UNLESS OTHERWISE NOTED. ALL INTERIOR BUILDING WIRE SHALL BE COPPER CONDUCTORS, TYPE THWN-2/THHN(DUAL LISTED), 90°C INSULATION, APPLIED AT 75°C AMPACITY.
  - A.2. USE PROPERLY INSULATED CABLES IN LOCATIONS SUBJECT TO EXCESSIVE HEAT.
  - A.3. PROVIDE AN INSULATED GROUNDING CONDUCTOR OF NOT LESS THAN #12 AWG FOR ALL EQUIPMENT, LIGHTING, & OUTLETS UNLESS OTHERWISE NOTED.
  - A.4. CABLING SHALL BE INCREASED IN SIZE AS NEEDED TO LIMIT VOLTAGE DROP ACROSS THE COMBINATION OF FEEDERS AND BRANCH CIRCUITS TO A MAXIMUM OF 5%.
- B. RACEWAYS
  - B.1. USE ONLY U.L. APPROVED RACEWAYS - MINIMUM SIZE 3/4".
  - B.2. ELECTRICAL METALLIC TUBING (EMT) - THINWALL GALVANIZED.
    - 1. MAY BE USED ANYWHERE IN DRY LOCATIONS FOR FEEDERS, AND BRANCH CIRCUITS 480 VOLTS AND UNDER TO GROUND.
    - 2. SHALL NOT BE INSTALLED IN WET OR DAMP LOCATIONS.
    - 3. ALL FEEDERS AND BRANCH CIRCUITS ON THE EXTERIOR OF THE BUILDING SHALL BE INSTALLED WITHIN GALVANIZED RIGID STEEL CONDUIT.
    - 4. PROVIDE INSULATED BUSHINGS ON ALL BOX CONNECTORS. AN INTERNAL EQUIPMENT GROUND SHALL BE RUN WITHIN ALL ELECTRICAL METALLIC TUBING.
    - 5. E.M.T. SHALL BE USED FOR ALL FEEDERS. IT SHALL BE USED WHEREVER M.C. CABLE IS NOT PERMITTED.

- B.1. METAL CLAD SHALL BE PERMITTED ON A LIMITED BASIS AS FOLLOWS:
  - 1. M.C. CABLE SHALL NOT BE USED FOR SINGLE OR 3 PHASE 480-VOLT CIRCUITS OF ANY AMPERAGE.
  - 2. M.C. CABLE SHALL NOT BE USED ANYWHERE IT IS EXPOSED OUTSIDE OF ELECTRICAL ROOMS SUCH AS NON FINISHED AREAS OR AREAS WITHOUT A DROP CEILING.
  - 3. CAN BE USED FOR ALL BRANCH CIRCUITS WHERE ALLOWED BY CODE.
  - 4. FITTINGS USED FOR CONNECTING TYPE M.C. CABLE TO BOXES AND LIGHT FIXTURES SHALL BE LISTED AND IDENTIFIED FOR SUCH USE. NO SNAP IN CONNECTORS, OR INTERNAL BOX CLAMPS ARE PERMITTED. ALL M.C. CONNECTORS SHALL BE OF THE LOCKNUT TYPE, DESIGNED TO SECURE THE CONNECTOR TO A BOX OR ENCLOSURE.
  - 5. ANTI-SHORT (RED DEVILS) SHALL BE INSERTED INTO THE ENDS OF ALL M.C. CABLE.
  - 6. ONLY TOOLS SPECIFICALLY DESIGNED TO CUT M.C. CABLE SHALL BE PERMITTED ON THE PROJECT.
  - 7. THE JACKET OF M.C. CABLE SHALL NOT BE PERMITTED TO BE USED AS AN EQUIPMENT GROUND PATH. ALL M.C. CABLE SHALL CONTAIN A SEPARATE EQUIPMENT GROUND CONDUCTOR. WHERE ISOLATED GROUNDING IS REQUIRED THEN (TWO GROUND CONDUCTORS WITHIN THE CABLE SHALL BE USED.
  - 8. ALL M.C. CABLE SHALL BE RUN TO BUILDING STRUCTURE AT RIGHT ANGLES. ALL CABLE SHALL BE SUPPORTED TO STRUCTURE THROUGH A SYSTEM OF M.C. CABLE SUPPORTS, OR CADDY BRIDLE RINGS. CABLE MAY ALSO BE SUPPORTED DIRECTLY TO STRUCTURE. ALL CABLE SHALL BE SUPPORTED A (6) SIX FOOT INTERVALS. WHERE BUILDING STRUCTURE DOES NOT EXIST TO MEET THE 6-FOOT SUPPORT REQUIREMENT THE CONTRACTOR SHALL FURNISH AND INSTALL STEEL CHANNEL TO TRAVERSE EXISTING STRUCTURE AND HANG CABLE AT THE REQUIRED (6) FOOT INTERVAL.
  - 9. AT NO POINT SHALL M.C. CABLE COME IN CONTACT WITH A DROPPED CEILING.
- B.4. RIGID GALVANIZED STEEL CONDUIT(GRS)
  - 1. GALVANIZED RIGID STEEL (GRS) CONDUIT ELBOWS AND RISERS, OF THE TYPE LISTED FOR UNDERGROUND, SHALL BE USED AS THE TRANSITION FROM THE UNDERGROUND SERVICE FEEDERS UP INTO EQUIPMENT IN THE 1ST MAIN ELECTRICAL ROOM. RIGID STEEL ELBOWS SHALL BE USED FOR ALL UNDERGROUND CONDUIT RISERS.
  - 2. MAY BE USED OUTSIDE OF THE BUILDING.
  - 3. 'GRS' MAY BE USED ON THE ROOF.
  - 4. 'GRS' SHALL BE USED TO CONNECT C.T. CABINETS TO UTILITY METERS.
  - 5. ALL CONDUIT SHALL BE INSTALLED AND SUPPORTED IN ACCORDANCE WITH THE N.E.C.
- B.5. LIQUIDTIGHT FLEXIBLE METAL CONDUIT
  - 1. SHALL BE USED FOR ALL FLEXIBLE CONNECTIONS REQUIRED ON THE EXTERIOR OF THE BUILDING OR ROOF.
  - 2. LENGTH SHALL NOT EXCEED 18 INCHES FOR CONNECTION TO MOTORS AND 48 INCHES FOR CONNECTION TO HVAC EQUIPMENT.
  - 3. AN INTERNAL EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITHIN AL WATER TIGHT CONDUIT.
- B.6. RIGID NON-METALLIC CONDUIT
  - 1. MAY BE USED ANYWHERE AS PERMITTED BY CODE.
  - 2. MINIMUM SIZE RNC TO BE USED IS 1".
  - 3. CONDUIT BENDS SHALL BE MADE WITH AN APPROVED HEAT BLANKET OR HOT BOX BENDER. FACTORY ELBOWS SHALL BE USED FOR CONDUIT LARGER THAN 2".
  - 4. ALL CUT ENDS OF RNC SHALL BE TRIMMED OR OTHERWISE FINISHED TO REMOVE ANY SHARP EDGES.
  - 5. ALL RIGID NONMETALLIC CONDUIT ON THIS JOB SHALL BE SCHEDULE 80.
  - 6. AN INTERNAL EQUIPMENT GROUND SHALL BE RUN WITHIN ALL RIGID NONMETALLIC CONDUIT.
- B.7. RIGID ALUMINUM CONDUIT
  - 1. MAY BE USED ANYWHERE AS PERMITTED BY CODE, AND SHALL BE INSTALLED WHERE SPECIFICALLY INDICATED ON PLANS.
  - 2. SHALL BE PERMITTED TO BE USED IN MECHANICAL SPACES, AND PENTHOUSES.
  - 3. SHALL NOT BE USED IN ANY CONCRETE ENCASEMENT. RIGID ALUMINUM CONDUIT SHALL NOT BE USED FOR ANY UNDERGROUND USE, OR BE ALLOWED TO COME IN CONTACT WITH THE GROUND.
  - 4. PROVIDE BUSHINGS AT ALL CONDUIT ENDS IN ACCORDANCE WITH NOTES #A3 AND A4 ABOVE.
  - 5. AN INTERNAL EQUIPMENT GROUND SHALL BE RUN WITHIN ALL RIGID ALUMINUM CONDUIT.
- B.8. NONMETALLIC SHEATHED CABLE (NM)
  - 1. MAY BE USED ANYWHERE AS PERMITTED BY CODE, AND SHALL BE INSTALLED WHERE SPECIFICALLY INDICATED ON PLANS.
  - 2. SHALL NOT BE USED IN ANY CONCRETE ENCASEMENT.
  - 3. SHALL NOT BE USED FOR ANY UNDERGROUND USE, OR BE

- C. WIRING METHODS AND EQUIPMENT
  - C.1. NM CABLE IS ONLY PERMITTED IN TYPE III,IV,V CONSTRUCTION AND SHALL BE LIMITED TO AREAS SPECIFICALLY PERMITTED BY CODE.
  - C.2. METAL CLAD (MC) CABLE AND CONDUIT SHALL BE PROVIDED WHERE PERMISSIBLE BY CODE, AND/OR WHERE NM CABLE IS SUBJECT TO PHYSICAL DAMAGE.
  - C.3. USE EMT FOR EXPOSED AND CONCEALED WIRING IN DRY LOCATIONS.
  - C.4. EXPOSED CONDUITS WILL BE PERMITTED ONLY IN UNFINISHED AREAS. (FINAL APPROVAL BY ARCHITECT)
  - C.5. PROVIDE FLEXIBLE CONDUIT AND FITTINGS FOR FINAL CONNECTIONS TO MOTORS.
  - C.6. USE PRESSED STEEL WALL BOXES OR WIREMOLD FOR EACH OUTLET INDICATED. SIZED FOR NO. OF WIRES CONTAINED. USE 4" OCTAGON BOX WITH 3/8" FIXTURE STUD FOR LIGHTING FIXTURES.
  - C.7. ALL SPlicing TO BE DONE IN OUTLET, JUNCTION BOXES OR WIREMOLD. USE WIRE NUTS ON #8 AND SMALLER WIRE. USE COMPRESSION 'LUGS' FOR SPLICES ON #6 AND LARGER, WITH RUBBER AND PLASTIC TAPE APPLIED OVER JOINT.
  - C.8. PROVIDE SEPARATE GROUND CONDUCTORS FOR ALL BRANCH CIRCUITS.
- D. WIRING FOR MECHANICAL EQUIPMENT
  - D.1. PROVIDE POWER WIRING FOR ALL EQUIPMENT FURNISHED AND INSTALLED BY THE MECHANICAL TRADES.
  - D.2. CONTROL FEEDERS TO MECHANICAL AND PROCESS EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY OTHERS UNLESS OTHERWISE NOTED.
  - D.3. WIRING CONNECTIONS ON EQUIPMENT WHICH PRODUCES VIBRATION OR NOISE SHALL HAVE AT LEAST THREE (3) FEET OF LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
- E. WIRING DEVICES
  - E.1. LOCAL SWITCHES - 20 AMPERE, 120/277 VOLT, FLUSH TUMBLER QUIET OPERATING SINGLE THREE WAY AND FOUR WAY AS REQUIRED.
  - E.2. DUPLEX RECEPTACLES - GROUNDING TYPE 20 AMPERE, 125 VOLTS. - SEE FLOOR PLAN FOR LOCATION
  - E.3. COORDINATE DEVICE PLATES WITH ARCHITECTS

**ACCESSIBILITY**

- A. ALL DEVICES AND OUTLET BOXES SHALL BE ACCESSIBLE. ANY DEVICES LOCATED ABOVE A DRYWALL/HARD CEILING SHALL BE EITHER RELOCATED OR AN ACCESS PANEL INSTALLED.
- B. BOXES, ENCLOSURES AND CONDUIT BODIES SHALL BE INSTALLED SO THAT THE WIRING CONTAINED WITHIN CAN BE RENDERED ACCESSIBLE WITHOUT REMOVING ANY PART OF THE BUILDING. (NEC 314.29)

**BREAKERS**

- A. ALL PANELBOARD BREAKERS FOR LIGHTING LOADS SHALL BE SWITCH DUTY RATED.
- B. ALL PANELBOARD BREAKERS FOR HVAC EQUIPMENT SHALL BE HVAC RATED

**GENERAL**

- A. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND ROUGHING IN DIMENSIONS OF ALL EQUIPMENT AND SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED, I.E., POWER, CONTROL, INTERLOCK, ETC.
- B. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED. THERE SHALL BE NO COMMON NEUTRALS(EXCEPT IN SYSTEMS FURNITURE).
- C. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
- D. PROVIDE PADLOCK LOCKOUT DEVICES ON ALL CIRCUIT BREAKERS.
- E. THE CONTRACTOR SHALL PROVIDE ARC FLASH LABELS ON ALL PANEL BOARDS, SAFETY SWITCHES, STARTERS, MOTOR CONTROL CENTERS AND CONTROL PANELS AS REQUIRED BY NEC ARTICLE 110.16.
- F. ALL DISTRIBUTION PANELBOARDS, ENCLOSED CIRCUIT BREAKERS, LIGHTING AND POWER PANELBOARDS, SAFETY SWITCHES, COMBINATION STARTERS, STARTERS, AND TRANSFORMERS SHALL BE SQUARE-D FOR SWITCHGEAR STANDARD. ALL PHYSICAL SIZES, CAPACITIES AND LUG TERMINATIONS ARE BASED ON SQUARE-D EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL APPROVED SUBSTITUTIONS WILL PHYSICALLY FIT INTO THE SPACE ALLOTTED AND THAT ALL CAPACITIES ARE MET OR EXCEEDED AND THAT ALL LUGS ARE SUITABLE FOR FEEDERS AND BRANCH CIRCUITS BEING INSTALLED.
- G. ALL POWER PANELS, LIGHTING PANELS, DISTRIBUTION PANELS, DISCONNECT SWITCHES, STARTERS, VFD'S, TRANSFORMERS, MOTOR CONTROL CENTERS, AND CONTROL PANELS, ETC. SHALL HAVE A WHITE LAMINATED PLASTIC I.D. NAMEPLATE WITH 1/4

- INCH HIGH BLACK LETTERS. INDICATING THE NAME OF THE DEVICE, VOLTAGE CONTAINED WITHIN, AND WHERE THE DEVICE IS FED FROM. THE I.D. NAMEPLATE SHALL BE ATTACHED TO THE COVER USING EPOXY CEMENT.
- H. CONTRACTOR SHALL GROUND ALL NEW ELECTRICAL WORK WITHIN THE WORK AREA PER NEC SECTION 250. THE CONTRACTOR SHALL ALSO NOTE ANY EXISTING GROUNDING ISSUES AND TURN THEM OVER TO THE BUILDING REPRESENTATIVE.
- I. CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR APPLICABLE CODES, PERMITTING AND INSPECTIONS.
- J. WHERE MULTIPLE SWITCHES ARE INDICATED AT THE SAME LOCATION, THEY SHALL BE MOUNTED BEHIND A COMMON FACEPLATE.
- K. THE CONTRACTOR IS REQUIRED TO PROVIDE SHEETING AND SHORING IN ALL TRENCHES AND EXCAVATIONS AS NECESSARY IN ACCORDANCE WITH OSHA.
- L. EXISTING BUILDINGS ONLY: INDICATED EXISTING PANEL IDENTIFICATION AND CIRCUIT NUMBERS ARE BASED ON REVIEW OF EXISTING DOCUMENTATION AND FIELD OBSERVATIONS. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THAT THE CIRCUITS ARE AVAILABLE FOR USE AS INDICATED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK. INDICATED EXISTING PANEL IDENTIFICATION AND CIRCUIT NUMBERS ARE BASED ON REVIEW OF EXISTING DOCUMENTATION AND FIELD OBSERVATIONS. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THAT THE CIRCUITS ARE AVAILABLE FOR USE AS INDICATED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK. WHERE ACTUAL FIELD CONDITIONS REQUIRE DIFFERENT CIRCUIT NUMBERS THAN THOSE INDICATED ON PLANS, THE CONTRACTOR SHALL ADVISE OWNER OF CHANGES ON REQUIRED AS-BUILT DRAWINGS.

**IDENTIFICATION**

- A. REGARDLESS OF VOLTAGE, ALL JUNCTION BOXES, AND PULL BOXES FOR BRANCH CIRCUITS, SUB FEEDERS, AND FEEDERS SHALL IDENTIFY THE CIRCUITS WITHIN BY CIRCUIT NUMBER AND PANEL OF ORIGIN. IDENTIFICATION SHALL BE ACCOMPLISHED WITH A BLACK PERMANENT FELT TIP MARKER.
- B. ALL INDIVIDUAL PHASE, AND NEUTRAL BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED WITHIN ALL PULL BOXES, JUNCTION BOXES, AND AT THE POINT OF USE WITH THE BRANCH CIRCUIT POLE POSITION CONNECTED TO AT THE POWER OR LIGHTING PANEL.
- C. ALL WIRING DEVICES (RECEPTACLES AND LIGHT SWITCHES) SHALL HAVE P-TOUCH (CLEAR W/BLACK) LABELS AFFIXED TO THEIR COVERPLATE. IDENTIFY THE CONNECTED BRANCH CIRCUIT BY PANEL AND CIRCUIT NUMBER. (NON RESIDENTIAL APPLICATIONS)

**LIGHTING FIXTURES**

- A. GENERAL
  - A.1. INSTALL LIGHTING EQUIPMENT AS INDICATED ON THE DRAWINGS INCLUDING ALL LENSES, LOUVERS, LAMPS, PLASTER/GWB CEILING FRAMING KITS AND ACCESSORIES. PROVIDE SELF-ALIGNING HANGERS AND STRAPS FOR ALL SUSPENDED FIXTURES. PROVIDE ADDITIONAL BRACKETS AND SUPPORTS AS REQUIRED.
  - A.2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TEMPORARY POWER & LIGHTING SYSTEM FOR THE PROJECT. LIGHTING SHALL BE AT LEAST .25W/ft<sup>2</sup> AND OSHA APPROVED.

**PENETRATIONS**

- A. PRIOR TO CORE DRILLING THROUGH THE FLOOR, THE ELECTRICAL CONTRACTOR SHALL VISUALLY SURVEY BOTH SIDES TO SEE IF THERE ARE ANY PIPES, DUCTS, OR ELECTRICAL SERVICES THAT MAY PRESENT AN OBSTACLE. IN ADDITION TO A VISUAL SURVEY, THE ELECTRICAL CONTRACTOR SHALL HAVE THE FLOOR X-RAYED, TO DETERMINE IF THERE ARE ANY HIDDEN OBSTACLES IN THE FLOOR. AFTER IT HAS BEEN DETERMINED THAT THERE ARE NOT ANY OBSTACLES, THE FLOOR CAN THEN BE CORE DRILLED.
- B. ALL CONDUIT PENETRATIONS THRU THE ROOF, AND WALLS TO THE OUTSIDE SHALL BE SEALED WATERTIGHT.
- C. ALL CONDUIT PENETRATIONS THRU FIRE RATED FLOORS AND WALLS SHALL BE SEALED IN ACCORDANCE WITH UL REQUIREMENTS.

**BRANCH CIRCUIT PANELBOARDS**

- A. THE MINIMUM SHORT-CIRCUIT RATING FOR THE BRANCH CIRCUIT PANELBOARDS SHALL BE AS SPECIFIED AS INDICATED ON THE DRAWINGS. PANELBOARDS SHALL BE FULLY RATED.
- B. BRANCH CIRCUIT PANELBOARDS SHALL BE SEIMENS P SERIES OR APPROVED EQUAL.
- C. PLUG-ON TYPE, HEAVY DUTY, QUICK-MAKE, QUICK-BREAK, SINGLE- AND MULTI-POLE CIRCUIT BREAKERS OF THE TYPES SPECIFIED HEREIN, SHALL BE PROVIDED FOR EACH CIRCUIT WITH

- TOGGLE HANDLES THAT INDICATE WHEN UNIT HAS TRIPPED.
- D. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC TYPE WITH COMMON TYPE HANDLE FOR ALL MULTIPLE POLE CIRCUIT BREAKERS. CIRCUIT BREAKERS SHALL BE MINIMUM 100-AMPERE FRAME AND THROUGH 100-AMPERE TRIP SIZES SHALL TAKE UP THE SAME POLE SPACING. CIRCUIT BREAKERS SHALL BE UL LISTED AS TYPE SWD FOR LIGHTING CIRCUITS.
- E. CIRCUIT BREAKER HANDLE LOCKS SHALL BE PROVIDED FOR ALL CIRCUITS THAT SUPPLY EXIT SIGNS, EMERGENCY LIGHTS, ENERGY MANAGEMENT, AND CONTROL SYSTEMS (ECMS) PANELS AND FIRE ALARM PANELS.

**VOICE/DATA**

- A. ALL VOICE/DATA CABLE WORK ON THIS PROJECT SHALL BE ACCOMPLISHED BY OTHERS AND IS NOT PART OF THE ELECTRICAL CONTRACT, UNLESS NOTED OTHERWISE.

**WIRE TERMINATIONS**

- A. CONDUCTORS #10 AND SMALLER - SOLID WIRE CONDUCTORS #10 AND SMALLER SHALL BE TERMINATED UNDER THE TERMINAL SCREW OF THE DEVICE. THE CONTRACTOR SHALL NOT USE THE PRESSURE PUSH-IN WIRING TERMINALS ON THE DEVICE. THE TERMINATION SHALL BE MADE USING STANDARD INDUSTRY PRACTICES, AND THE TORQUE-TIGHTENED SCREWS SHALL BE TO THE MANUFACTURER'S RECOMMENDATIONS.
- B. CONDUCTORS #10 AND SMALLER - STRANDED WIRE CONDUCTORS #10 AND SMALLER SHALL BE TERMINATED USING CRIMP-ON TERMINALS, UNLESS THE TERMINATION LUG OR SCREW IS SPECIFICALLY DESIGNED FOR STRANDED CONDUCTOR TERMINATION. THE CRIMP-ON TERMINATION SHALL BE VINYL INSULATED, SPADE TYPE, TURNED UP AT THE TIPS, TIN-PLATED COPPER, AND RATED Cu/AL, 105°C, AND UL LISTED. THE TERMINALS SHALL BE SIZED AS CLOSELY AS POSSIBLE TO THE CONDUCTOR SIZE AND TERMINATION LUG OR SCREW SIZE.
- C. CONDUCTORS #8 AND LARGER TERMINATION OF CONDUCTORS #8 AND LARGER SHALL BE MADE WITH SOLDERLESS COMPRESSION TYPE LUGS. LUGS SHALL BE CONSTRUCTED OF HIGH CONDUCTIVITY ELECTRO-TIN PLATED WROUGHT COPPER, 600 VOLT APPLICATION AND UL LISTED. LUGS SHALL BE SIZED AS CLOSELY TO CONDUCTOR SIZE AND EQUIPMENT TERMINATION REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE TERMINATION LUGS FOR ALL EQUIPMENT NOT PROVIDED WITH THE PROPER TERMINATIONS AS DESCRIBED IN THIS SPECIFICATION. ANY EQUIPMENT PROVIDED WITH LUGS OR TERMINATIONS NOT CONFORMING TO THIS SPECIFICATION SHALL REMOVE THE PROVIDED TERMINATIONS, AND PROVIDE THE CORRECT TERMINATION OR LUG THAT MEETS THIS SPECIFICATION.
- D. MOTOR TERMINATION TERMINATIONS AT MOTORS SHALL BE MADE WITH THE QUICK DISCONNECT TYPE MOTOR CONNECTORS. THE CONNECTORS TO THE MOTOR LEADS AND SUPPLY CABLES SHALL BE SOLDERLESS COMPRESSION CONNECTORS, THOMAS & BETTS PIGTAIL TYPE. A MOLDED NEOPRENE SPLICE INSULATOR SHALL COVER THE ASSEMBLED CONNECTORS. THE TERMINATION SHALL BE UL LISTED FOR ENGAGE/DISENGAGE, CURRENT CYCLING, VIBRATION, GROUND FAULT, AND FLAMMABILITY. TERMINATIONS SHALL BE SIZED AS CLOSELY AS POSSIBLE TO THE MOTOR LEAD, AND SUPPLY CABLE CONDUCTOR SIZE AS POSSIBLE.

**CONTRACTOR RESPONSIBLE STUDIES**

- A. OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY TO DETERMINE OVERCURRENT PROTECTIVE DEVICES AND TO DETERMINE OVERCURRENT PROTECTIVE DEVICE SETTINGS FOR SELECTIVE TRIPPING.
- B. FAULT CURRENT STUDY TO DETERMINE THE MINIMUM INTERRUPTING CAPACITY OF CIRCUIT PROTECTIVE DEVICES.
- C. ARC-FLASH STUDY TO DETERMINE THE ARC-FLASH HAZARD DISTANCE AND THE INCIDENT ENERGY TO WHICH PERSONNEL COULD BE EXPOSED DURING WORK ON OR NEAR ELECTRICAL EQUIPMENT.

**ARCHITECTS**

**ARCHITECTURE**

**ENGINEERING**

**SITE PLANNING**

**CODE SERVICES**

140 N. PROVIDENCE ROAD  
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Project No. 23040

**ELECTRICAL SPECIFICATIONS**

**HR SUITE RECONFIGURATION**

**DELAWARE COUNTY GOVERNMENT CENTER**

**201 W. FRONT STREET**

**MEDIA, PA 19063**

DATE:	01/02/24
SCALE:	
AS NOTED:	
DRAWN BY:	
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SHEET 5 OF 5

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