

PROJECT TEAM

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**NC DEPARTMENT OF
MOTOR VEHICLES**

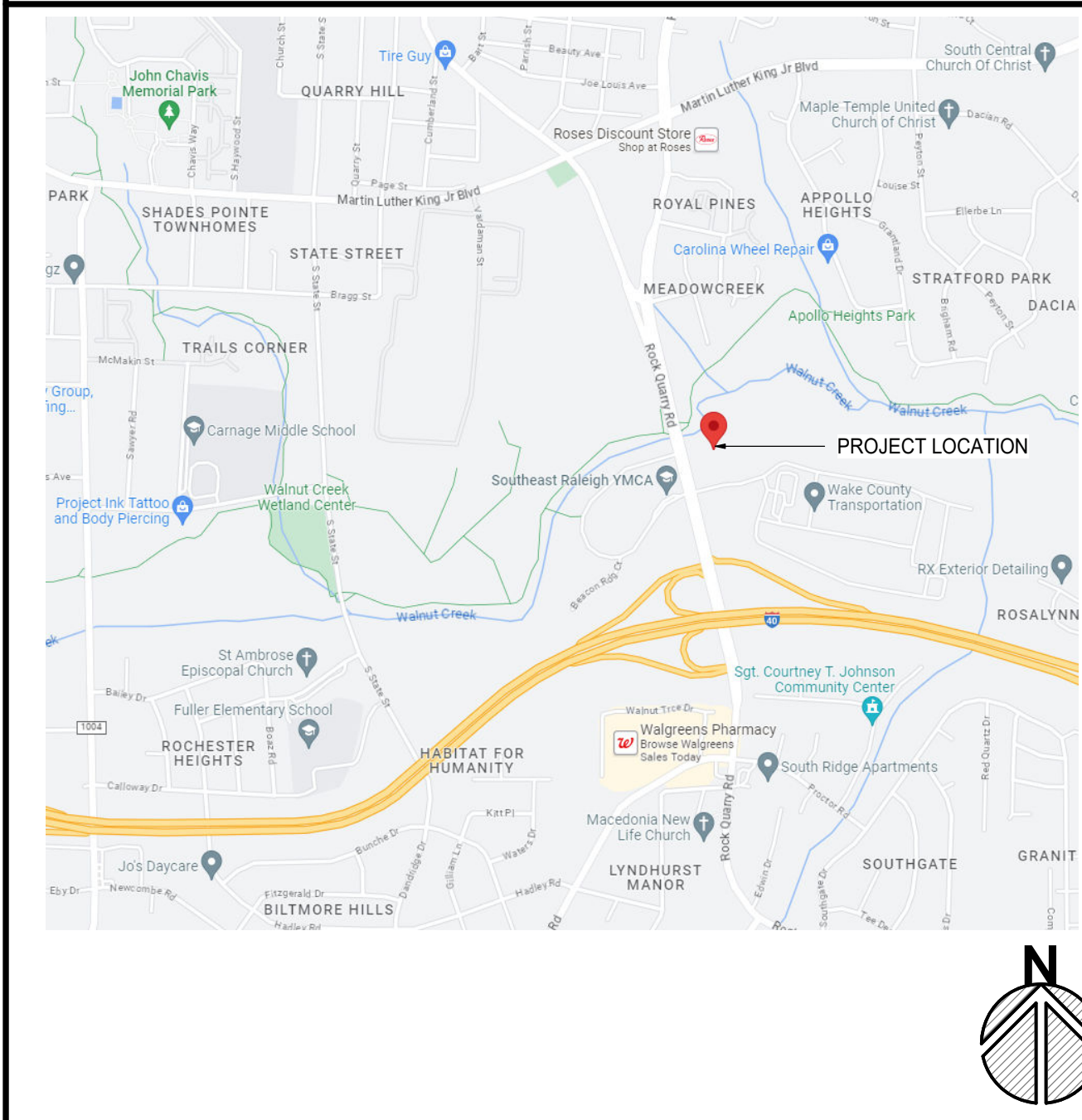
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PROJECT SCOPE

CONSTRUCT TWO PARTITIONS WITH DOORS AND CARD READERS SEPARATING
EMPLOYEE WORK AREA FROM PUBLIC AREA.
ADD ADDITIONAL EXIT LIGHT AND CORRIDOR LIGHTING FIXTURE.

LOCATION MAP



NCDMV RALEIGH IRP OFFICE

NCDMV

**1425 ROCK QUARRY RD. SUITE 100,
RALEIGH, NC
23109**



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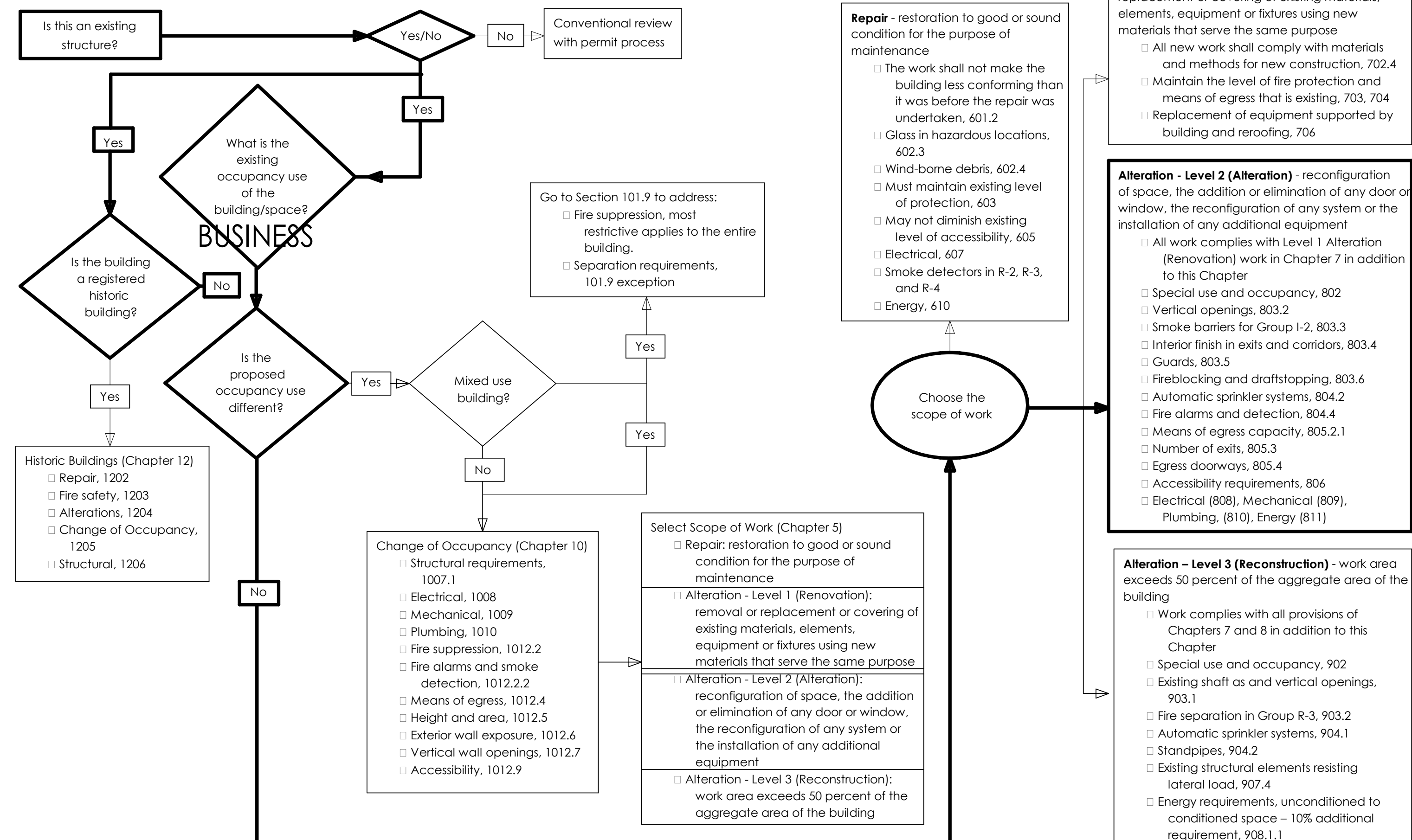
**NCDMV RALEIGH IRP
OFFICE**
1425 ROCK QUARRY RD. SUITE
100, RALEIGH, NC

3/11/15

DRAWING INDEX

NO	NAME	ISSUED	REVISION:	
			NO	DATE
G000	COVER SHEET + SHEET INDEX	03/28/24		
G001	BUILDING CODE SUMMARY	03/28/24		
G010	LEVEL 1 - LIFE SAFETY PLAN	03/28/24		
A001	GENERAL ARCHITECTURAL INFORMATION	03/28/24		
A111	LEVEL 1 - FLOOR PLAN	03/28/24		
A121	LEVEL 1 - REFLECTED CEILING PLAN	03/28/24		
E1	ELECTRICAL SHEET	03/28/24		

NC Existing Building Code Decision Diagram
(Work Area Compliance Method)



REVISIONS:

#	DESCRIPTION:	DATE

SHEET NAME:
COVER SHEET + SHEET
INDEX

PHASE:
CD PHASE

ISSUE DATE: 03/28/24
PROJECT #: 23109
DRAWN BY: N.A.

SHEET NUMBER

G000



2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2 - FAMILY DWELLINGS AND TOWNHOUSES) NAME OF PROJECT: NCDMV IRP OFFICE RENOVATION ADDRESS: 1425 ROCK QUARRY ROAD, RALEIGH, NC ZIP CODE: 27610...

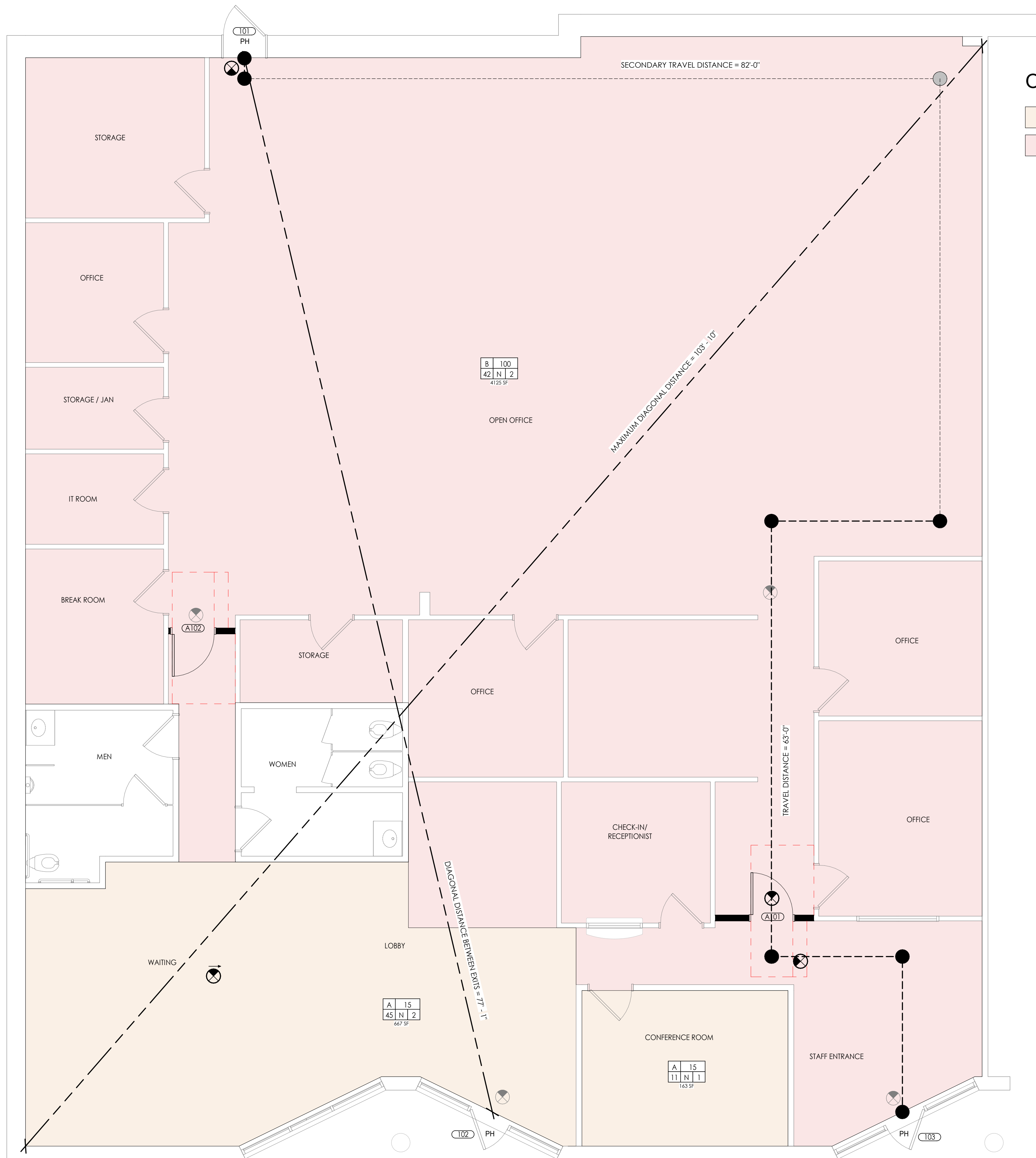
FIRE PROTECTION REQUIREMENTS: Notes: BUILDING ELEMENT FIRE SEPARATION DISTANCE (FEET) RATING REQ'D PROVIDED (W/REDUCTION) DETAIL # & SHEET # DESIGN # FOR RATED ASSEMBLY...

ENERGY SUMMARY: EXISTING - NO CHANGE ENERGY REQUIREMENTS: THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED... THERMAL ENVELOPE: ROOF/CEILING ASSEMBLY (EACH ASSEMBLY) DESCRIPTION OF ASSEMBLY: U-VALUE OF TOTAL ASSEMBLY:...

ALLOWABLE HEIGHT: BUILDING HEIGHT IN FEET (Table 504.3) ALLOWABLE 40'-0" SHOWN ON PLANS 14'-0" CODE REFERENCE 1.504.3...

ACCESSIBLE DWELLING UNITS (SECTION 1107): NOT APPLICABLE ACCESSIBLE PARKING (Section 1106): EXISTING - NO CHANGE LOT OR PARKING AREA TOTAL NUMBER OF PARKING SPACES REQUIRED PROVIDED...

ELECTRICAL SUMMARY: EXISTING - NO CHANGE ELECTRICAL SYSTEM AND EQUIPMENT METHOD OF COMPLIANCE: ENERGY CODE PERFORMANCE PRESCRIPTIVE ASHRAE 90.1 PERFORMANCE PRESCRIPTIVE...



OCCUPANCY TYPE LEGEND

- A
- B

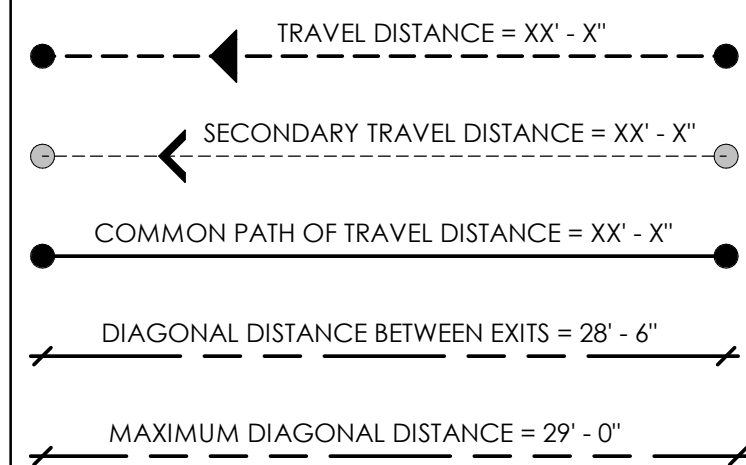
FIRE PREVENTION GENERAL NOTES:

1. EVERY EXIT DOOR IS SPECIFIED TO BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY AND WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT.
2. INTERIOR WALL AND CEILING FINISHES ARE SPECIFIED TO BE CLASS 2 (FLAME SPREAD 26-75, SMOKE DEVELOPMENT 450 OR LESS) OR BETTER, UNLESS NOTED OTHERWISE.
3. INTERIOR TRIM IS SPECIFIED TO BE CLASS 3 (FLAME SPREAD 76 TO 200, SMOKE DEVELOPMENT OF 450 OR LESS) OR BETTER.
4. INTERIOR TRIM FOR CEILINGS IS SPECIFIED TO BE 10% OR LESS OF THE TOTAL CEILING AREA. INTERIOR TRIM OF WALLS IS SPECIFIED TO BE 20% OR LESS OF TOTAL WALL AREA.
5. THIS PROJECT DOES NOT INCLUDE STORAGE, DISPENSING OR USE OF ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, FLAMMABLE GAS, OR HAZARDOUS SUBSTANCES.
6. ALL WOOD BLOCKING, CLEATS, GROUNDS, SHEATHING AND OTHER MISC. CARPENTRY ITEMS SHALL BE FIRE RETARDANT TREATED.
7. FLOOR COVERING FOR CORRIDORS, LOBBIES, STAIRS, OTHER EXIT PATHS OR EXIT AREAS ARE SPECIFIED TO BE CLASS B OR BETTER.

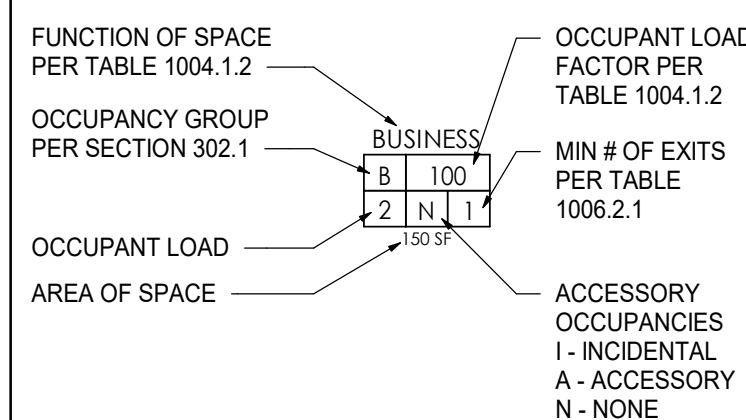
LIFE SAFETY REQUIREMENTS:

1. MAXIMUM COMMON PATH OF TRAVEL DISTANCE IS 75'-0" (TABLE 1006.2.1).
2. EXIT DOORS SHALL BE SPACED APART NOT LESS THAN ONE HALF THE DIAGONAL DISTANCE OF THE BUILDING OR AREA SERVED. (1007.1.1).
3. EXIT ACCESS TRAVEL DISTANCE IS AS FOLLOWS:
(B) OCCUPANCY: 200'-0"
(TABLE 1017.2 WITHOUT SPRINKLER SYSTEM)
4. DEAD END CORRIDOR LENGTH IS LIMITED TO 20'-0" WHERE MORE THAN 1 EXIT IS PROVIDED. (1020.4)
5. NEW EGRESS COMPONENT CAPACITY NUMBERS TO BE DETERMINED PER SECTION 1005.3.1
- STAIRWAYS : .3" PER OCCUPANT
- ALL OTHER EGRESS COMPONENTS: .2" PER OCCUPANT
6. ALL EXTERIOR EGRESS DOOR HARDWARE TO BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY AND WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT.

LIFE SAFETY PLAN SYMBOLS



OCCUPANCY INFORMATION SYMBOL:

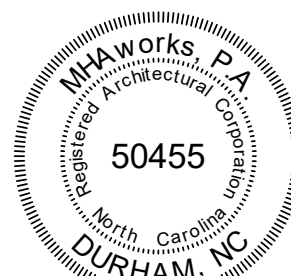


EGRESS DOOR SCHEDULE

DOOR NO.	SIZE		HARDWARE	FIRE RATING	EGRESS TYPE	EXIT INFO		HARDWARE REQ		REMARKS (SEE SPECIFICATIONS)
	Doors Leaf(s)					EGRESS CAPACITY	EGRESS ACTUAL	PANIC HARDWARE	DELAY	
Level 1										
101	3'-0"	7'-0"			34"	170	32	No		
102	3'-0"	6'-11"			34"	170	32	No		
103	3'-0"	6'-11"			34"	170	32	No		
A101	3'-0"	7'-0"			34"	13				
A102	3'-0"	7'-0"			34"	13				



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REVISION	
DESCRIPTION:	DATE:

SHEET NAME:
LEVEL 1 - LIFE SAFETY PLAN
 PHASE:
CD PHASE

ISSUE DATE: **03/28/24**
 PROJECT #: **23109**
 DRAWN BY: **N.A.**

SHEET NUMBER

G010

ARCHITECTURAL GRAPHIC SYMBOLS LEGEND

Architectural graphic symbols legend including Room Tag, Door Tag, Partition Tag, Ceiling Tag, Centerline, Datum Point, Keynote Tag, Revision Tag, Area of Revision, North Arrow, and Structural Grid Line with Designations.

ACCESSIBLE GENERAL NOTES:

- A. PILE THICKNESS OF SPECIFIED CARPETS DOES NOT EXCEED 1/2".
B. FLOOR SURFACES SPECIFIED ARE SLIP-RESISTANT.
C. ABRUPT CHANGES IN LEVEL ALONG ACCESSIBLE ROUTE DO NOT EXCEED 1/2" IN HEIGHT...

ARCHITECTURAL GENERAL NOTES

- A. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL.
B. ELEMENTS THAT ARE IDENTIFIED BY OTHER DISCIPLINES (E.G., CIVIL, ELECTRICAL) ELSEWHERE WITHIN THE ARCHITECTURAL SERIES...

ARCHITECTURAL ABBREVIATIONS

Table of architectural abbreviations with columns for symbol, description, and alternate descriptions. Includes terms like A-PT, ABS, ABC, ACP, ACT, ACW, ADJ, AFF, AHJ, AHU, ALT, ALUM, AP, APC, ARC, AS, AUTO, AVG, AW, AWC, AWP, BF, BLDG, BLDG, BOT, BRG, BTWN, BUR, C, C-TILE, CAB, CB, CCTV, CEM, CFSF-NIS, CFSF-S, CG, CI, CIPC, CJ, CL, CLG, CLR, CM, CMBD, CMU, CMU-A, CMU-GF, CMU-GLZ, CMU-SPLF, CO, COL, CONC, CONC-P, CONC-SLR, CONC-ST, CONST, CONT, CONTR, CORR, CSMU, CT, CTSK, CU FT, CUST, CW, CWFD, D, DBL, DEMO, DETE, DF, DG, DHM, DIA, DIAG, DIM, DIV, DL, DN, DP, DR, DS, DTL, DWG, DWR, EA, EF, EFS, EFS, EJ, EL, ELAS, ELEC, ELEV, EMER, EPS, EPX, EQ, EQUIP, ETR, EWC, EX, EXH, EXP, EXPC, EXT, FAAF, FD, FE, FEB, FEC, FF, FGL, FH, FHC, FHVC, FIN, FLR, FLRG, FND, FO, FRM, FRP, FRT, FT, FTG, FURN, FVC, FWC, GA, GALL, GALV, GB, GB-AR, GB-IR, GB-S, GFRG, GL, GL-BLK, GPM, GRT, GSFT, GT, GWT, GYP, H, HB, HBD, HDC, HDNR, HDWD, HDWR, HM, HORIZ, HPC, HPPF, HT, HVAC, ID, IN, INCL, INFO, INST, INSUL, INT, IRWC, IWB, JAN, JCT, JT, L, LAB, LAHJ, LAM, LAV, LH, LIN, LKR, LMC, LPS, LT, LVR, M, MACH, MAS, MATL, MAX, MB, MCM, MCP, MDO, MECH, MED, MEMB, MFR, MIF, MIN, MIR, MISC, MLDG, MO, MPS, MR, MT, MTD, MTL, NA, NIC, NO, NOM, NRC, NTS, OC, OD, OFCI, OPNG, OPP HD, OVHD, P-TILE, PC, PERF, PERIM, PIP, PLAM, PLAS, PLWD, PLYWD, PNL, POLY, PPS, PPT, PR, PREFAB, PREFIN, PREP, PS, PSB, PSF, PSI, PT, PARTITION, PVS, PVM, PVMC, QSM, QUARRY TILE, QTY, R, R/W, RAD, RAF, RB, RCP, RD, REFG, REINF, REM, REQD, RES, RFT, RH, RL, RM, RO, ROU, RSF, RSR, RST, RT, RTU, SAB, SC-PLK, SC-PNL, SCH, SF, SFRM, SHM, SHTG, SIM, SPEC, SPF, SPR, SQ, SQ FT, SRD, SS, SSM, ST, STC, STD, STL, STRUC, SUSP, SV, SWM, SYM, T, T&G, T.O., TB, TEL, TERR-C, TERR-E, TERR-R, THHD, THK, TOS, TOW, TS, TV, TYP, UC, UG, UH, UNO, VAT, VB, VCT, VDB, VERT, VEST, VFCT, VFWC, VR, VT, VTR, VWC, W, W/O, WC, WCP, WD, WDW, WP, WPT, WSCT, WSF, WT, WWF, XPS.



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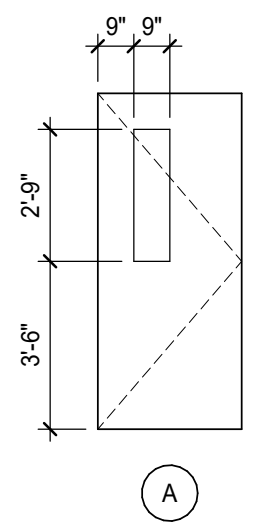
REVISION table with columns for No., Description, and Date.

SHEET NAME: GENERAL ARCHITECTURAL INFORMATION CD PHASE

ISSUE DATE: 03/28/24
PROJECT #: 23109
DRAWN BY: N.A.

SHEET NUMBER A001

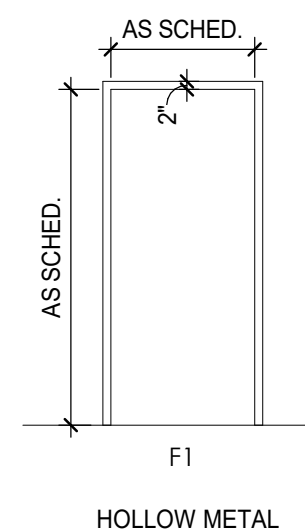
DOOR & FRAME SCHEDULE																	
NUMBER	TYPE	DOOR				FRAME				HARDWARE SET	ELECTRIFIED	FIRE RATING	COMMENTS				
		WD	HGT	THK	UC	MATERIAL	GLAZING	TYPE	DEPTH					HEAD WIDTH	JAMB WIDTH	MATERIAL	
A101	A	3'-0"	7'-0"	1 3/4"		SCW	1/4" TEMPERED	F1	5 7/8"	2"	2"	2"	HM	BLADE TYPE DOOR LEVERS, CLOSER, SILENCERS, MEDIUM DUTY HINGES, ELECTRIC STRIKE, KICK PLATE, FINISHES - BRUSHED STAINLESS STEEL OR LUMINUM		N/A	
A102	A	3'-0"	7'-0"	1 3/4"		SCW	1/4" TEMPERED	F1	5 7/8"	2"	2"	2"	HM	BLADE TYPE DOOR LEVERS, CLOSER, SILENCERS, MEDIUM DUTY HINGES, ELECTRIC STRIKE, KICK PLATE, FINISHES - BRUSHED STAINLESS STEEL OR LUMINUM		N/A	



NARROW LITE
(FOR NON-RATED
CONSTRUCTION)
SOLID CORE WOOD

DOOR PANEL TYPES

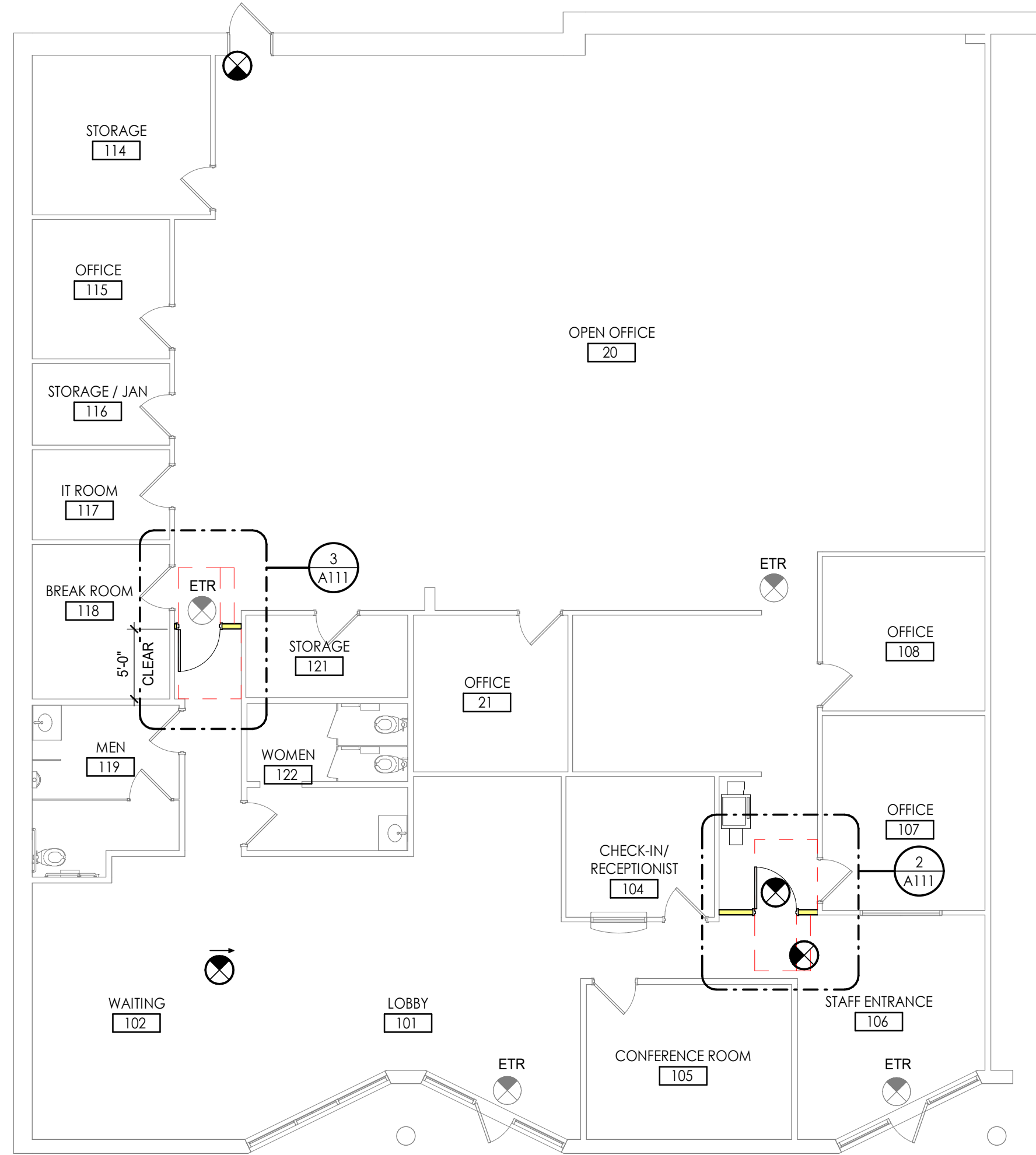
1/4" = 1'-0"



HOLLOW METAL
FRAME

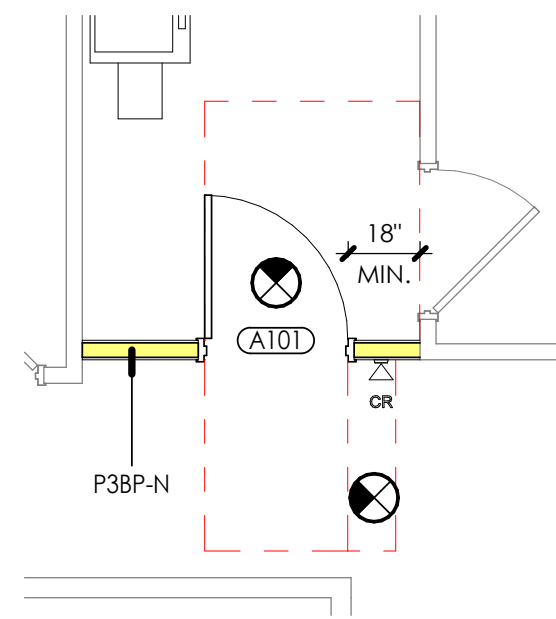
DOOR FRAME TYPES

1/4" = 1'-0"



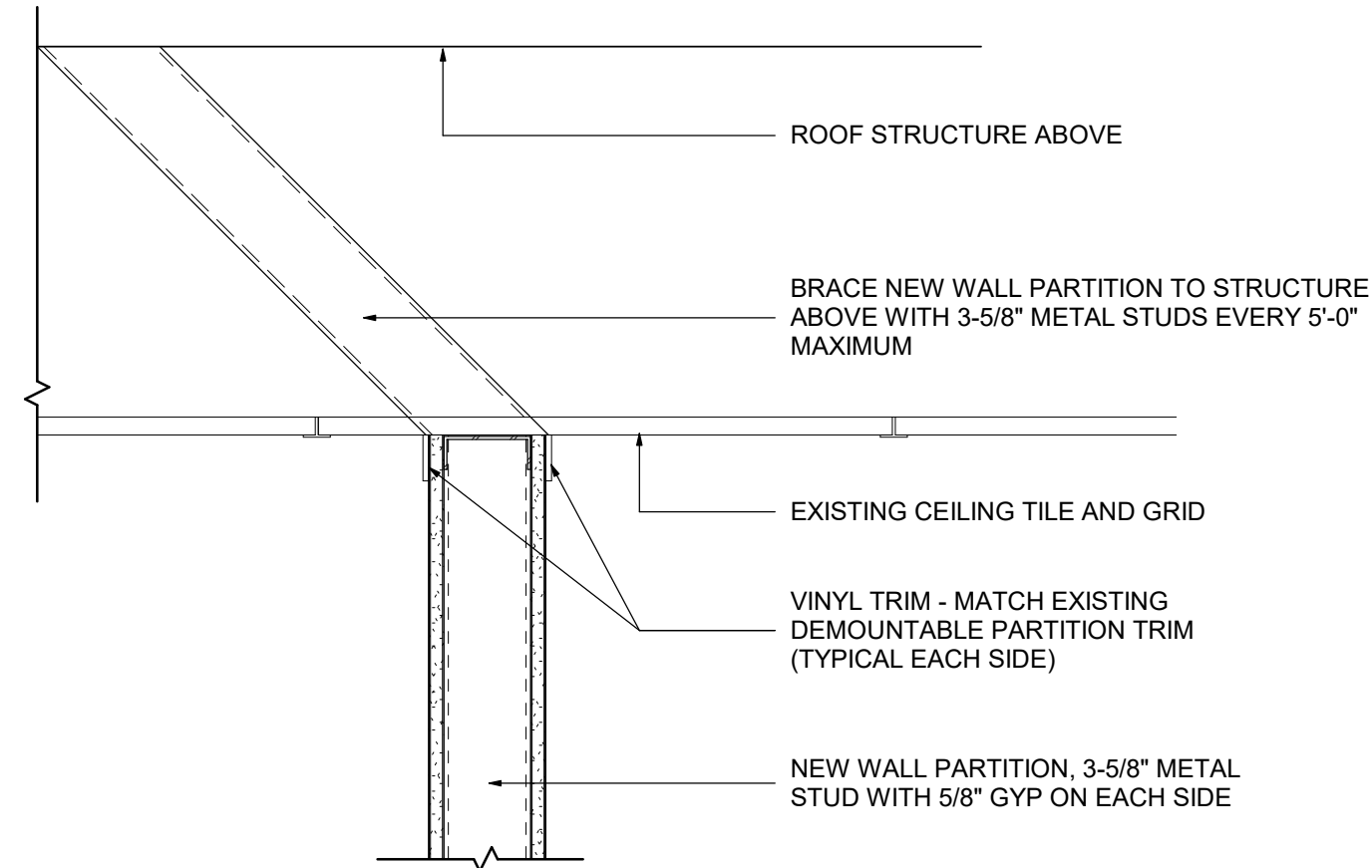
1 LEVEL 1 - FLOOR PLAN

1/8" = 1'-0"



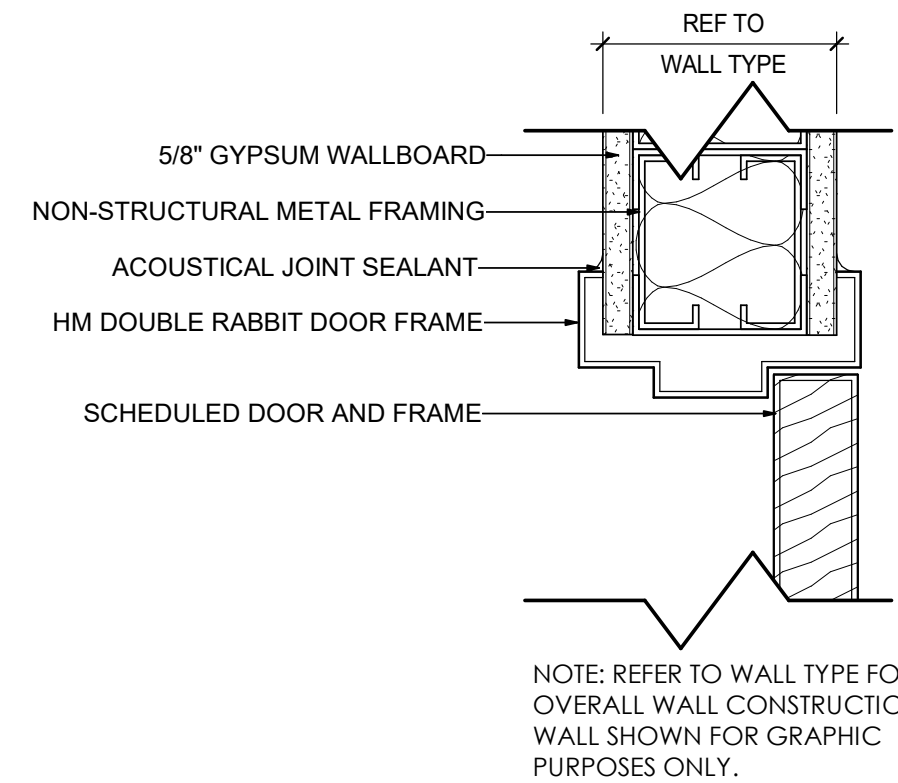
2 ENLARGED FLOOR PLAN 1

1/4" = 1'-0"



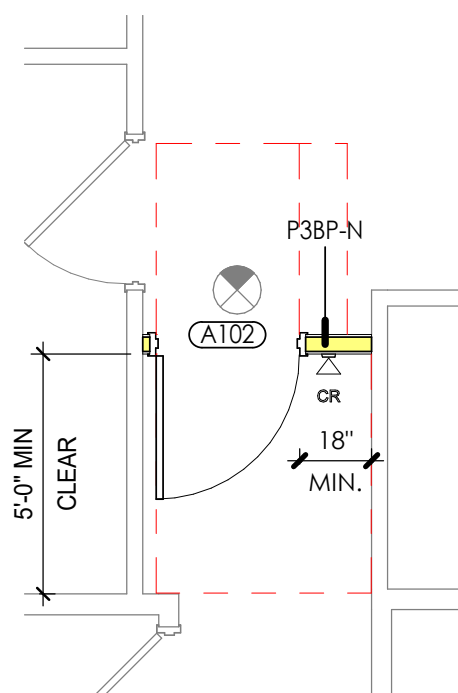
7 WALL BRACING DETAIL @ NEW PARTITION

1 1/2" = 1'-0"



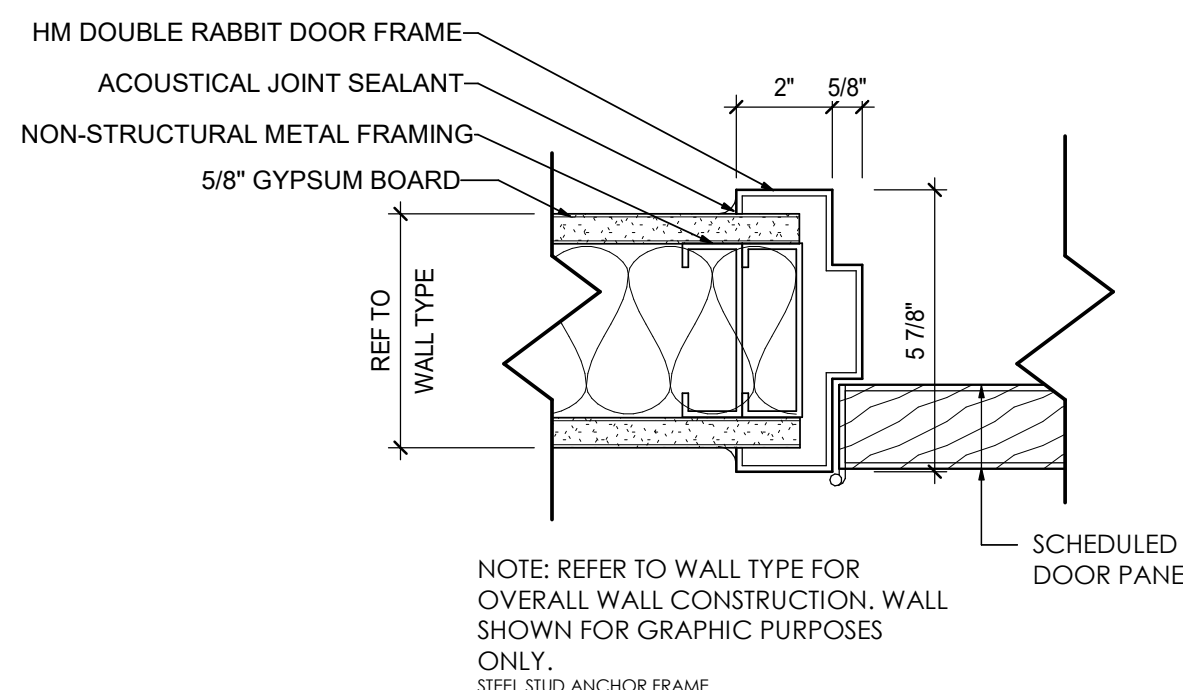
4 DOOR HEAD 1

3" = 1'-0"



3 ENLARGED FLOOR PLAN 2

1/4" = 1'-0"



5 DOOR JAMB 1

3" = 1'-0"

FLOOR PLAN GENERAL NOTES

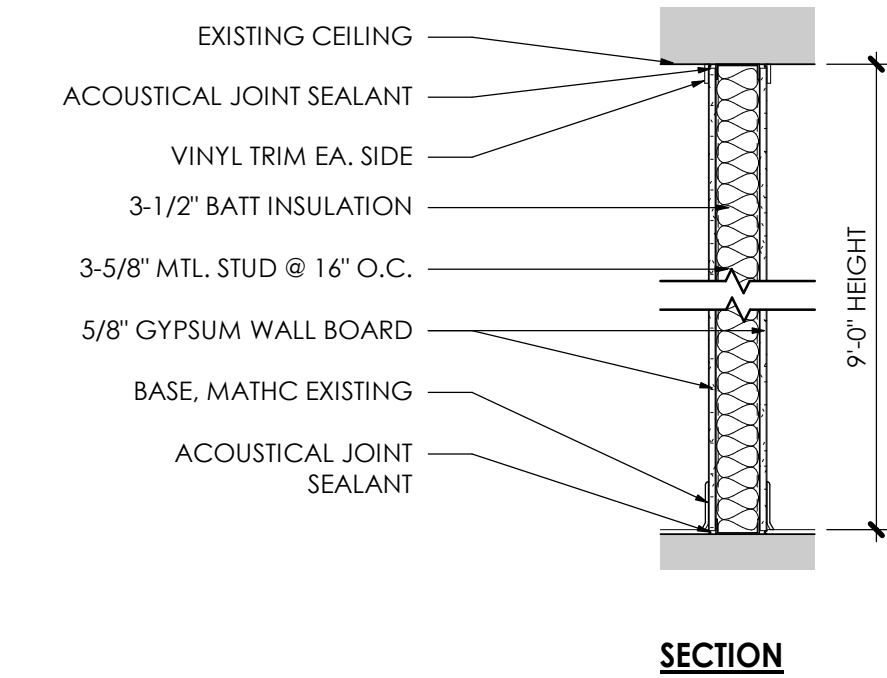
A. REPAIR OR REPLACE TO ORIGINAL CONDITION ANY ADJACENT FINISHES THAT ARE DAMAGED DUE TO INSTALLATION OF NEW WORK.

WALL RATING LEGEND

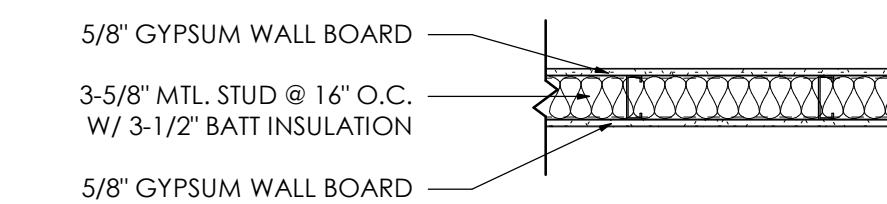
- EXISTING WALL
- TYPE P3BD-N: NEW UNRATED WALL PARTITION, 3-5/8" METAL STUDS WITH 5/8" GYP ON EACH SIDE, TO CEILING

DOOR & FRAME GENERAL NOTES:

- A. DOOR AND FRAME DETAILS INDICATE GENERAL CHARACTERISTICS OF DOOR AND FRAME SIZES AND COMPONENTS AND MAY NOT INDICATE EXACT FIELD CONDITIONS OR REQUIREMENTS. COORDINATE DETAILS WITH OTHER DRAWINGS AND SPECS TO DETERMINE ALL COMPONENTS (E.G., SEALANT, ANCHORS, HARDWARE, LINTELS, CLIPS) REQUIRED FOR COMPLETE AND FUNCTIONAL INSTALLATION.
- B. DOOR SWINGS ON FLOOR PLANS TAKE PRECEDENCE OVER SWINGS INDICATED ELSEWHERE (E.G., ELEVATIONS).



SECTION



PLAN

TYPE G - 3-5/8" MTL STUD @ 16" O.C. W/ 3-1/2" BATT INSULATION & 5/8" GWB BOTH SIDES (OR AS REQUIRED)

RATING: 0

MARK DESCRIPTION OF VARIATION



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REVISION
DESCRIPTION: DATE

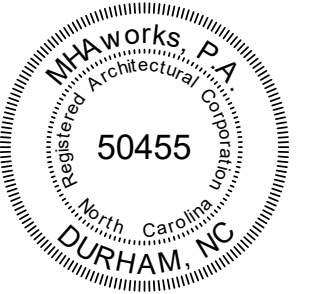
SHEET NAME:
LEVEL 1 - FLOOR PLAN

PHASE:
CD PHASE

ISSUE DATE: 03/28/24
PROJECT #: 23109
DRAWN BY: N.A.

SHEET NUMBER

A111



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RALEIGH, NC

REVISION

NO.	DESCRIPTION	DATE
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SHEET NAME:
**LEVEL 1 - REFLECTED
CEILING PLAN**
PHASE:
CD PHASE

ISSUE DATE: **03/28/24**
PROJECT #: **23109**
DRAWN BY: **N.A.**

SHEET NUMBER
A121

REFLECTED CEILING PLAN NOTES

- A. DRAWINGS INDICATE GRID LAYOUT DIAGRAMMATICALLY. REFER TO SPECIFICATIONS FOR SPECIFIC GRID LAYOUT CRITERIA AT PERIMETER CONDITIONS THAT MAY DIFFER FROM GRID LAYOUT INDICATED ON DRAWINGS.
- B. CENTER CEILING MOUNTED ITEMS WITHIN CEILING PANELS, UNLESS INDICATED OTHERWISE.
- C. IF ADDITIONAL SPRINKLER HEADS ARE REQUIRED TO SATISFY CODE OR COVERAGE DENSITIES (OTHER THAN THOSE THAT MAY BE INDICATED), PROVIDE ADDITIONAL SPRINKLER HEADS AT NO ADDITIONAL COST AND OBTAIN APPROVAL OF ARCHITECT FOR LOCATIONS OF SUCH HEADS, IF ANY.
- D. THESE PLANS ATTEMPT TO INDICATE ALL ITEMS THAT ARE INSTALLED OR MOUNTED ON OR IN THE CEILING. HOWEVER, SOME ITEMS MAY NOT BE INDICATED, AND THEY DO NOT INDICATE WALL MOUNTED DIFFUSERS, LIGHTING, EXIT SIGNS, ETC. REFER TO ALL CONTRACT DOCUMENTS TO DETERMINE EXACT QUANTITY AND LOCATION OF ITEMS NOT INDICATED. IF AN ITEM IS NOT INDICATED ON REFLECTED CEILING PLAN, VERIFY LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- E. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR FIXTURE TYPES AND QUANTITIES ONLY. REFLECTED CEILING PLAN SHALL GOVERN LOCATIONS OF ELECTRICAL FIXTURES, MECHANICAL DIFFUSERS, AND GRILLS. NOTIFY ARCHITECT OF ANY CONFLICT WITH LOCATIONS INDICATED ON THE DRAWINGS.
- F. LOCATION OF CEILING ACCESS PANELS ARE APPROXIMATE. CONFIRM FINAL LOCATION IN EACH ROOM TO PROVIDE EASE OF ACCESS TO FINAL CONDUIT LOCATIONS AND ARCHITECT / OWNER'S ELECTRICAL STAFF APPROVAL PRIOR TO INSTALLATION.

CEILING PLAN LEGEND

1005	ROOM NUMBER
CL88	CEILING TYPE
1'-0"	CEILING HEIGHT A.F.F. UNO
ETR	EXISTING TO REMAIN

INTERIOR APPLICATIONS:
GYPSUM BOARD CEILING

EXTERIOR APPLICATIONS:
GYPSUM SOFFIT BOARD OR GYPSUM SHEATHING

2'-0" x 2'-0" LAY-IN ACOUSTICAL CEILING PANELS IN SUSPENDED GRID

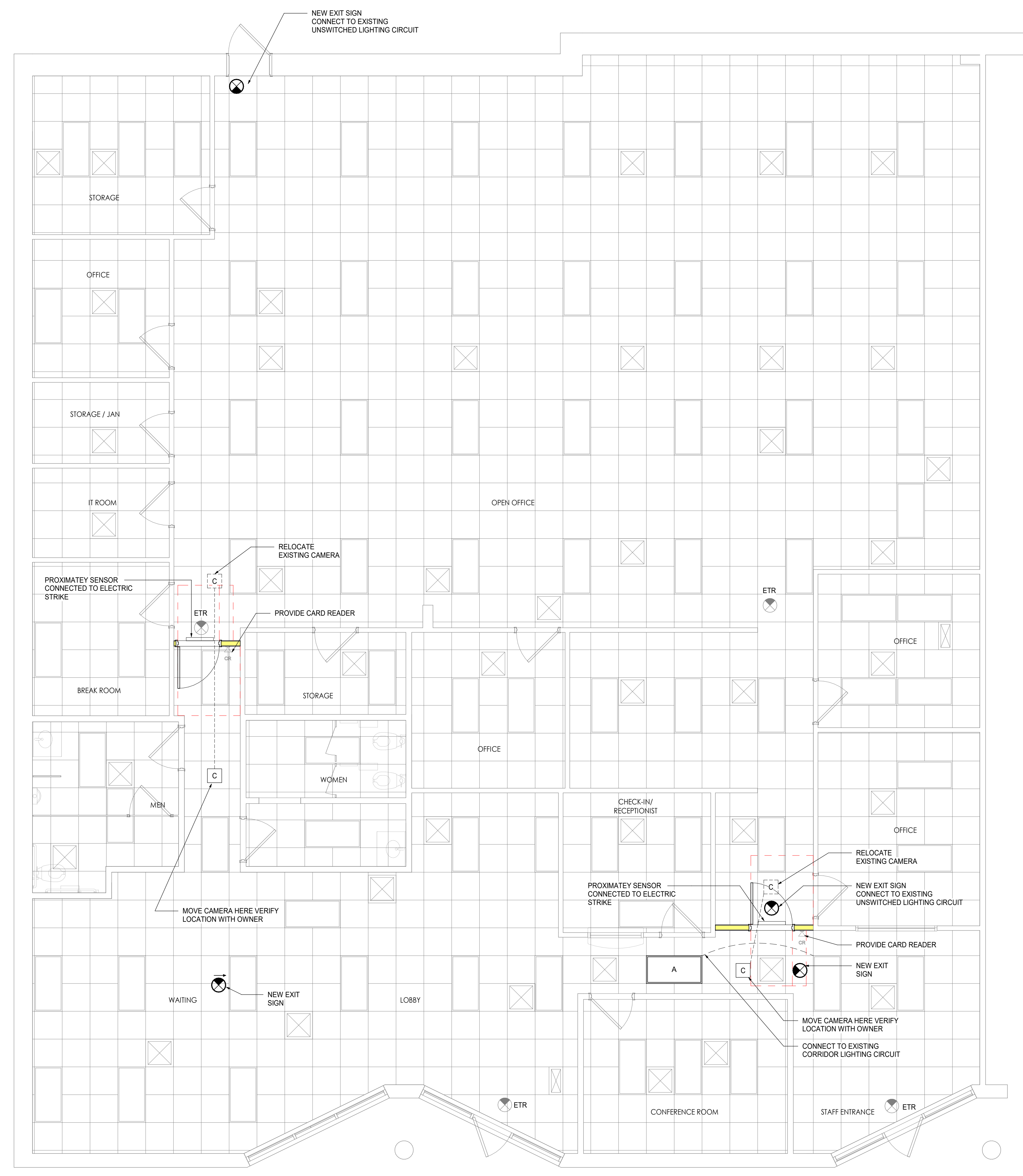
1 HR RATED HORIZONTAL SHAFT WALL ABOVE ACP CEILING

AP ACCESS PANEL

	WITH OPENING	EXTERIOR WALL
	WITHOUT OPENING	EXTERIOR WALL
		INTERIOR WALL/PARTITION TO UNDERSIDE OF DECK
		INTERIOR WALL/PARTITION TO CAP ABOVE OR TERMINATES ADJACENT TO A RATED HORIZONTAL ASSEMBLY
		INTERIOR WALL/PARTITION 6' MIN ABOVE HIGHEST ADJACENT CEILING, IF NECESSARY TO ACHIEVE RESULTS DESIRED, EXTEND WALL HEIGHT SO WALL BRACING IS NOT EXPOSED TO VIEW IN FINISHED SPACES.
		INTERIOR WALL/PARTITION TO UNDERSIDE OF CEILING
		EXISTING TO REMAIN, VERIFY VERTICAL EXTENTS WHERE THE HEIGHT IMPACTS THE WORK

LIGHTING FIXTURES SCHEDULE - SEE ELEC. DWGS FOR...

TYPE	DESCRIPTION	TYPE	COMMENTS
A	MATCH EXISTING	2'X4'	



DIVISION 16 - ELECTRICAL

PART 1 - GENERAL

1.1 DESCRIPTION OF THE WORK

- A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
- Lighting and power distribution system.
 - Provide lighting fixtures per light fixture schedule with lamps to match.
 - Wiring devices, boxes, cover plates, etc.
 - Source of power for all items of equipment.
 - Grounding.
 - Other requirements and/or systems where shown.
- B. All work shall be complete and items, equipment, etc., shall be electrically connected for proper and correct operation.
- C. All work under this contract shall be installed in accordance with the latest edition of the following codes and standards insofar as they apply:
- The 2020 National Electrical Code.
 - The National Electrical Safety Code.
 - Underwriter's Laboratories, Inc., Standards and approved listings or other approved 3rd party listing agency.
 - Electrical Testing Laboratories standards.
 - 2018 North Carolina State Building Code.
 - 2018 North Carolina State Energy Code.
- D. The Electrical Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.
- E. Local permits are not required. All work must be inspected by the Office of State Construction state electrical inspector and the Engineer of Record. Provide certificate of inspection and approval from the state electrical inspector prior to the final inspection. The electrical contractor is responsible for contacting the state electrical inspector for all required inspections. All scheduling shall be Monday through Friday unless otherwise exempted by SCO.
- F. All work shall be done by skilled mechanics and shall present a neat, trim, workmanlike condition when complete.

1.2 INTENT

- A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Electrical Contractor shall take this into consideration and include in his bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

- A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.
- B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

- A. Shop drawings shall be submitted for panels and service equipment, lighting, wiring devices, and cover plates. These may consist of the manufacturer's standard catalog or test sheets and shall have the exact items being offered clearly identified.

PART 2 - PRODUCTS AND MATERIALS

2.1 GENERAL

- A. All material shall be new and shall bear the manufacturer's name, trade name, and be third party acceptable to NCDOT listed and labeled where such standard has been established for the particular material. Materials shall be the standard products of manufacturer regularly engaged in the manufacturer of the required type of equipment and the manufacturer's latest approved design.
- Boxes installed in concealed locations shall be set flush with the finished surfaces.
 - Provide rated boxes in all fire barriers & walls installed per code.

2.2 CONDUCTORS

- A. Conductors shall be color coded, sizes #4 and larger may be color taped on the job. Color coding shall comply with 2017 NEC.
- 120/240V, 1 phase
Phase A- Black
Phase B- Red
Neutral- White
Ground- Green

480/277V, 3 phase
Phase A- Brown
Phase B- Orange
Phase C- Yellow
Neutral- Natural Gray
Ground- Green

- B. Conductors shall be manufactured by Dodge, Southwire, Dayton Systems or approved equal. Conductors shall meet the latest requirements of NEMA and IPCEA and shall be third party acceptable to NCDOT approved.

2.3 CONDUCTORS SHALL BE APPLIED AND TAPED AS FOLLOWS:

- Size #10 and #12, use Ideal "Wing Nuts" or T&B "Piggy" connectors. Connectors shall be rated for 150 degrees C for use in recessed lighting fixtures.
- Size #8 and larger shall be solderless screw and screw-clamping type, smoothly covered and shod with rubber gum type with final cover vinyl plastic electrical type. In lieu of rubber gum and vinyl plastic type, factory fabricated approved preformed insulating covers may be used. All connectors shall be UL approved.
- No split-bolt type connectors may be used.

- D. All branch wire and connections shall be copper and sized per National Electric Code with a minimum size of #12.
- E. All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in panelboard cabinets, safety switches, etc.
- F. All wiring in mechanical spaces shall be plenum rated.
- G. Provide GFI protection within 6'-0" of any sink.
- H. Multi-wire branch circuits are not allowed per SCO Guidelines

2.3 PANELBOARDS, SAFETY SWITCHES

- A. Panelboards shall comply with NEMA Standard PB 1 - Latest Edition and as manufactured by Square D or ITE-Siemens. All panel boards must have copper buses and bolt-in breakers.
- B. Safety switches shall be heavy duty type, size and rating as required for load service. Safety switches shall be fused or unfused as shown and/or as required. Safety switches serving motor loads shall be horsepower rated for load served.

2.4 WIRING DEVICES

- A. Wiring devices shall be federal specification by Bryant, Leviton, Cooper or approved equal. With matching cover. All exterior devices require "extra-duty" rated weatherproof while in use covers. Color by Architect.
- B. Wiring devices installed under a Kitchen Hood shall have stainless steel covers.
- C. Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 CONDUIT

- A. PVC conduit will be allowed under slab. Provide rigid turn-ups.
- B. All exposed conduit shall be rigid steel where exposed to the elements, located less than 8'-0" above grade or where exposed to hazardous conditions.
- C. EMT conduit, above slab, concealed or exposed above 8'-0" shall be used through out the project.
- D. Metallic sheathed "MC" cable should not be used for this project, without designer authorization. MC cable is allowed for light whips 6'-0" or less and where concealed with-in existing construction to minimize demolition work. If used, MC cable shall be 1/2" with minimum #12 AWG copper wire and green insulated copper ground.

PART 3 - EXECUTION

3.1 CIRCUIT GROUNDING

- A. All circuits shall contain an insulated, green, copper grounding conductor, sized in accordance with Table 250-122 of the NEC. Grounding conductors shall be connected to equipment grounding bus in panelboard and securely attached and grounded to the device or enclosure at the other end.

3.2 GROUNDING TYPE CONVENIENCE OUTLETS AND SWITCHES

- A. Outlets and switches shall be solidly grounded to equipment grounding system with a green colored insulated conductor. Electrical connections shall be continuous from equipment ground bus in panelboard to the hex nut on the convenience outlet or switch.

3.3 MOTORS

- A. All motors shall be connected to conduit system with short length (minimum length 24" and maximum length 36") of flexible liquidtight conduit.

3.4 EQUIPMENT LABELING

- A. Provide permanent plastic name plates for all panelboards, safety switches, wiring troughs, etc., for identification of equipment controlled, services, etc. Nameplates shall be securely and permanently attached to equipment with stainless steel screws. Nameplates shall include the name of the equipment and where it is fed from.

- Color Coding-**
Blue surface with white core- 120/240v equipment
Black surface with white core- 277/480v equipment
Bright red surface with white core- fire alarm systems
Dark red surface with white core- security systems
Green surface with white core- emergency systems
Orange surface with white core- telephone systems
Brown surface with white core- data systems
White surface with black core- paging systems
Purple surface with white core- TV systems

- B. All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.
- C. All empty conduit runs shall be identified and indicated where they terminate.
- D. Provide typewritten directory in each panelboard to clearly identify each circuit, service, etc.

3.5 JUNCTION AND/OR PULL BOXES

- A. Boxes shall be installed where necessary to avoid excessive runs and/or too many bends between outlets.

3.6 FULL WIRE

- A. Leave pull wire in each empty conduit run.

3.7 GROUNDING

- A. All grounding shall be in accordance with Article 250 of the NEC. In addition, the following requirements shall be met:
- Grounding conductors shall be installed as to permit the shortest and most direct path from equipment to ground. All connections to grounding conductors shall be accessible.
 - Equipment ground continuity shall be maintained through flexible metal conduit.
 - All wiring devices equipped with grounding connection shall be solidly grounded to ground system with grounding conductors.
 - The frame of all lighting fixtures shall be securely grounded to the equipment ground system with grounding conductors.
 - All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.
 - All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.
 - The raceway system shall not be relied on for ground continuity. A green grounding conductor, properly sized per NEC table 250-122, shall be run in all power raceways.
 - Provide ground resistance testing for all service grounds upon completion of grounding & bonding system per 2020 SCO guidelines 26 08 00 B

3.8 ELECTRICAL WORK IN CONNECTION WITH OTHER WORK

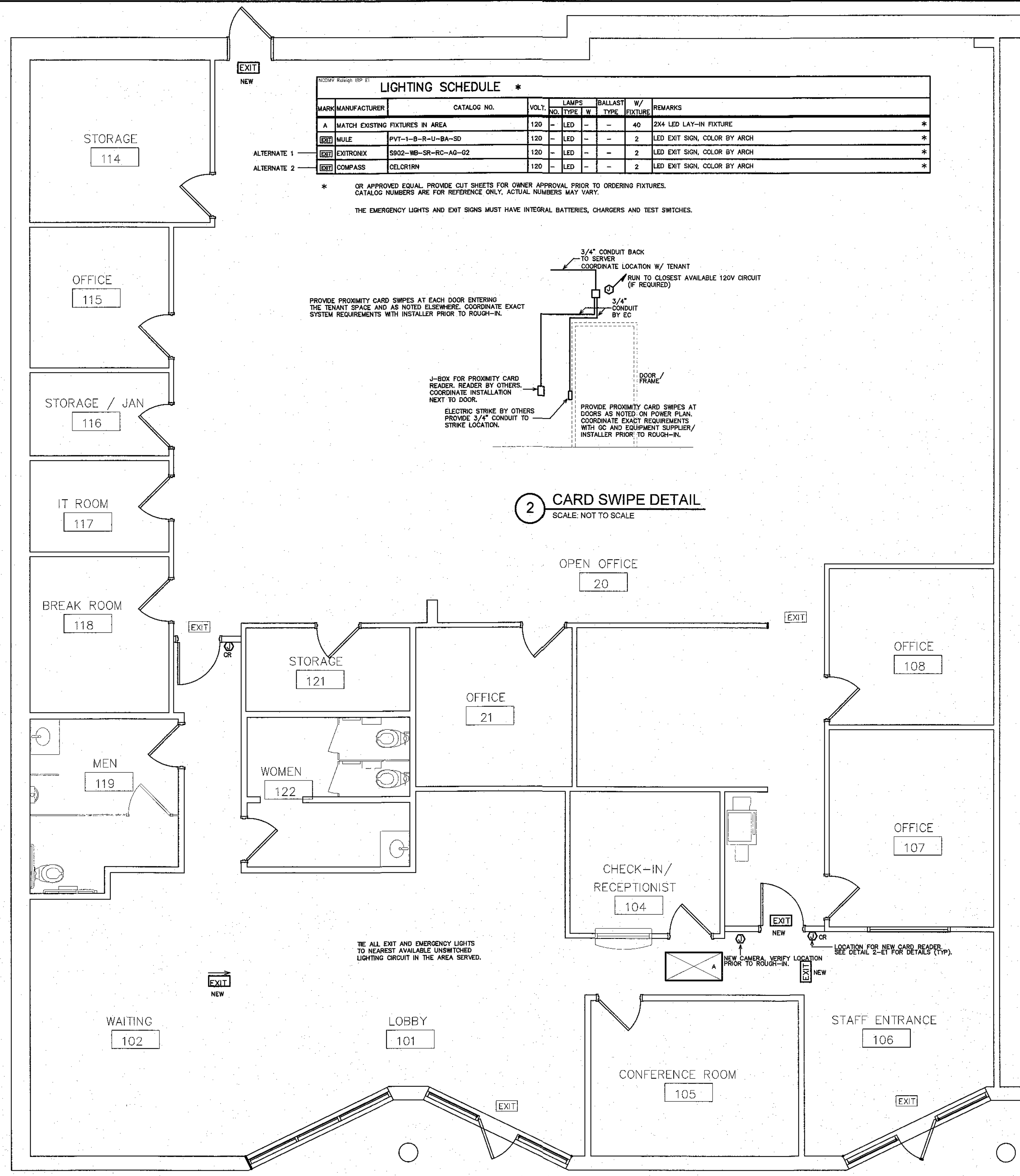
- A. The trade(s) furnishing equipment will provide disconnect switches, motor starters, and make final equipment connections. ELECTRICAL CONTRACTOR will make the site connections to disconnect switches or motor starters.

3.9 CLEAN UP

- A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

3.10 GUARANTEE

- A. Guarantee all materials and labor included in the electrical work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.

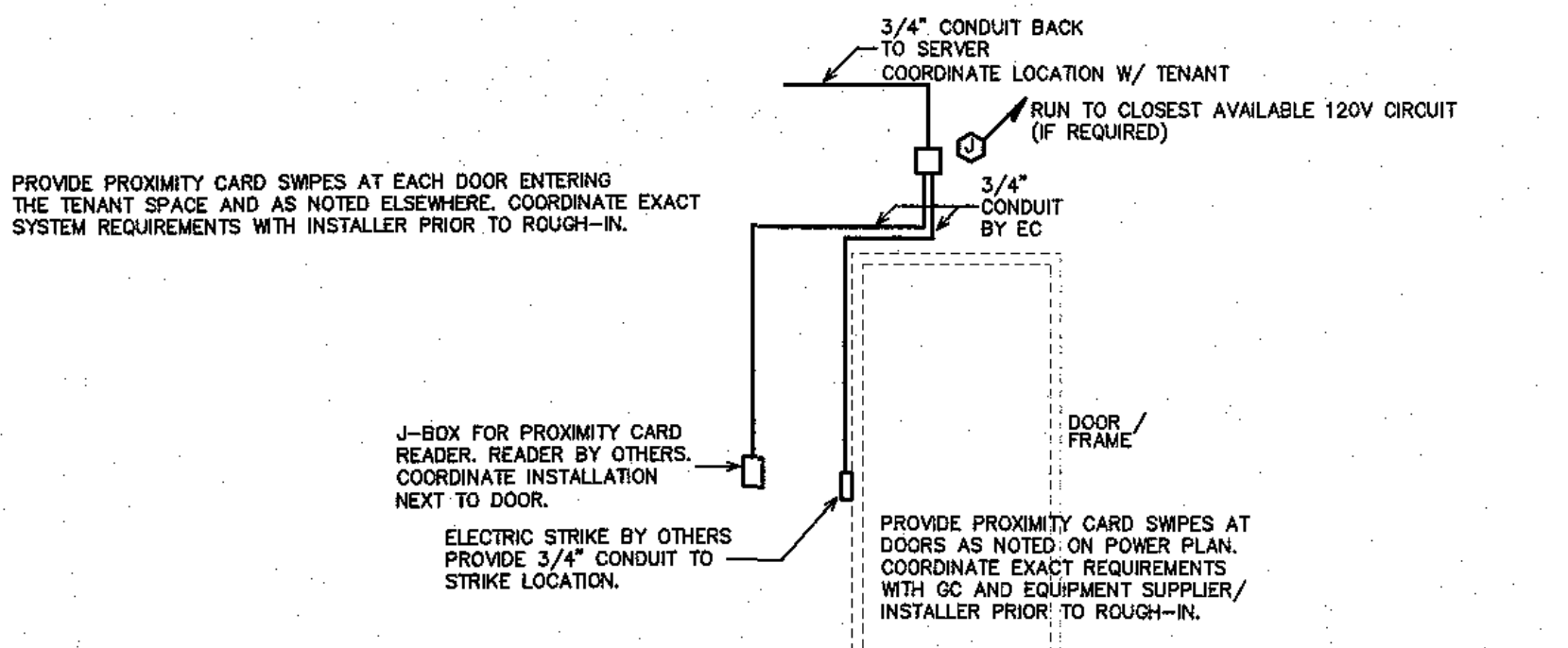


LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLTY	LAMPS NO.	LAMP TYPE	BALLAST TYPE	W/FIXTURE	REMARKS
A	MATCH EXISTING FIXTURES IN AREA		120	-	LED	-	40	2X4 LED LAY-IN FIXTURE *
(E21)	MULE	PVT-1-B-R-U-BA-SD	120	-	LED	-	2	LED EXIT SIGN, COLOR BY ARCH *
(E21)	EXTRONIX	S902-WB-SR-RC-AG-G2	120	-	LED	-	2	LED EXIT SIGN, COLOR BY ARCH *
(E21)	COMPASS	DELORIN	120	-	LED	-	2	LED EXIT SIGN, COLOR BY ARCH *

* OR APPROVED EQUAL PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES. CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY.

THE EMERGENCY LIGHTS AND EXIT SIGNS MUST HAVE INTEGRAL BATTERIES, CHARGERS AND TEST SWITCHES.



2 CARD SWIPE DETAIL
SCALE: NOT TO SCALE

1 REVISED EXIT SIGN PLAN
SCALE: 1/4" = 1'-0"

BID SET

STATE OF NORTH CAROLINA
DIVISION OF CONSTRUCTION
ENGINEERING & SURVEYING
202038
2/2/2024

CLIENT: NCDOT RALEIGH IRP RALEIGH, NC

CONSULTANT: BURKE DESIGN GROUP, P.C. 3305-100 Durham Drive 919.771.1816 fax: 919.779.0826 email: banburke@bdc.ncr.com Corp. License # C-2652

ENGINEER: NCDOT RALEIGH IRP RALEIGH, NC

1425 ROCK QUARRY ROAD, SUITE 100 RALEIGH, NC

REVISIONS

NO.	DATE

DATE ISSUED: 03/28/2024
DRAWN BY: JQ
CHECKED BY: BEB

SHEET NO. **1:1**