FIRST FLOOR RENOVATIONS TO

	D ALTERNATIVES: ALL WORK TO BE DONE IN ACCORDANCE WITH STATE AND LOCAL CODES AND ORDINANCES.		UNER PR
• <u>•</u>	CONTRACTOR SHALL DETERMINE LAYOUT AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND TO		SECURITY SYST
	CONSULT WITH THE ENGINEER REGARDING ANY DISCREPANCIES THAT EXIST WITHIN THESE DOCUMENTS.		FURNITURE AN
3.	ALL WORK PERFORMED SHALL BE OF ACCEPTED INDUSTRY STANDARDS AND PRACTICES GOVERNING THE HIGHEST QUALITY OF WORKMANSHIP.	4.	COPIER.
4.	EACH SUB CONTRACTOR SHALL THOROUGHLY REVIEW THESE DOCUMENTS AND EVALUATE THE SCOPE OF WORK REQUIRED BY THEIR RESPECTIVE TRADE PRIOR TO THE START OF CONSTRUCTION.	<u>C</u> A	ST-IN-PLA
5.	DIMENSIONS SHOWN ARE TO FACE OF FINISH.	1.	ALL CONCRETE BUILDINGS" AND
5.	ALL DECOR ITEMS AND FINISH SELECTIONS ARE OUTSIDE OF THIS DRAWING SCOPE – COORDINATE ALL FINISHES WITH OWNER.		PLACED IN HOT CONCRETE PLAC
7.	CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, ETC. ASSOCIATED WITH THE EXECUTION AND COMPLETION OF THE WORK.	2.	CONCRETING." ALL CAST-IN-F
3.	ALL ABUTTING DISSIMILAR MATERIALS SHALL BE CAULKED AND SEALED CONTINUOUS. COLOR TO MATCH ADJACENT MATERIALS.		A. SLAB-C
).	DETAILS SHOWN ARE REPRESENTATIVE OF DESIGN CONCEPT. DETAILS MAY BE MODIFIED TO AFFECT EXISTING CONDITIONS OR INDUSTRY STANDARDS WITH THE APPROVAL OF THE ENGINEER. HOWEVER, THE BASIC DESIGN AND STRUCTURAL INTENT IS TO BE MAINTAINED.	3.	B. CONCRI REINFORCING M
0.	PROVIDE BLOCKING IN PARTITIONS AS REQUIRED FOR MOUNTING OF CABINETS, SHELVING, GRAB BARS, ETC.		A. REINFO B. WELDED
	ALL STAIRS, LANDINGS AND HANDRAILS AND GUARDRAILS SHALL COMPLY WITH 2018 IRC. GUARDRAILS		FLAT SI
	MUST BE 36" MINIMUM WITH 4" MAX CLEAR PICKET SPACING, STAIR RISERS 8 1/4" MAXIMUM, STAIR TREADS 9" MINIMUM.	4.	BEND ALL BARS BENDING OF RE
2.	ALL APPLIANCES AND OFFICE EQUIPMENT TO BE OWNER FURNISHED, CONTRACTOR INSTALLED UNLESS OTHERWISE NOTED. CONTRACTOR TO PROVIDE ROUGH-INS TO ACCOMMODATE APPLIANCE LOCATIONS AS	5.	PROVIDE 3/4"
	INDICATED.	6.	THE SLUMP OF REDUCING ADMI
	FLOOR LEVELS SHOWN ARE TO TOP OF FINISHED FLOOR UNLESS OTHERWISE NOTED.		WATER REDUCIN SHALL BE AIR-
4.	CONTRACTOR SHALL PROVIDE HANGERS, TIES, ETC. WITH COMPATIBLE FASTENERS. COORDINATE WITH CONTRACT DOCUMENTS.	7.	ALL REINFORCIN
5.	CONTRACTOR TO VERIFY ALL CONSTRUCTION IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS APPLICABLE) AND INSTALLED IN SUCH A MANNER TO MEET ALL APPLICABLE BUILDING CODES.		DO NOT WET S SUPPORTED ON GREATER COMP CONCRETE REIN
6.	CONTRACTOR SHALL PROVIDE SOUND BATTS IN NEW INTERIOR WALLS SURROUNDING OFFICES AS INDICATED.	8.	DURING THE PL
7.	CONTRACTOR SHALL PROVIDE TEMPERED SAFETY GLASS IN ACCORDANCE WITH SECTION R308.	0.	CRACKS DUE T COMPLETED WIT
8.	CEILING HEIGHTS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY WITH OWNER/ENGINEER PRIOR TO MODIFICATION OF ANY CEILING AREAS FOR CHASES, ETC. LOWER THAN HEIGHTS INDICATED ON DRAWINGS. ALIGN NEW CONSTRUCTION WITH EXISTING UNLESS OTHERWISE NOTED.	9.	MINIMUM CONCI DRAWINGS DEPI
9.	INSTALL ALL NEW WORK PER MANUFACTURER RECOMMENDATIONS IN ORDER TO PROVIDE MAXIMUM WARRANTY AVAILABLE. PROVIDE ALL REQUIRED SUBSTRATE, UNDERLAYMENT, FASTENERS, ETC. FOR A		CONCRETE (PERMANENTL
20	COMPLETE INSTALLATION. DO NOT SCALE DRAWINGS.		CONCRETE (
	BACK CHARGES FOR CHANGE ORDERS, CORRECTIVE WORK OR REPLACED MATERIALS WILL NOT BE ACCEPTED		ALL OTHER
	UNLESS EXPRESSLY AUTHORIZED IN WRITING BY THE ENGINEER BEFORE ANY SUCH COSTS ARE INCURRED.	10.	THE CONTRACTO DESIGN SHALL STRENGTH TEST
	THESE DRAWINGS WERE BASED ON INFORMATION PROVIDED AND LIMITED FIELD WORK BY THE DESIGN TEAM. FIELD VERIFICATION OF ALL DIMENSIONS, HEIGHTS, EXTENTS, ETC. MUST BE PERFORMED PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.	11.	WHERE NEW CO NO LONGER PL COMPOUND.
4.	CONTRACTOR SHALL PROVIDE AND INSTALL ALL TEMPORARY SHORING/TEMPORARY CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW WORK.	12.	FORMWORK SHA
5.	CONTRACTOR SHALL PROVIDE ACCESSIBLE TEMPORARY STORAGE AS REQUIRED FOR COUNTY.		DALTERN
26.	CONTRACTOR SHALL HAVE THE FIRE ALARM TESTED BEFORE AND AFTER CONSTRUCTION.		PROVIDE MOTION REMOVE PLUMBI
7.	CONTRACTOR SHALL FURNISH STORAGE CONTAINER/CONTAINERS FOR FURNITURE, FILES, AND FILE CABINETS.	۷.	AUTOMATIC FAU
	CONTRACTOR SHALL MOVE FURNITURE SUCH AS, BUT NOT LIMITED TO: DESKS, CHAIRS, AND CUBICLES. CUBICLES WILL HAVE TO BE DISASSEMBLED AND STORED. FILE CABINETS AND FILES MUST BE STORED FOR COUNTY STAFF TO HAVE ACCESS DURING CONSTRUCTION. COUNTY WILL PROVIDE SPACE FOR CONTAINER/CONTAINERS OUTSIDE OF BUILDING. CONTRACTOR SHALL REASSEMBLE AND MOVE FILE CABINETS AND FURNITURE BACK INTO THE SPACE AFTER COMPLETION OF CONSTRUCTION. THE COUNTY SHALL INSTRUCT WHERE THE FURNITURE AND FILE CABINETS WILL BE PLACED.	3.	REMOVE AND RE

THE COMMUNITY DEVELOPMENT DEPARTMENT

ISLE OF WIGHT, VIRGINIA

PROVIDED EQUIPMENT AND SYSTEMS:

COMMUNICATIONS WIRING, CONNECTIONS, AND EQUIPMENT.

SYSTEM.

AND STORAGE SYSTEMS.

PLACE CONCRETE NOTES:

RETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 301 "STRUCTURAL CONCRETE FOR AND ACI 318/318R "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. CONCRETE HOT WEATHER SHALL BE PLACED IN ACCORDANCE WITH ACI 305 "HOT WEATHER CONCRETING." PLACED IN COLD WEATHER SHALL BE PLACED IN ACCORDANCE WITH ACI 306 "COLD WEATHER G."

IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND ATTAIN THE FOLLOWING B DAY COMPRESSIVE STRENGTHS (f'c):

AB-ON-GRADE : 3,500 PSI NCRETE NOT OTHERWISE NOTED : 3,000 PSI

G MATERIALS SHALL BE AS FOLLOWS:

NFORCING BARS : ASTM A 615, GRADE 60, DEFORMED LDED WIRE REINFORCEMENT : ASTM A 185 — WELDED STEEL WIRE REINFORCEMENT; PROVIDE NT SHEETS ONLY, ROLL TYPE IS PROHIBITED.

BARS 24 DIAMETERS AROUND CORNERS. ALL BENT BARS SHALL BE SHOP FABRICATED. FIELD FREINFORCEMENT IS NOT PERMITTED.

/4" CHAMFERS ON ALL EXPOSED EDGES OF CONCRETE, UNLESS OTHERWISE NOTED.

OF CAST-IN-PLACE CONCRETE SHALL NOT EXCEED 4 INCHES WITHOUT A HIGH RANGE WATER ADMIXTURE. THE SLUMP OF CAST-IN-PLACE CONCRETE WITH THE USE OF A HIGH RANGE UCING ADMIXTURE SHALL NOT EXCEED 8 INCHES. ALL CONCRETE EXPOSED TO WEATHER AIR-ENTRAINED 5% TO 7%. ENTRAPPED AIR SHALL NOT EXCEED 3%.

PRCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR BOLTS AND WELD PLATES SHALL BE Y PLACED AND HELD SECURELY TO PREVENT DISPLACEMENT DURING THE CONCRETE PLACEMENT. T SET DOWELS, ANCHOR BOLTS, OR OTHER EMBEDDED ITEMS. ALL REINFORCEMENT SHALL BE ON PLASTIC—PROTECTED WIRE BAR SUPPORTS OR PRECAST CONCRETE BAR SUPPORTS OF OMPRESSIVE STRENGTH THAN THE CONCRETE, MANUFACTURED IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE (CRSI) MANUAL OF STANDARD PRACTICE.

E PLACEMENT OF CONCRETE SLABS, TAKE ALL NECESSARY STEPS TO AVOID PLASTIC SHRINKAGE JE TO WEATHER. WET CURE ALL CONCRETE SLABS. CONVENTIONAL SAWED JOINTS SHALL BE WITHIN 4 TO 12 HOURS AFTER THE CONCRETE HAS BEEN FINISHED.

ONCRETE COVER FOR PROTECTION OF REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS THE DEPICT GREATER COVER REQUIREMENTS:

TE CAST AGAINST AND ENTLY EXPOSED TO EARTH : 3 INCHES

TE CAST AGAINST FORMWORK : 1 1/2 INCHES

HER LOCATIONS : 1 1/2 INCHES (UNLESS OTHERWISE NOTED)

ACTOR SHALL SUBMIT SHOP DRAWINGS, CONCRETE MIX DESIGNS AND TEST REPORTS. THE MIX ALL INCLUDE ALL PROPERTIES OF THE MIX, MATERIALS USED IN THE CONCRETE AND CONCRETE TESTS. SHOP DRAWINGS FOR CONCRETE REINFORCEMENT SHALL INCLUDE REINFORCING.

V CONCRETE IS PLACED AGAINST EXISTING, INCLUDING RECENTLY PLACED CONCRETE WHICH IS R PLASTIC, COAT THE EXISTING CONCRETE SURFACE ABUTTING NEW WITH AN EPOXY BONDING

SHALL BE IN ACCORDANCE WITH CHAPTER 26 OF ACI 318.

RNATIVES:

TION SENSING AUTOMATIC LIGHT SWITCHES AT PRIVATE OFFICES.

JMBING FIXTURES AT RESTROOMS. INSTALL NEW WATER SAVER FIXTURES. INSTALL TOUCHLESS FAUCETS AND SINKS.

D REPLACE BREAK ROOM COUNTER TOP AND SINK. REFINISH EXISTING WOOD CABINETS.

COLD-FORMED METAL FRAMING NOTES:

- 1. ALL STRUCTURAL PROPERTIES OF COLD-FORMED METAL FRAMI "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL ST STUD MANUFACTURERS ASSOCIATION (SSMA).
- 2. ALL WELDS SHALL CONFORM TO AWS D1.3 "SPECIFICATION FO WELDING ELECTRODES SHALL BE IN ACCORDANCE WITH AWS A SHALL BE PERFORMED ONLY BY QUALIFIED WELDERS USING P TYPE OF WORK REQUIRED.
- 3. COLD-FORMED METAL FRAMING MEMBERS SHALL BE FORMED CONFORMING TO ASTM A653 WITH A MINIMUM YIELD STRENGTH AND 33 KSI FOR ALL OTHER MEMBERS, UNLESS OTHERWISE M
- 4. PROVIDE BRIDGING LINES AT 4-0" MAXIMUM ON CENTER IN AL BRIDGING SHALL BE FULLY INSTALLED AND ANCHORED AT END STUDS.
- 5. ALL FRAMING MEMBERS SHALL BE GALVANIZED IN ACCORDANCE IF THE FRAMING MEMBER IS IN CONTACT WITH CONCRETE AT O OTHER APPLICATIONS.
- 6. CUT ALL FRAMING COMPONENTS TO FIT SQUARELY AGAINST AB POSITION UNTIL PROPERLY FASTENED.
- 7. ALL PANELS SHALL BE SQUARE AND BRACED AGAINST RACKIN
- 8. WIRE TYING OF STRUCTURAL FRAMING COMPONENTS IS NOT PE
- 9. SPLICES IN STRUCTURAL FRAMING MEMBERS ARE NOT PERMITA ARCHITECT/ENGINEER.
- 10. CONTRACTOR SHALL NOT ALLOW AXIAL LOADS ON STUDS UNTIL ATTACHMENT OF COLLATERAL MATERIALS ARE COMPLETE.
- 11. ATTACH TRACK SECURELY TO THE FLOOR AND OVERHEAD STRU FLOOR AND OVERHEAD TRACK AND ATTACH SECURELY.
- 12. ALL COLD-FORMED FRAMING DESIGN IS THE RESPONSIBILITY C SHALL RETAIN A PROFESSIONAL ENGINEER, LICENSED IN THE C FRAMING DESIGN AND PREPARATION OF SHOP DRAWINGS. THE SEAL THE COLD-FORMED FRAMING DESIGN CALCULATIONS PRIC THE ENGINEER OF RECORD.
- 13. THE CONTRACTOR'S ENGINEER SHALL BE RESPONSIBLE FOR TH CONNECTIONS TO THE CAST-IN-PLACE CONCRETE.
- 14. WHERE ARCHITECTURAL FEATURES, INCLUDING DOORS, WINDOWS EMBEDDED WITHIN OR ABUT A COLD-FORMED FRAMING SYSTEM RESPONSIBLE FOR PROVIDING, COLD-FORMED HEADERS, JAMBS ARCHITECTURAL FEATURE.
- 15. COLD-FORMED METAL FRAMING WHICH SUPPORTS A HORIZONTA EXCEED A LIVE, WIND OR SEISMIC INDUCED DEFLECTION OF SE
- 16. LINTELS SUPPORTING MASONRY VENEER WALLS SHALL BE DESI SEISMIC INDUCED DEFLECTION OF SPAN/600.
- 17. ALL OTHER COLD-FORMED METAL FRAMING SHALL BE DESIGNE INDUCED DEFLECTION OF SPAN/240.

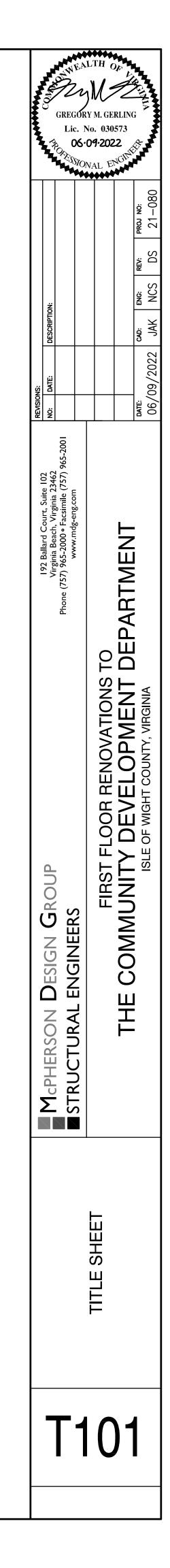
SHEET INDEX

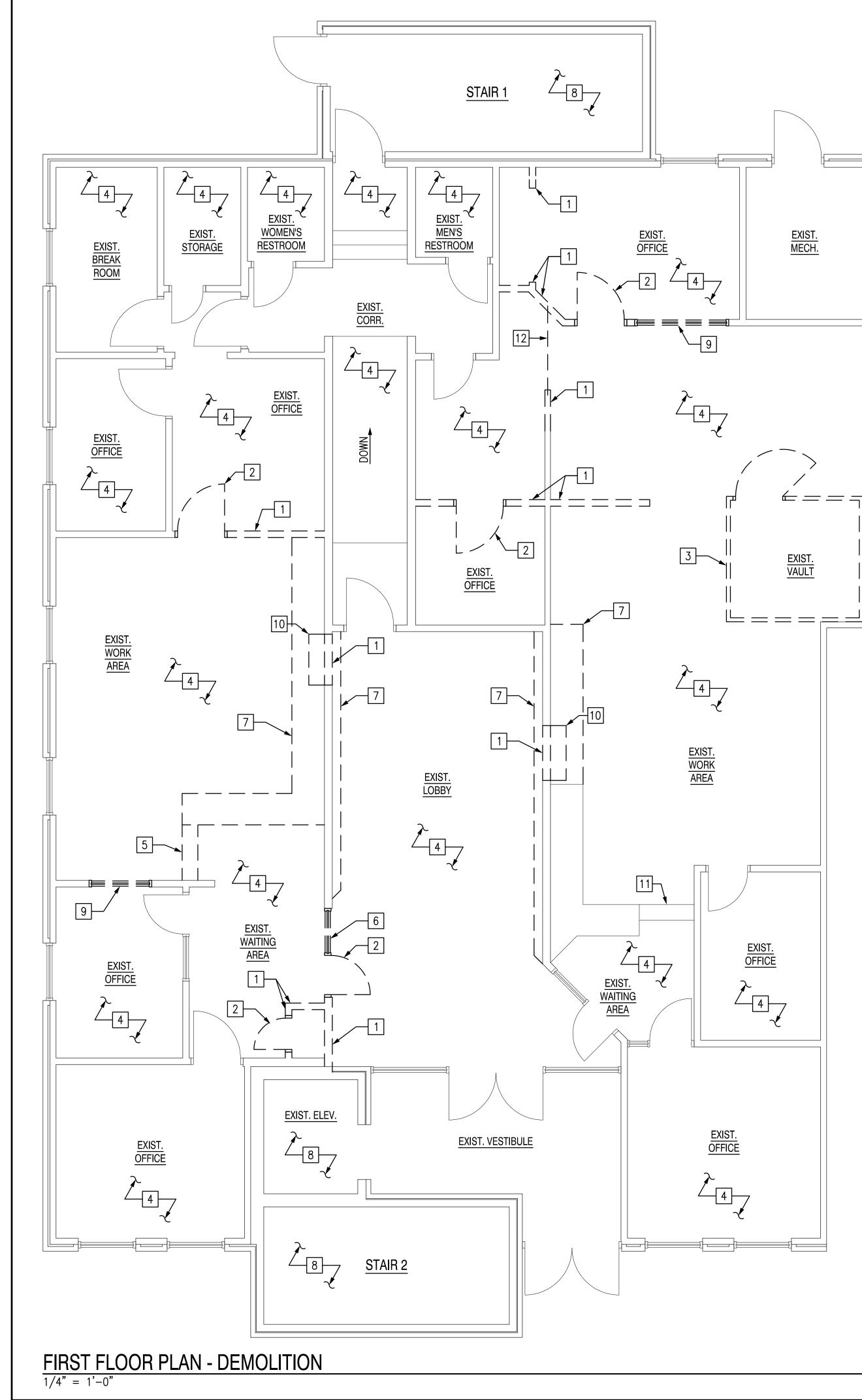
T101	_	TITLE	SHEET

D101 -	- FIRST	FLOOR	PLAN - DEM	OLITION

- D102 FIRST FLOOR REFLECTED CEILING PLAN DEMOLITION A101 – FIRST FLOOR PLAN – NEW WORK
- A102 FIRST FLOOR REFLECTED CEILING PLAN NEW WORK
- A201 ELEVATIONS AND TYPICAL DETAILS
- M101 FLOOR PLAN DEMOLITION, LEGEND AND DETAIL M201 - FLOOR PLAN - NEW WORK AND ABBREVIATIONS
- M701 MECHANICAL SPECIFICATIONS
- E001 LEGEND, NOTES, ABBREV. AND SCHEDULE
- E101 FLOOR PLAN DEMOLITION LIGHTING E102 – FLOOR PLAN – DEMOLITION POWER
- E103 FLOOR PLAN DEMOLITION SPECIAL SYSTEMS
- E201 FLOOR PLAN NEW WORK LIGHTING
- E202 FLOOR PLAN NEW WORK POWER E203 – FLOOR PLAN – NEW WORK SPECIAL SYSTEMS
- E601 RISER DIAGRAM AND PANELBOARD SCHEDULES
- E701 ELECTRICAL SPECIFICATIONS

MING SHALL BE IN ACCORDANCE WITH STRUCTURAL MEMBERS" AND WITH THE	
OR WELDING SHEET STEEL IN STRUCT A5.1, A5.5 OR A5.18 SERIES E70. V PROPER EQUIPMENT FOR THE PARTICU	VELDING
OF CORROSION—RESISTANT STEEL H OF 33 KSI FOR TRACKS AND RUN NOTED.	NERS
ALL WALLS UNLESS OTHERWISE INDICA DS BEFORE SUPERIMPOSING LOADS O	
CE WITH ASTM A525. PROVIDE G90 OR NEAR GRADE. PROVIDE G60 IN	
BUTTING MEMBERS AND HOLD FIRMLY	IN
NG.	
PERMITTED.	
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IL ALL BRIDGING, CONNECTIONS AND	
RUCTURE. SEAT STUDS SQUARELY TO) THE
OF THE CONTRACTOR. THE CONTRAC COMMONWEALTH OF VIRGINIA FOR TH IE CONTRACTOR'S ENGINEER SHALL S IOR TO SUBMITTING THEM FOR APPRO	E IGN AND
THE DESIGN OF THE COLD-FORMED F	RAMING
WS, CURTAIN WALL SYSTEMS, ETC., AF EM, THE CONTRACTOR'S ENGINEER SH 3S, ETC., AS REQUIRED TO SUPPORT	ALL BE
TAL SURFACE SHALL BE DESIGNED TO SPAN/360.	D NOT
SIGNED TO NOT EXCEED A LIVE, WIND), OR
IED TO NOT EXCEED A LIVE, WIND OF	R SEISMIC
RELEVANT CODE INF	
2018 INTERNATIONAL RESIDENTIAL 2018 INTERNATIONAL EXISTING BUI 2018 VIRGINIA CONSTRUCTION COE	ILDING CODE
BUILDING INFORMATION	
USE GROUP CLASSIFICATION	COMMERCIAL
TYPE OF CONSTRUCTION	V-B COMBUSTIBLE UNPROTECTED LEVEL 3 RENOVATION
FIRE SUPPRESSION	NONE





GENERAL DEMOLITION NOTES:

- 1. CONTRACTOR SHALL GENERALLY DO ALL CUTTING AND REMOVING ALL ITEMS, WHETHER SPECIFICALLY INDICATED OR NOT, WHICH WOULD OBVIOUSLY INTERFERE WITH OR BE INCONGRUOUS TO PROPOSED CONSTRUCTION OF FINISHES.
- 2. CONTRACTOR SHALL PROVIDE AND PLACE ALL SHORING AS REQUIRED TO SUPPORT EXISTING CONSTRUCTION DURING ALL PHASES OF CONSTRUCTION.
- 3. CONTRACTOR SHALL MINIMIZE THE EFFECT OF DEMOLITION AND CONSTRUCTION ON THE ADJACENT SPACES NOT TO BE DISTURBED. CONTRACTOR SHALL PROVIDE DUST AND DAMAGE CONTROL MEASURES TO PROTECT ADJACENT AREAS WHICH ARE NOT PART OF THE SCOPE OF WORK. NOTE : ALL POLY BARRIERS MUST BE FIRE RETARDANT.
- 4. CONTRACTOR SHALL COORDINATE SCOPE OF DEMOLITION WORK WITH NEW WORK. DO NOT DEMOLISH BEYOND THE SCOPE OF WORK TO BE PERFORMED. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE ANY ITEMS DAMAGED WHICH ARE NOT PART OF THE SCOPE OF WORK AS SHOWN ON THESE DRAWINGS AT THE CONTRACTOR'S EXPENSE.
- 5. CONTRACTOR SHALL PROVIDE ANY TEMPORARY DUST PARTITION, BARRICADES, SUPPORTS, RAILINGS, ETC. AS REQUIRED BY O.S.H.A. AND TO PROVIDE SAFE WORKING CONDITIONS.
- 6. ALL WORK WHICH REQUIRES ACCESS TO THE SPACE AND AREAS ADJACENT TO THE SPACE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISTURBANCE AND INCONVENIENCE.
- 7. ANY ASBESTOS ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED OR ENCAPSULATED BY A LICENSED ASBESTOS CONTRACTOR IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- 8. BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL VISIT, THOROUGHLY FAMILIARIZE THEMSELVES WITH THE PROJECT AND INCLUDE ALL SUCH WORK IN BID.

SHORING AND BRACING NOTES:

- 1. BEFORE STARTING ANY SHORING WORK, INVESTIGATE THOROUGHLY TO DETERMINE EXTENT AND TYPE OF SHORING NECESSARY TO SUPPORT EXISTING STRUCTURES.
- 2. SET ANY NEEDLES, CRIBBING, BRACING SHORING NEEDED TO CARRY EXISTING LOADS WITHOUT DEFLECTION OR SETTLEMENT OF EXISTING STRUCTURE.
- 3. IT IS REQUIRED THAT BEFORE ANY SHORING WORK IS DONE, THE CONTRACTOR SETS GAUGE MARKS FOR THE PURPOSE OF DEFLECTION OF SETTLEMENT AND/OR MOVEMENT DURING OPERATIONS. NEW WORK MUST CARRY EXISTING STRUCTURE WITHOUT SETTLEMENT.

ABBREVIATIONS:

ACI	AMERICAN CONCRETE INSTITUTE	K	KIP (1,000 POUNDS)
ADDIT.	ADDITIONAL	KSI	KIPS PER SQUARE INCH
AISC	AMERICAN INSTITUTE OF	LBS	POUNDS
	STEEL CONSTRUCTION	LLH	LONG LEG HORIZONTAL
	ΔΡΡΡΟΧΙΜΑΤΕ /ΔΡΡΡΟΧΙΜΑΤΕΙ Υ	LLV	LONG LEG VERTICAL
		LSH	LONG SIDE HORIZONTAL
	APPROXIMATE/APPROXIMATELY ARCHITECTURAL AMERICAN STANDARD FOR TESTING OF MATERIALS	ISV	LONG SIDE VERTICAL
ASTM	TESTING OF MATERIALS		LAMINATED VENEER LUMBER
	TESTING OF MATERIALS	L.W.	LONG WAY
AWS	AMENICAN MELDING SCOLT	MANUF.	MANUFACTURER
BLDG.			MANORACIONEN
B.O.		MAS.	
BOTT.	BOTTOM	MAX.	MAXIMUM
BRG.	BEARING CONSTRUCTION/CONTROL JOINT CENTERLINE	MIN.	
C.J.	CONSTRUCTION/CONTROL JOINT	MECH.	MECHANICAL
CL	CENTERLINE	MTL.	METAL
CLR.	CLEAR	NO./# o/c	NUMBER
CMU	CONCRETE MASONRY UNIT	o/c	ON CENTER
COL.	COLUMN	OPNG.	OPENING
CONC.	CONCRETE	OPP.	OPPOSITE
CONN	CONNECT/CONNECTION	OSB	ORIENTED STRAND BOARD
CONT	COLUMN CONCRETE CONNECT/CONNECTION CONTINUE/CONTINUOUS COORDINATE	PEJ	PREMOLDED EXPANSION JOINT
COORD		PLF	POUNDS PER LINEAR FOOT
		PROJ. PSF PSI	PROJECTION
	DOUBLE DEMOLISH/DEMOLITION	PSF	POUNDS PER SQUARE FOOT
DEMO.		PSI	POUNDS PER SQUARE INCH
DET.	5200	PSL	PARALLEL STRAND LUMBER
DIA./Ø		PT	PRESSURE TREATED
	DIAGONAL	P.T. REINF.	REINFORCED/REINFORCING
DWGS.		REQD.	REQUIRED
	EACH	RTU	ROOF TOP UNIT
E.F.	EACH FACE	SCHED.	SCHEDULE
	EACH WAY		SECTION
ELEV.	ELEVATION	SECT.	
	EMBEDDED/EMBEDMENT	SIM.	SIMILAR
	EQUAL/EQUALLY	S.J.	SAW JOINT
EXIST.	EXISTING	STD.	STANDARD
F.F.	FINISHED FLOOR	STL.	STEEL
FLR.	FLOOR		STRUCTURAL
FNDN.	FOUNDATION	S.W.	SHORT WAY
FTG.	FOOTING	THK.	THICK/THICKNESS
F.V.	FIELD VERIFY	Т.О.	TOP OF
GA.	GAUGE	TYP.	TYPICAL
GALV.	GALVANIZED	U.O.N.	UNLESS OTHERWISE NOTED
	GYPSUM WALL BOARD	VERT.	VERTICAL
	HORIZONTAL	W.P.	WORKING POINT
INFO.	INFORMATION	WWR	WELDED WIRE REINFORCING
		W/	WITH
		,	

NOTE: IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

<u>GRAPHIC SCALE:</u>

1/4" = 1'-0"

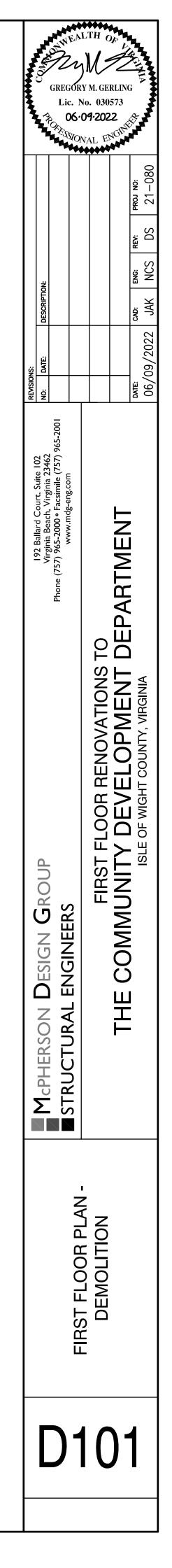
PLAN NORTH

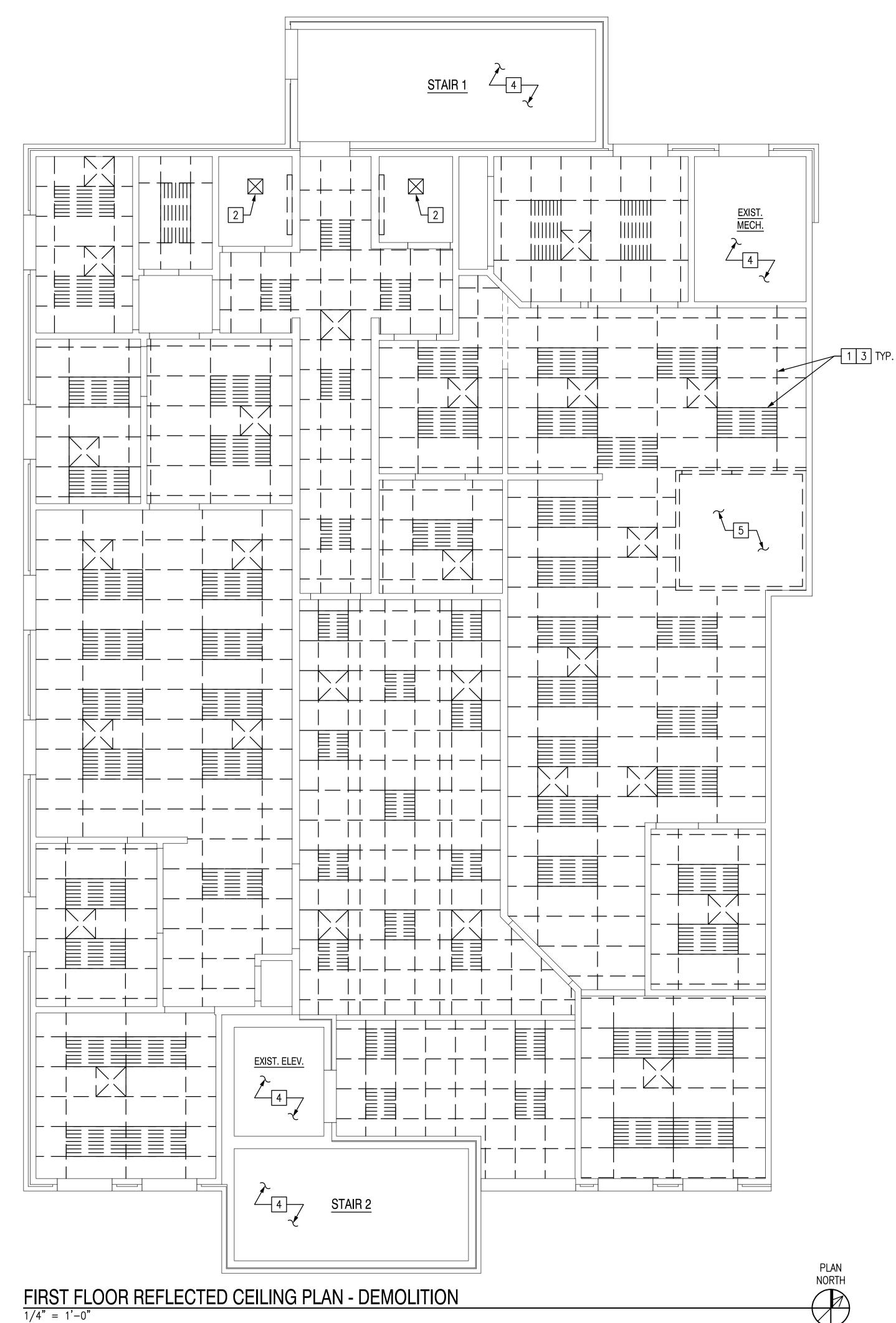
PLAN NOTES:

- 1. THESE NOTES, SCHEDULES AND KEYNOTES PERTAIN TO ALL ARCHITECTURAL FLOOR PLANS AND WORK APPEARING IN THIS DRAWING SET.
- 2. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND MEASUREMENTS SHOWN PRIOR TO STARTING WORK AND TO NOTIFY DESIGNER OF ANY DISCREPANCIES FOUND.
- 3. GENERAL CONTRACTOR AND ALL SUBS SHALL VISIT THE SITE PRIOR TO SUBMISSION OF BIDS TO FIELD VERIFY EXISTING CONDITIONS AND GAIN FAMILIARITY WITH THE PROJECT SCOPE AND ENVIRONMENT.
- 4. DO NOT REMOVE ANY STRUCTURAL ELEMENTS UNLESS SPECIFICALLY NOTED AND APPROVED BY THE DESIGNER.
- 5. CONTRACTOR TO PROVIDE ANY AND ALL TEMPORARY SHORING REQUIRED TO ACCOMMODATE NEW WORK AND MUST ADEQUATELY BRACE ALL AREAS EFFECTED BY DEMOLITION.
- 6. CONTRACTORS SHALL NOTIFY DESIGNER OF ANY UNFORESEEN CONDITIONS THAT MAY AFFECT THE WORK TO BE COMPLETED IF UNCOVERED DURING DEMOLITION.
- 7. CONTRACTOR TO STOCKPILE AND PROTECT ALL MATERIALS REMOVED DURING DEMOLITION FOR REUSE AS INDICATED ON THE DRAWINGS AND/OR AS DIRECTED BY THE OWNER'S PROJECT MANAGER. REMOVE AND LEGALLY DISPOSE OF ANY AND ALL MATERIALS NOT TO BE REUSED.
- 8. CONTRACTOR SHALL PROTECT ALL EQUIPMENT, FURNITURE, CASES, SHELVING, FIXTURES, DOORS, ETC. THAT ARE INTENDED FOR REUSE FROM DAMAGE.
- 9. CONTRACTOR SHALL PROTECT ITEMS WITHIN EXISTING WALL CAVITIES (CONDUITS, BLOCKING, INSULATION, ETC.) FROM DAMAGE DURING CONSTRUCTION AND RE-ROUTE ITEMS AFFECTED BY WALL REMOVAL AS NEEDED TO PROVIDE A COMPLETE INSTALLATION.
- 10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION WORK REQUIRED TO IMPLEMENT NEW WORK.
- 11. THE CONTRACTOR SHALL COORDINATE ALL AREAS OF DEMOLITION AND REMODEL WITH THE RESPECTIVE TRADES AND BUILDING/MUNICIPAL OFFICIALS TO PROVIDE A COMPLETE AND TIMELY PROJECT.
- 12. EXISTING CONDITIONS SHOWN BUT NOT SPECIFICALLY NOTED ARE EXISTING TO REMAIN.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY AREAS OF THE PROJECT INADVERTENTLY DAMAGED BY CONSTRUCTION ACTIVITY DURING THE PROJECT DURATION
- 14. ALL EXISTING EQUIPMENT TO REMAIN OPERATIONAL DURING THE CONSTRUCTION PERIOD UNLESS NOTED OTHERWISE. SHUT DOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM THE OWNER AND THEN SHALL OCCUR ONLY FOR THE DURATION ORIGINALLY AGREED UPON.
- 15. ALL FIXTURES REMOVED AND NOT RE-USED SHALL BECOME THE PROPERTY OF THE OWNER. IF THE OWNER ELECTS NOT TO RETAIN FIXTURES, THE CONTRACTOR SHALL REMOVE FIXTURES FROM THE JOB SITE AND DISPOSE OF PROPERLY.
- 16. THESE DOCUMENTS INDICATE GENERAL DEMOLITION WORK TO BE PERFORMED AND DO NOT RELIEVE THE CONTRACTOR FROM ADDITIONAL DEMOLITION WORK OR TEMPORARY CONSTRUCTION THAT MAY BE REQUIRED TO PRODUCE THE BUILDING MODIFICATIONS SHOWN. CONTRACTOR SHALL COORDINATE DEMOLITION WITH ALL TRADES.
- 17. CONTRACTOR TO PATCH AND REPAIR ALL DAMAGED FLOORING DUE TO REMODEL WORK. MATCH ADJACENT SURFACES, UNLESS OTHERWISE NOTED.
- 18. SAW CUT ALL CONCRETE FOR CLEAN, STRAIGHT LINES.
- 19. CONTRACTOR SHALL COORDINATE DEMOLITION OR REMOVAL OF EXISTING CONDUIT WITH THE ELECTRICAL DRAWINGS.

KEY NOTES:

- 1 REMOVE EXISTING WALL COMPLETE AS SHOWN. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH OR WORK.
- 2 REMOVE EXISTING DOOR AND FRAME COMPLETE. COORDINATE REUSE/DISPOSAL/STORAGE WITH COUNTY.
- 3 DEMOLISH AND REMOVE CONCRETE WALLS WITH LIGHT GAUGE STUDS AND DRYWALL OF VAULT WALLS. DEMOLISH AND REMOVE CONCRETE CEILING. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH OR WORK. THIS WORK MAY HAVE TO BE COMPLETED AFTER HOURS, COORDINATE WITH COUNTY.
- 4 REMOVE FLOOR AND BASE FINISH COMPLETE. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH OR WORK.
- 5 REMOVE STEPS AS SHOWN. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH WORK.
- 6 REMOVE EXISTING DOOR SIDELIGHTS COMPLETE AS SHOWN. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH OR WORK.
- 7 REMOVE EXISTING COUNTER. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH WORK.
- 8 NO WORK.
- 9 REMOVE EXISTING WINDOW COMPLETE AS SHOWN. PREPARE AREAS AFFECTED TO RECEIVE NEW FINISH OR WORK.
- 10 REMOVE CONCRETE SLAB AND TURNDOWN SLAB EDGE AS REQUIRED FOR NEW WORK.
- 11 EXISTING STAIR TO REMAIN.
- 12 REPLACE BEAM ABOVE CEILING.





 \bigtriangledown

PLAN NOTES:

- 1. REFER TO MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
- 2. REFER TO ELECTRICAL SHEETS AND NEW WORK SHEETS FOR ADDITIONAL LIGHTING REQUIREMENTS.

KEY NOTES:

1 CAREFULLY REMOVE, CLEAN AND STORE LIGHT FIXTURES AND DIFFUSERS FOR REUSE IN NEW WORK.

2 CAREFULLY REMOVE, CLEAN AND STORE VENTS IN RESTROOMS FOR REUSE.

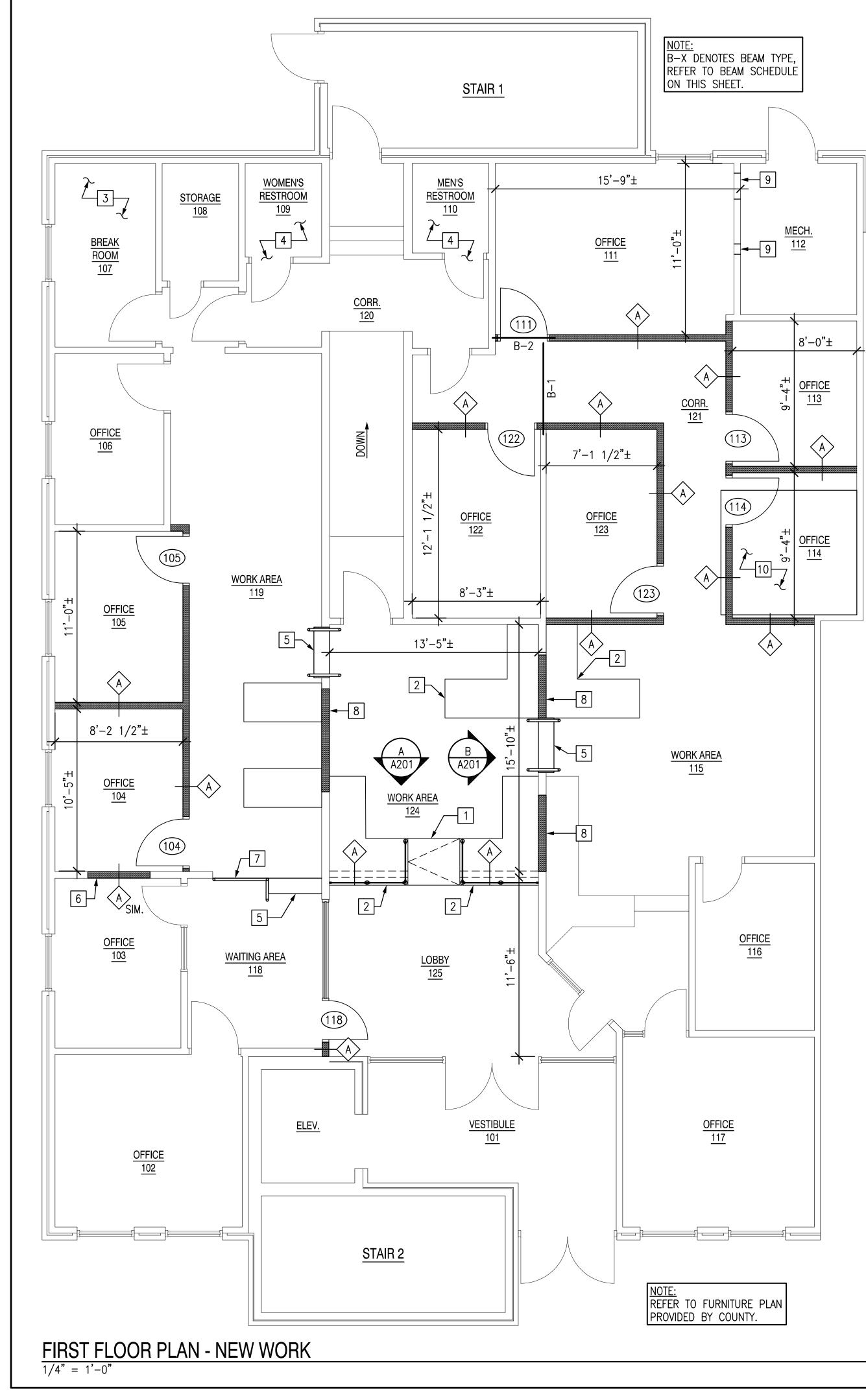
3 REMOVE CEILING GRID AND TILE COMPLETE.

4 NO WORK.

5 DEMOLISH EXISTING VAULT COMPLETE.

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REVISIONS:	NO: DATE:						рате: 06/09/2022
	192 Ballard Court, Suite 102 REVISION Virginia Beach, Virginia 23462 NO: Phone (757) 965-2000 • Facsimile (757) 965-2001 www.mdg-eng.com				FIRST FLOOR RENOVATIONS TO	THE COMMUNITY DEVELOPMENT DEPARTMENT	ISLE OF WIGHT COUNTY, VIRGINIA
	FIRST FLOOR						
))2	2

NOTE:		S DRAWING MUST BE		REDUCTION,	GRAPHIC	
<u>GRAPHI</u>	C SC/	ALE:				
1/4" =	· 1'-0"	5'	0'	5'		10'



		FINI	SH S	CHE	DULE				
ROOM NUMBER	ROOM NAME	BASE FINISH	FLOOR FINISH	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING FINISH	AR
101	VESTIBULE	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	ACT	
102	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
103	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
104	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
105	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
106	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
107	BREAK ROOM	VINYL	LVT	PT	PT	PT	PT	ACT	
108	STORAGE	VINYL	LVT	PT	PT	PT	PT	ACT	
109	WOMEN'S RESTROOM	VINYL	LVT	PT	PT	PT	PT	PT	
110	MEN'S RESTROOM	VINYL	LVT	PT	PT	PT	PT	PT	
111	OFFICE	VINYL	CPT	PT	PT	PT	PT	PT	
112	MECHANICAL	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	
113	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
114	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
115	WORK AREA	VINYL	CPT	PT	PT	PT	PT	ACT	
116	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
117	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
118	WAITING AREA	VINYL	CPT	PT	PT	PT	PT	ACT	
119	WORK AREA	VINYL	CPT	PT	PT	PT	PT	ACT	
120	CORRIDOR	VINYL	CPT	PT	PT	PT	PT	ACT	
121	CORRIDOR	VINYL	CPT	PT	PT	PT	PT	ACT	
122	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
123	OFFICE	VINYL	CPT	PT	PT	PT	PT	ACT	
124	WORK AREA	VINYL	CPT	PT	PT	PT	PT	ACT	
125	LOBBY	VINYL	CPT	PT	PT	PT	PT	ACT	
126	WAITING AREA	VINYL	CPT	PT	PT	PT	PT	ACT	

<u>BASE (NEW):</u> TO MATCH EXISTING VINYL – VINYL EXISTING TO REMAIN – EXIST

<u>WALLS (NEW):</u> PAINTED – PT PAINTED GYPSUM WALL BOARD – GWB–1 STOREFRONT – STFT <u>FLOORING (NEW):</u> LVT – LVT CARPET – CPT EXISTING TO REMAIN – EXIST

<u>CEILING (NEW):</u> PAINTED – PT PAINTED GYPSUM WALL BOARD – GWB NEW ACOUSTIC CEILING TILE AND GRID – ACT EXISTING TO REMAIN – EXIST

	DOOR SCHEDULE							
DOOR NUMBER	WIDTH	HEIGHT	DOOR TYPE	HARDWARE SET	RATING			
104	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
105	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
111	EXIST.	EXIST.	REUSE EXIST. DOOR AND FRAME	EXIST.	O HOUR			
113	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
114	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
118	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
122	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			
123	3'-0"	7'-0"	SC HL WOOD DOOR W/ KD HM FRAME TO MATCH EXIST.	SET #1	O HOUR			

GENERAL DOOR NOTES:

1. ALL DOOR HARDWARE TO BE MEDIUM DUTY COMMERCIAL.

2. VERIFY ALL HARDWARE SETS WITH COUNTY.

- 3. MAXIMUM THRESHOLD TRANSITION IS 1/2" TO MEET ACCESSIBILITY REQUIREMENTS OF A117.1.
- 4. ALL KEYED LOCKS SHALL BE COORDINATED WITH COUNTY.
- 5. ALL DOORS AND HARDWARE STYLES TO MATCH EXISTING CONDITIONS.
- 6. ALL DOORS SHALL BE HALF LITE (HL) DOORS.

HARDWARE SET:

PLAN NORTH

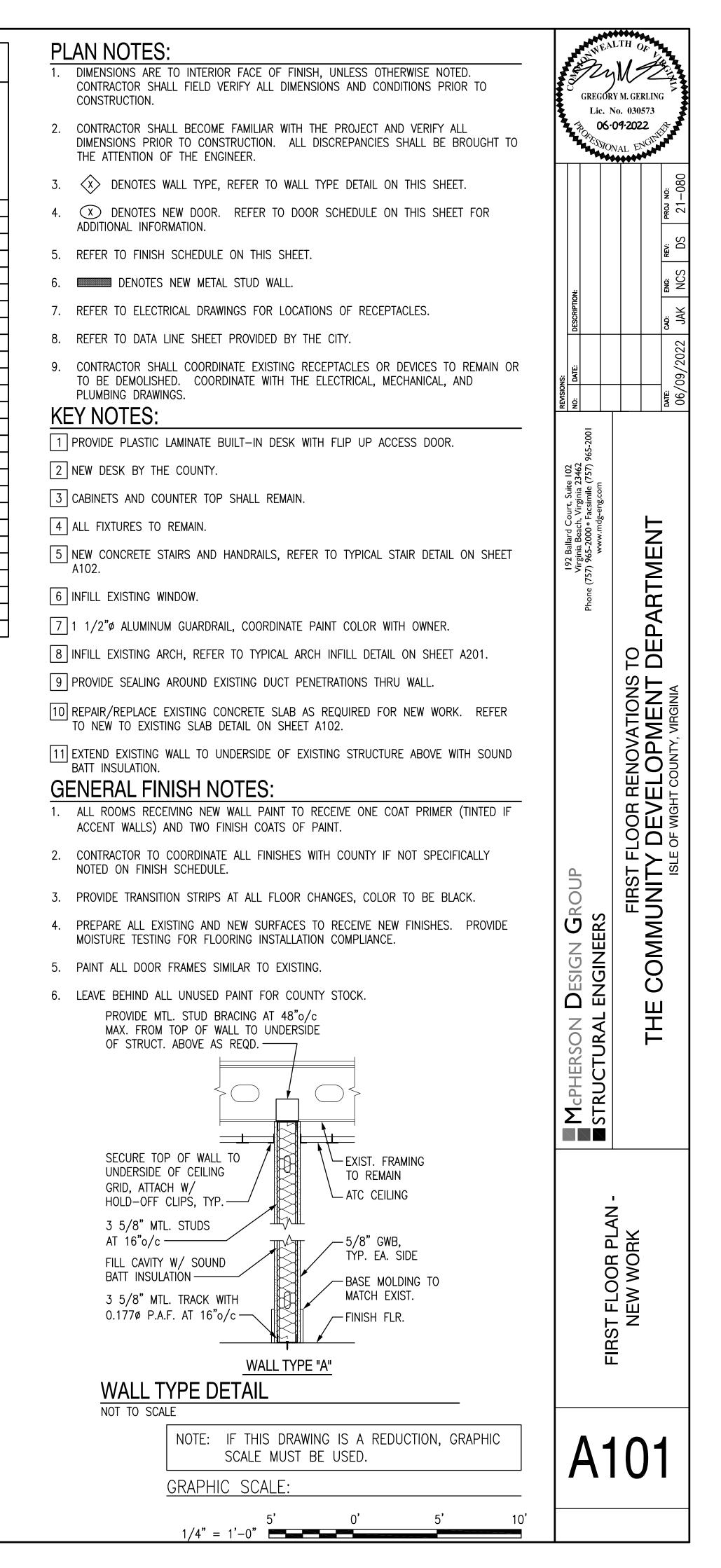
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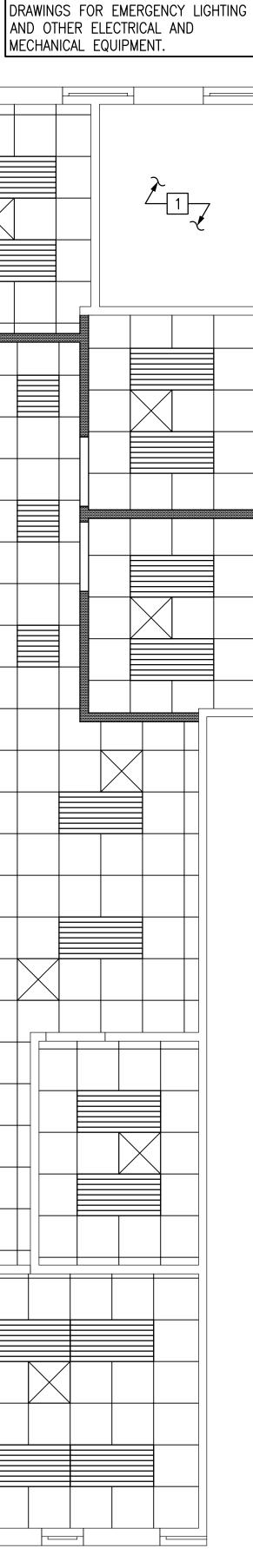
HARDWARE SET #1 - OFFICE

1 1/2" PR. HINGES, LEVER HANDLES, OFFICE LATCHES, WALL STOP, AND DOOR SILENCERS.

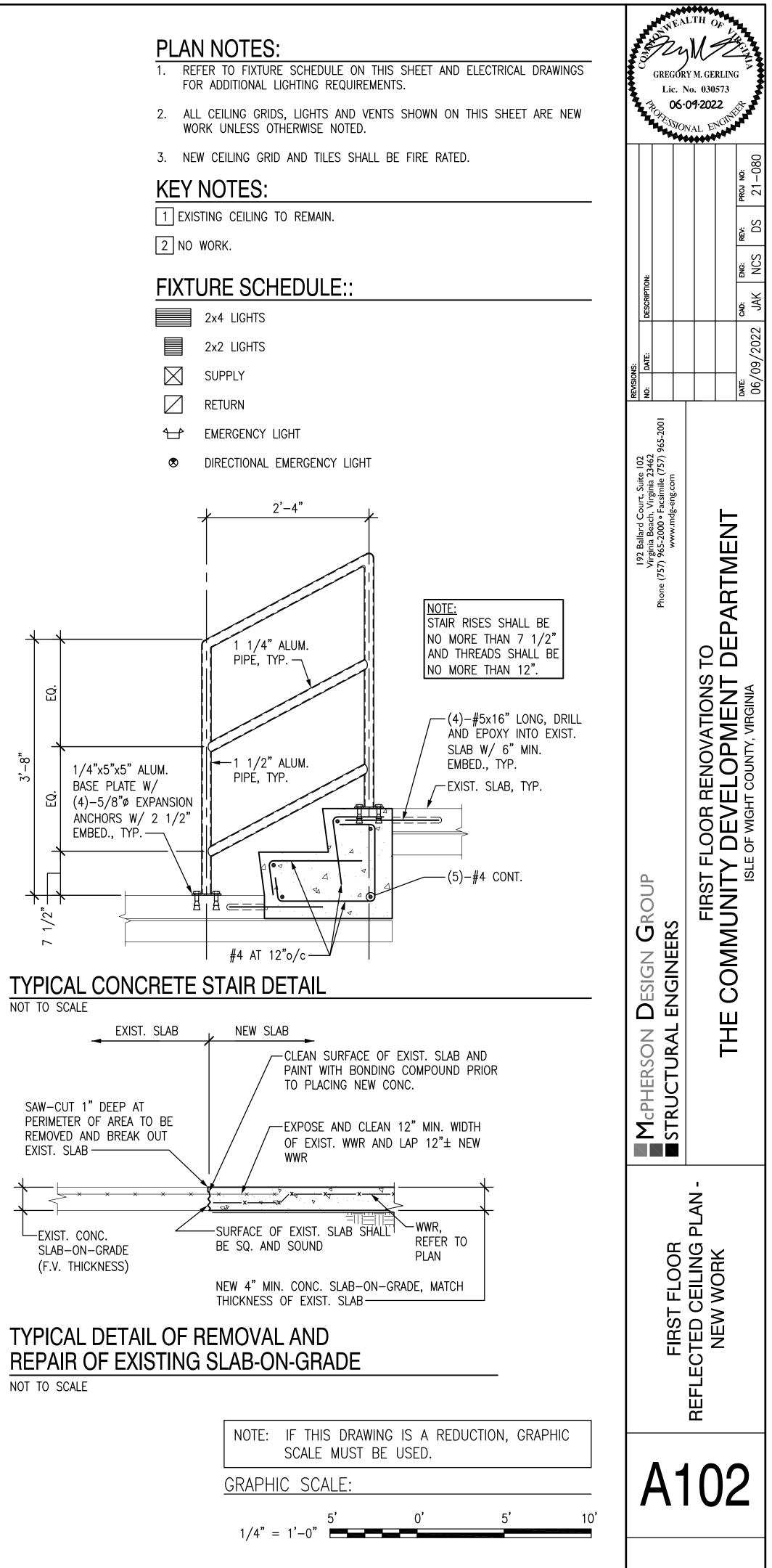
	BEAM SCHEDULE							
MARK	SIZE	BEARING	REMARKS					
B-1	10" DEEP,14 GAUGE BOX HEADER	(3)–3 5/8" MTL. GANG STUDS	BEARING ONE END ONLY					
B-2	10" DEEP,14 GAUGE BOX HEADER	(3)—3 5/8" MTL. GANG STUDS	_					

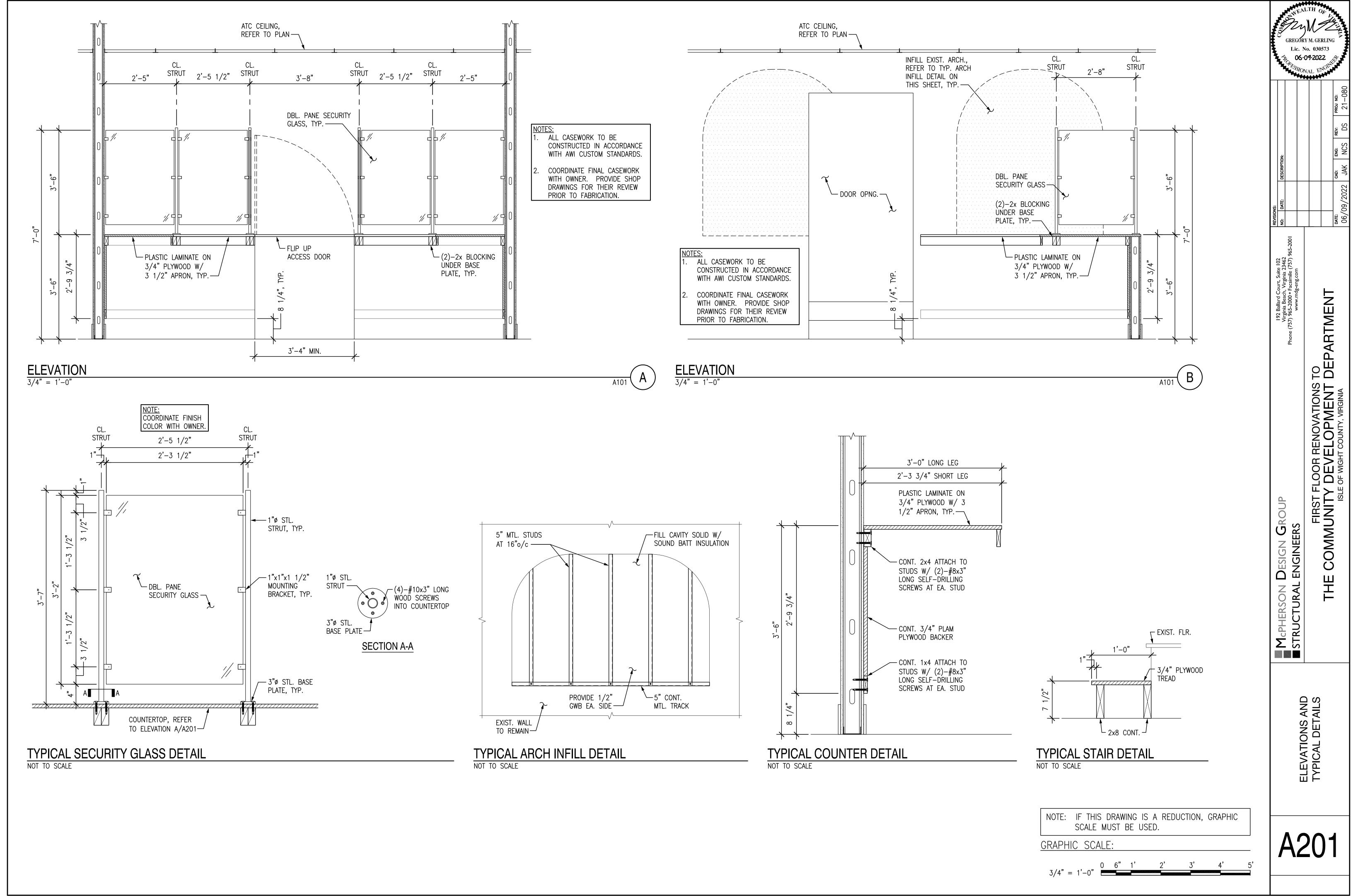


NOTE: REFER TO ELECTRICAL AND MECHANICAL <u>_</u>2__ \bigotimes 41-- \bigcirc \bigotimes $\overline{\mathbf{x}}$ \bigotimes 2 FIRST FLOOR REFLECTED CEILING PLAN - NEW WORK 1/4" = 1'-0"

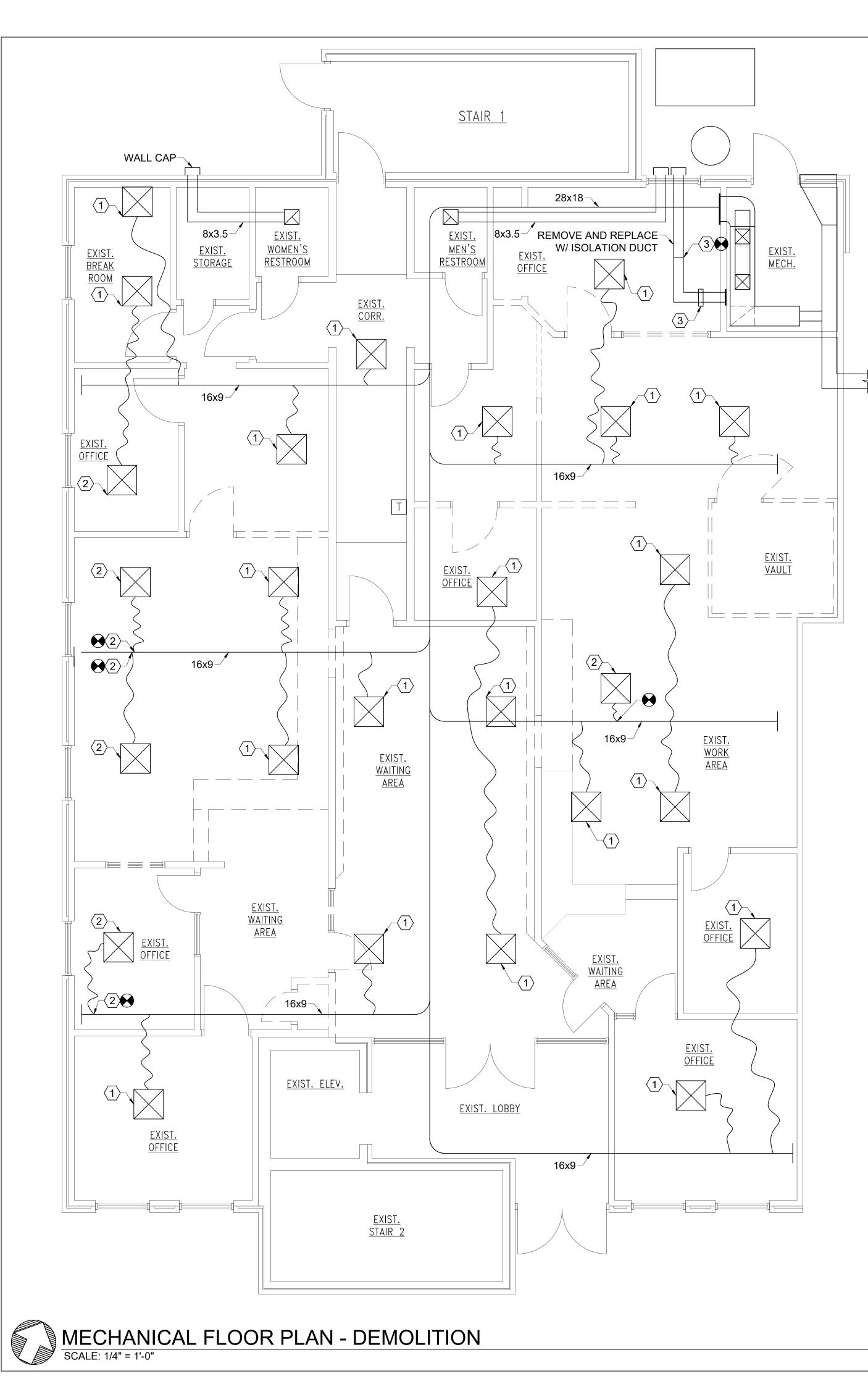


PLAN NORTH









MECHANICAL LEGEND

NOTE: HEAVY LINE WEIGHT INDICATES NEW EQUIPMENT OR EQUIPMENT TO BE REMOVED, LIGHT LINE WEIGHT INDICATES EQUIPMENT WHICH IS EXISTING TO REMAIN

CONDENSATE DRAIN

- POINT OF CONNECTION-NEW TO EXISTING AND POINT OF DEMOLITION TERMINATION
- EF-1 EXHAUST FAN MARK SEE SCHEDULE
- (A) GRILLE OR DIFFUSER MARK SEE SCHEDULE OR SPECIFICATION (CFM NOTE)
 - NEW WORK NOTE MARK
 - DEMOLITION WORK NOTE MARK
 - SUPPLY DUCT SECTION
 - EXHAUST DUCT SECTION
 - RETURN DUCT SECTION

PROVIDED BY G.C.

THERMOSTAT/SENSOR MOUNT 48" ABOVE FLOOR SUBSCRIPT INDICATES EQUIPMENT BEING CONTROLLED

ELBOW WITH TURNING VANES

DOOR LOUVER - SEE SCHEDULE

MANUAL BALANCING DAMPER WITH LOCKING QUADRANT

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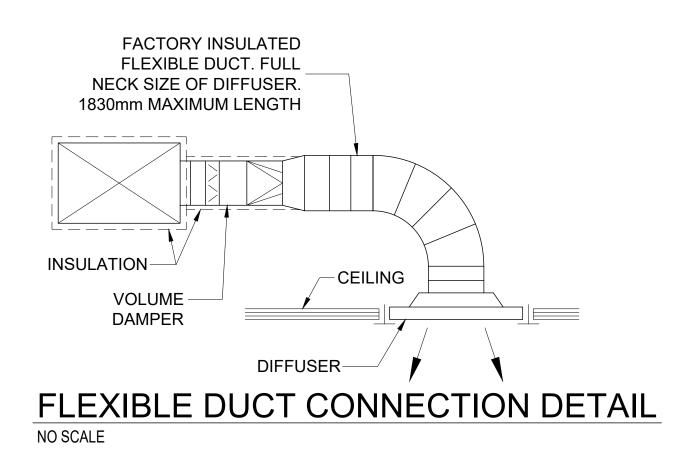
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F − F − F F − F − F BD

> UNDER CUT DOOR MIN. 1" / SEE ARCH. PLANS FOR SIZES

FLEXIBLE DUCT CONNECTION WITH BALANCING DAMPER

LOW PRESSURE SUPPLY OR RETURN DUCT WORK



GENERAL NOTES

- SCOPE OF WORK INCLUDES PROVIDING A FIRST CLASS WORKING SYSTEM IN COMPLIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, TESTED READY FOR OPERATION COMPLETE WITH LABOR, MATERIALS, APPARATUS, TRANSPORTATION, AND TOOLS REQUIRED FOR THE INSTALLATION.
- 2. COORDINATE WORK WITH THAT OF OTHER TRADES. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATIONS OF CEILING MOUNTED DEVICES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFICATIONS, CHANGES, ETC. FOR THE EQUIPMENT HE PROVIDES, EVEN IF APPROVED AS AN EQUAL.
- 4. MISCELLANEOUS ITEMS NOT SHOWN ON THE PLANS BUT NECESSARY FOR A COMPLETE OPERABLE SYSTEM, SHALL BE SUPPLIED AND INSTALLED.
- 5. INSTALL EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MAINTAIN ALL RECOMMENDED CLEARANCES.
- 6. REMOVE EXCESS MATERIAL, SCRAP, ETC. FROM THE JOB SITE.
- 7. REPAIR ANY MATERIAL OR WORK WHICH HE HAS DAMAGED.
- 8. BALANCE AIR AND WATER SYSTEMS WITHIN ±10% OF THE VALUES INDICATED.
- 9. TEST THE ENTIRE SYSTEM IN ALL MODES OF OPERATION TO INSURE PROPER OPERATION.
- 10. FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
- 11. ALL INDICATED DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.

DEMOLITION WORK NOTES:

(THIS SHEET ONLY)

- (1) RELOCATE EXISTING CEILING DIFFUSER IN NEW CEILING GRID AS INDICATED ON NEW WORK PLANS.
- 2 REMOVE EXISTING CEILING DIFFUSER AND FLEXIBLE DUCT BACK TO MAIN, WHERE CONNECTION IS NOT REUSED, PATCH AND INSULATE MAIN DUCT TO MATCH EXISTING.
- 3 REMOVE EXISTING EXHASUT FAN AND DUCT AS INDICATED FOR RELOCATION TO ALLOW FOR INSTALLATION OF NEW SOUND ATTENUATING RETURN DUCT.

	RICHAI	RD M. KLEIN
	No. 06- OFESSIO	. 027864 09-ZOZZ A NAL ENGINE
REVISIONS: NO: DATE: DESCRIPTION:		DATE: D6/09/22 CAD: ENC: RMK RMK 20-332
CPHERSON DESIGN GROUP	Phone (75	FIRST FLOOR RENOVATIONS TO THE COMMUNITY DEVELOPMENT DEPARTMENT ISLE OF WIGHT COUNTY, VIRGINIA
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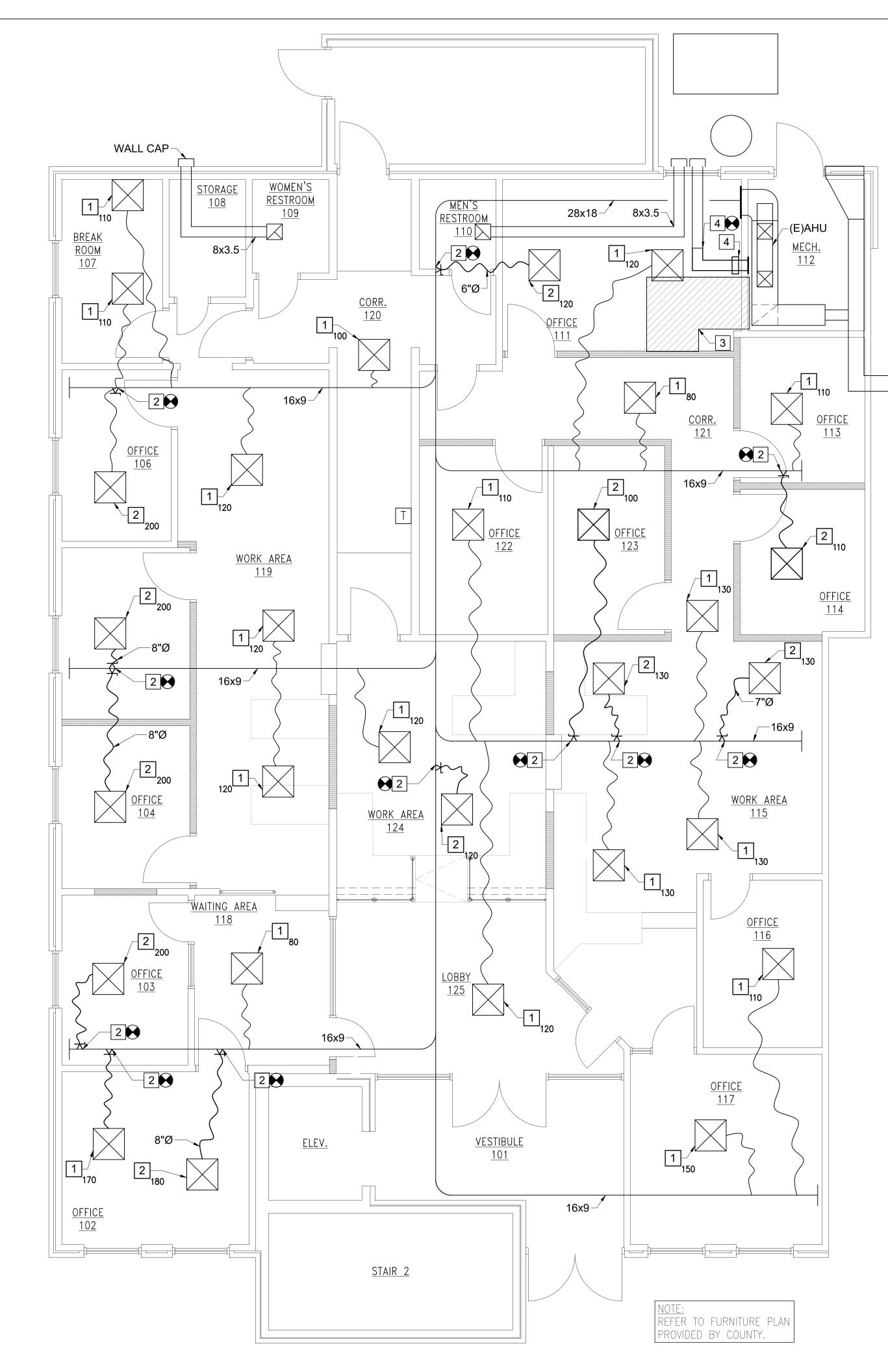
GRAPHIC SCALE

1/4" = 1'-0"



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MECHANICAL FLOOR PLAN - NEW WORK SCALE: 1/4" = 1'-0"



NEW WORK NOTES:

- 1 RELOCATE EXISTING DIFFUSER IN NEW CEILING GRID, PROVIDE NEW FLEXIBLE DUCT FIELD VERIFY EXACT RUN OUT DUCT BALANCE TO CFM NOTED.
- 2 NEW CEILING DIFFUSE, DUCT RUN OUT, AND BALANCING DAMPER, CONNECT TO EXISTING DUCT. MATH DIFFUSER TYPE TO EXISTING. SIZE AS INDICATED FOR RUN OUT DUCT. BALANCE TO CFM INDICATED.
- 3 PROVIDE NEW 40x18 ACCOUSTICALLY LINED RETURN AIR DUCT FROM NEW MECHANICAL ROOM WALL AS INDICATED, DUCT SHALL TERMINATE AT THE NEW WALL SUCH THAT THE MECHANICAL ROOM IS UTILIZED AS RETURN AIR PLENUM.
- 4 RENOVATE EXISTING 11 1/2"x3 1/2" EXHAUST DUCT AND FAN, CONNECT TO EXISTING DUCT AND STUB END THROUGH NEW SOUND ATTENUATING WALL.

L	ANGLE	Effet hul	MUC
AD	ACCESS DOOR		D M. KLEIN 027864
AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	3 06-0	09-ZOZZ
APD	ABOVE FINISHED GRADE	NOISSIA	VAL ENGINI
APPROX	-		
AS-1 BD	AIR SEPARATOR MARK - SEE SCHEDULE BALANCING DAMPER		
BDD	BACK DRAFT DAMPER		
BTUH	BRITISH THERMAL UNIT PER HOUR		LORG
CFH CFM	CUBIC FEET PER HOUR CUBIC FEET PER MINUTE		
CFM CHLR-1	CUBIC FEET PER MINUTE CHILLER MARK - SEE SCHEDULE		КЕ КЕ
COP	COEFFICIENT OF PERFORMANCE		i i i
CP-1	CONDENSATE PUMP MARK - SEE	ION .	UU E
CU-1	SCHEDULE CONDENSING UNIT MARK - SEE	DESCRIPTION:	
	SCHEDULE	DE DE	
CWR CWS	CHILLED WATER RETURN CHILLED WATER SUPPLY		
DN	DOWN	IS: DATE:	
DSS-1	DUCTLESS SPLIT SYSTEM MARK - SEE		
EAT	SCHEDULE ENTERING AIR TEMPERATURE	NO:	DATF
EDB	ENTERING AR TEMPERATURE	- 00	
EMD	END OF MAIN DRIP	965-200	
EWB	ENTERING WET BULB	00 02 7) 96	
EWT ESP	ENTERING WATER TEMPERATURE EXTERNAL STATIC PRESSURE	iite - 2-41(m	
EXIST	EXISTING	ve, Su 2350 ing.co	
FD	FIRE DAMPER WITH ACCESS DOOR	- Driv ginia • Fac	⊢
FDB FF	DEGREE FAHRENHEIT DRY BULB FINISHED FLOOR	Center Drive, Suite olk, Virginia 23502- 5-2000 • Facsimile (www.mdg-eng.com	Ż
FF FPM	FINISHED FLOOR FEET PER MINUTE	6371 Center Drive, Suite 100 Norfolk, Virginia 23502-4102 (757) 965-2000 • Facsimile (757) www.mdg-eng.com) EPARTMEN1
FT	FEET	63 (757)	\geq
FWB	DEGREE FAHRENHEIT WET BULB	Phone (H
GA GPH	GAUGE GALLONS PER HOUR	P	L ∠
GPM	GALLONS PER MINUTE		<u> </u>
"HG HP	INCHES OF MERCURY HORSE POWER		ОШ
HWC	HOT WATER CONVERTER MARK - SEE		ĔΟ
	SCHEDULE		SF
HWR HWS	HOT WATER RETURN HOT WATER SUPPLY		RENOVATIONS ELOPMENT
ID	INSIDE DIAMETER		ΕΨ
KW	KILOWATT		ENOVATION
L-1	LOUVER MARK - SEE SCHEDULE		ŞO
LAT LBS/HR	LEAVING AIR TEMPERATURE POUND PER HOUR		
LDB	LEAVING DRY BULB		
LWB			EVE
LWT MAX	LEAVING WATER TEMPERATURE MAXIMUM		о́Б
MOCP	MAXIMUM OVER CURRENT PROTECTION		
MIN		<u>ط</u>	
MBH MCA	THOUSAND BTU/HR MINIMUM CIRCUIT AMPS	Group	N ^B
MFS	MAXIMUM FUSE SIZE	S RO	
NOM	NOMINAL	IGN GR	FIRST F COMMUNITY
NO OA	NUMBER OUTSIDE AIR	Z ÿ	Σ
OD	OUTSIDE DIAMETER		Ō
PD	PRESSURE DROP	Design	C
PH PSIG	PHASE POUNDS PER SQUARE INCH GAGE		ш
%RH	PERCENT RELATIVE HUMIDITY	A A	ΗĽ
PRV	PRESSURE RELIEF VALVE	Ŭ K	H
RA RBJ	RETURN AIR RUN BETWEEN JOIST	McPherson	
RIH-1	ROOF INTAKE HOOD MARK - SEE	뿐 익	
	SCHEDULE	ר cP אר	
RLA RPM	RATED LOAD AMPS REVOLUTIONS PER MINUTE	Σ T	
RTJ	RUN THRU JOIST		
SA	SUPPLY AIR		
SCT	SATURATED CONDENSING TEMPERATURE	×	2
0555	SEASONAL ENERGY EFFICIENCY RATING		S S
SEER	SQUARE FEET		ŽŽ
SF	STATIC PRESSURE		
SF SP		У	A L
SF SP SST	SATURATED SUCTION TEMPERATURE		EVIATIONS
SF SP	SATURATED SUCTION TEMPERATURE TIP SPEED THERMOSTAT		
SF SP SST TS T'STAT TYP	TIP SPEED THERMOSTAT TYPICAL		
SF SP SST TS T'STAT TYP UH-1	TIP SPEED THERMOSTAT TYPICAL UNIT HEATER MARK - SEE SCHEDULE		3BRI
SF SP SST TS T'STAT TYP	TIP SPEED THERMOSTAT TYPICAL		ABBRI
SF SP SST TS T'STAT TYP UH-1 VAV-1 "WC	TIP SPEED THERMOSTAT TYPICAL UNIT HEATER MARK - SEE SCHEDULE VARIABLE AIR VOLUME UNIT AND MARK - SEE SCHEDULE INCHES WATER COLUMN		ID ABBRI
SF SP SST TS T'STAT TYP UH-1 VAV-1 "WC	TIP SPEED THERMOSTAT TYPICAL UNIT HEATER MARK - SEE SCHEDULE VARIABLE AIR VOLUME UNIT AND MARK - SEE SCHEDULE		AND ABBRI
SF SP SST TS T'STAT TYP UH-1	TIP SPEED THERMOSTAT TYPICAL UNIT HEATER MARK - SEE SCHEDULE VARIABLE AIR VOLUME UNIT AND MARK - SEE SCHEDULE INCHES WATER COLUMN		AND ABBRE

GRAPHIC SCALE

1/4" = 1'-0"

0 2' 4'

COASTAL ENGINEERING2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456Phone 757-563-9027Fax 757-563-9028

SHEET -- OF --

M201

MECHANICAL SPECIFICATIONS:

1. GENER	AL
1.1. GE 1.1.1. 1.1.2. 1.3.4.	NERAL REQUIREMENTS: REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. EACH CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS. THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE, SHALL BE PROVIDED AS IF DESCRIBED IN BOTH. IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED. CONTRACTOR TO ELECTRONICALLY SUBMIT SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER OWNERS WILL RETURN WITH ACTION TAKEN NOTED. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.
1.4. INS 1.4.1.	SPECTION OF THE SITE: PRIOR TO SUBMITTING BID, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.
1.5. MA 1.5.1.	TERIAL AND WORKMANSHIP: PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM, WRITTEN DESCRIPTIONS OF THE TRIM GOVERN MODEL NUMBERS.
1.5.2.	WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.
1.5.3.	THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ETC. ABNORMAL NOISE CAUSED BY VIBRATING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN ROTATING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTABLE.
1.5.4.	REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, STICKERS, AND/OR EXCAVATION MATERIAL NOT USED IN BACKFILLING, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO A NEW AND CLEAN CONDITION AT THE TERMINATION OF WORK.

UNDER THIS CONTRACT TO A NEW AND CLEAN CONDITION AT THE TERMINATION OF WORK. REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS 1.5.5. CONTRACT TO THE SATISFACTION OF OWNER, ENGINEER AND AUTHORITIES HAVING JURISDICTION. MISCELLANEOUS ITEMS NOT SHOWN ON THE PLANS BUT NECESSARY FOR A COMPLETE OPERABLE SYSTEM, SHALL

1.5.6. BE SUPPLIED AND INSTALLED.

CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN 1.5.7. ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.

EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS 1.5.8. OR AN APPROVED EQUIVALENT.

THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND 1.5.9. SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS. EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.

1.6. COORDINATION:

- COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL 1.6.1. BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
- IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICON UNLESS OTHERWISE INDICATED, THE CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING 1.6.2. CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. MECHANICAL CAULK. CONTRACTOR SHALL FURNISH THE GENERAL CONTRACTOR WITH THE INFORMATION WHERE CHASES AND OPENINGS ARE REQUIRED. COORDINATE HE WORK OF THE OTHER TRADES ENGAGED IN THE CONSTRUCTION OF 2. HEATING, VENTILATION, AND AIR CONDITIONING THE PROJECT, AND EXECUTE WORK IN A MANNER AS TO NOT INTERFERE WITH OR DELAY THE WORK OF OTHER 2.1. DUCTWORK: TRADES.
- FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. THE CONTRACTOR SHALL TAKE 1.6.3. HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.
- PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES DUCTWORK SHALL BE GALVANIZED STEEL, CONSTRUCTED AND INSTALLED AS RECOMMENDED BY SMACNA AND 1.6.4. 2.1.2. INSULATED WITH 2" THICK FIBERGLASS DUCT WRAP WITH FOIL VAPOR BARRIER JACKET. SHEET METAL GAUGES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT SHALL BE IN ACCORDANCE WITH SMACNA. FLEXIBLE DUCTWORK SHALL BE FACTORY INSULATED WITH VAPOR INTENDED TO DESIGNATE THE REQUIRED TRIM. BARRIER JACKET. MECHANICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR DUCTWORK LAYOUT TO THE CONSTRUCTION 1.6.5.
- PROJECT MANAGER FOR OWNER APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR TO PROVIDE AND ELECTRONIC SUBMITTAL (OWNER WILL RETURN 3 SETS NOTED WITH ACTION 1.6.6. TAKEN)SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.

1.7. ORDINANCES AND CODES:

- 1.7.1. WORK PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INDICATED BUT SHALL NOT BE USED IN NON-ACCESSIBLE, CONCEALED SPACES. 2.1.7. RIGID DUCT SHALL BE USED FOR RETURN EXHAUST AND MAKE-UP AIR. INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS 2.2. FINAL TESTING AND ADJUSTMENTS: AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS AIR BALANCE SHALL BE PERFORMED AT THE COMPLETION OF THE PROJECT. BALANCE EACH SUPPLY, RETURN, LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF 2.2.1. MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING OUTSIDE AIR DEVICE WITHIN 5% OF REQUIREMENTS AND FURNISH AN AABC OR NEBB CERTIFIED REPORT TO THE OWNER, MECHANICAL INSPECTOR AND ENGINEER. THE ENTIRE HVAC SYSTEM MUST BE FULLY OPERABLE ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING BALANCED, AND APPROVED BY OWNER'S REPRESENTATIVE ON OR BEFORE THE DAY OF SUBSTANTIAL MATERIALS (ASTM), AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT COMPLETION. DOCUMENTS EXCEED THE REQUIREMENTS OF THEIR REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. 2.2.2. ADJUST THERMOSTATS AND CONTROL DEVICES TO OPERATE AS INTENDED. ADJUST PUMPS, FANS, ETC. FOR
- PROPER AND EFFICIENT OPERATION. CERTIFY TO ARCHITECT THAT ADJUSTMENTS HAVE BEEN MADE AND THAT PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN 1.7.2. DESCRIBED. WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. SYSTEMS IS OPERATING SATISFACTORILY. CALIBRATE, SET AND ADJUST AUTOMATIC TEMPERATURE CONTROLS. CHECK PROPER SEQUENCES OF INTERLOCK SYSTEMS, AND OPERATION OF SAFETY CONTROLS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW. VERIFY ECONOMIZER OPERATION PER MANUFACTURER PROCEDURE. 2.2.3.

1.8. PROTECTION OF EQUIPMENT AND MATERIALS:

- 1.8.1. STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED, AND MECHANICAL CONTRACTOR IS OBLIGED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND AS APPROVED BY OWNER.
- 1.8.2. KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.
- 1.8.3. PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING 2.4.1. LOW VOLTAGE WIRING - ALL PROVISIONS FOR LOW VOLTAGE WIRING SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR UNLESS CODES OR LABOR SITUATIONS DO NOT PERMIT. IF THE MECHANICAL CONTRACTOR CAN CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS. NOT PERFORM LOW VOLTAGE WIRING, THE MECHANICAL CONTRACTOR SHALL INFORM THE GENERAL CONTRACTOR, AS A PART OF THE HVAC BID DOCUMENT, TO HAVE THE ELECTRICAL SUBCONTRACTOR INCLUDE HIS COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON WORK IN THEIR BID. 1.9.1.

1.9. OPERATION AND MAINTENANCE INSTRUCTIONS:

THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS. PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE

MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS 1.9.2. SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE 2.

TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF MECHANICAL WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

1.10. WARRANTIES:

- 1.10.1. WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION (COMPRESSORS IN AIR CONDITIONING AND REFRIGERATION EQUIPMENT WITH A 60 MONTH WARRANTY). UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S), AS STATED IN THE GENERAL CONDITIONS AND DIVISION 1. 1.10.2. WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY
- ADDITIONAL COSTS TO THE OWNER.
- PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER. 1.10.3. AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND 1.10.4. PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

1.11. CUTTING AND PATCHING:

1.11.1. PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC., AS REQUIRED TO INSTALL WORK UNDER THIS SECTION OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. PATCH WALLS, FLOORS ETC., AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

1.12. ROUGH-IN:

- COORDINATE WITHOUT DELAY ROUGH-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT 1.12.1. ROUGH-IN EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN. 1.12.2. RUN ALL PIPING AND DUCTWORK NEAT AND PARALLEL TO THE BUILDING STRUCTURE UNLESS OTHERWISE NOTED.
- 1.13. STRUCTURAL STEEL:
- STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND 1.13.1. CONFORM TO ASTM DESIGNATION A-36.
- SUPPORT EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT EQUIPMENT FROM 1.13.2. CEILINGS, OTHER PLUMBING, MECHANICAL, FIRE PROTECTION, OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

1.14. ACCESS DOORS:

PROVIDE ACCESS DOORS IN CEILINGS AND WALL WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED 1.14.1. VALVES, DAMPERS, AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES SCREWDRIVER-TYPE LOCK, ANCHOR STRAPS; MANUFACTURED BY MILCOR, ZURN, TITUS OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

1.15. PENETRATIONS:

- 1.15.1. SEAL FLOOR, EXTERIOR WALL AND ROOF PENETRATIONS WATER AND WEATHER TIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING AND SILICONE CAULK (FOR ACOUSTICAL INSULATION).
- COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS OR EXISTING 1.15.2. BUILDING CONDITIONS AND RATINGS. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M # CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.
- SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CASE IRON WALL PIPES AND MODULAR MECHANICAI 1.15.3. SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC, METRAFLEX OR APPROVED EQUAL 1.15.4. PROVIDE SLEEVE FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST

- PROVIDE ANY DUCTWORK NECESSARY FOR A COMPLETE INSTALLATION OF HVAC SYSTEMS (INCLUDING EXHAUST 2.1.1. SYSTEMS AND MAKE-UP AIR SYSTEMS). ALL DUCTWORK IDENTIFICATION AND INSTALLATION TO ADHERE TO SMACNA STANDARDS AND ALL GOVERNING CODES
- 2.1.3. DUCTWORK CONNECTIONS TO AIR DEVICES MUST BE MADE WITH HARD PIPE ELBOWS, COVERED WITH SLEEVE INSULATION. FLEX DUCT MUST NOT BE UTILIZED FOR A 90 DEGREE CONNECTION TO AN AIR DEVICE. BALANCING DAMPERS WITH DOUBLE LOCKING QUADS SHALL BE PROVIDED IN ALL ROUND DUCT TAKE-OFFS FROM 2.1.4.
- THE MAIN TRUNKS, UNLESS OTHERWISE NOTED ON PLANS.
- FLEX DUCT MUST BE PROPERLY SUPPORTED WITH ONE INCH STRAPS AND CUT TO PROPER LENGTH TO PREVENT 2.1.5. SAGGING.
- 2.1.6. FLEX DUCT SHALL BE OWENS-CORNING FOIL-BACK HIGH QUALITY U/L APPROVED. PLASTIC WRAPPED FLEX DUCT IS NOT ACCEPTABLE. FLEXIBLE DUCTWORK MAYBE USED FOR RUN-OUTS TO AIR DISTRIBUTION DEVICES AS

2.3. DIFFUSERS AND GRILLES:

2.3.1. ALL SUPPLY AND RETURN AIR DEVICES SHALL BE INSTALLED BY THE CONTRACTOR.

ALL AIR TERMINAL DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS IN ORDER TO HANDLE THE DESIGNED 2.3.2. AIR FLOW CAPACITIES WITH A MINIMUM AMOUNT OF NOISE AND STATIC PRESSURE, PROVIDE BALANCING DAMPERS FOR ALL AIR FLOW DEVICES TO ALLOW ADJUSTMENT WITH A LOCKING SET POINT, ROOM OPERATED SLIDE ACTUATED DAMPERS ON SUPPLY GRILLES DO NOT MEET THE REQUIREMENTS OF A BALANCING DAMPER.

ELECTRICAL: 2.4.

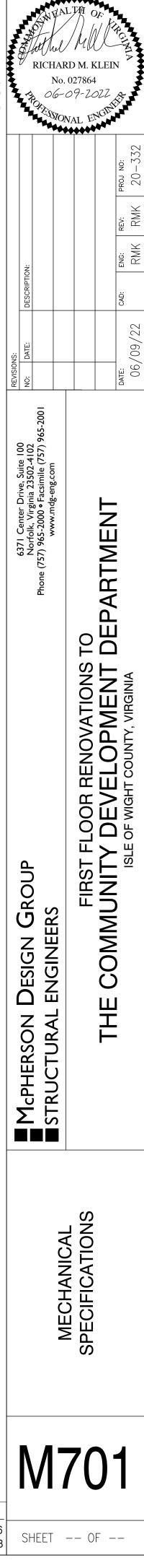
- POWER WIRING ALL ELECTRICAL POWER WIRING TO INCLUDE FINAL CONNECTIONS SHALL BE PROVIDED BY THE 2.4.2. GENERAL CONTRACTOR'S ELECTRICAL SUBCONTRACTOR.
- MOTOR STARTERS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND TURNED OVER TO THE 2.4.3.

2.5.	MECHANICAL CON
2.5.1.	AFTER COMP
	MECHANICAL
	STICKERS NO
	DEBRIS. LEAV
	HANDLING UN
2.5.2.	TEST AND DEI
	OPERATION.

ELECTRICAL CONTRACTOR FOR INSTALLATION.

ITRACTOR RESPONSIBILITIES: PLETION OF THE WORK DESCRIBED IN THIS SPECIFICATION AND SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVING ALL LABELS AND OT CONTAINING OPERATION INSTRUCTION. MECHANICAL CONTRACTOR SHALL REMOVE CRATING /ING THE INSTALLATION FINISHED AND READY FOR OPERATION. TO INCLUDING CLEAN FILTERS IN AIR VITS.

MONSTRATE TO THE OWNER THE ENTIRE SYSTEM IN ALL MODES OF OPERATION TO INSURE PROPER



LEGE	ND		
NOTE:	ALL SYMBOLS BELOW MAY NOT BE USED ON PLANS, SYMBOLARE IDENTIFIED WHERE THEY OCCUR.	OLS NOT SH	IOWN BELOW
0	LED LIGHTING FIXTURES. LETTER INDICATES TYPE; SEE "LIGHTING FIXTURE SCHEDULE".	•	POINT OF WORK, DEMO AND NEW WORK.
	LED NIGHT LIGHTING OR EMERGENCY	111	
ОО	FIXTURE. LED LIGHTING FIXTURE, CEILING OR WALL MOUNTED.	1 $\langle 1 \rangle$	NEW WORK NOTE SYMBOL DEMO WORK NOTE SYMBOL
€₩	LED EXIT LIGHTING FIXTURE. ARROW, WHEN USED INDICATES DIRECTION (SHADING INDICATES FACE OF SIGN ORIENTATION). CEILING OR WALL MOUNTED RESPECTIVELY.	_/ ▼	STANDARD TELEPHONE OUTLET BOX AND MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N PROVIDE 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE WITH CAT-6 (
	LED EMERGENCY BATTERY POWERED LIGHTING UNIT. (TWIN HEAD)		BACK TO TELEPHONE MAIN EQUIPMENT U 48" = MOUNTING HEIGHT AFF. IN INC
À	LIGHTING FIXTURE TYPE SYMBOL. SEE "LIGHTING FIXTURE SCHEDULE".	\bigtriangledown	TELECOMMUNICATIONS OUTLET BOX AND MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N PROVIDE 3/4" CONDUIT STUBBED ABOVE
LC	LIGHTING CONTACTOR.		ACCESSIBLE CEILING SPACE WITH CAT-6 (BACK TO TELEPHONE MAIN EQUIPMENT U
S	SINGLE POLE LIGHT SWITCH. 20A, 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N. SUBSCRIPT INDICATES SWITCH FIXTURE CONFIGURATION		(VOICE AND DATA). MOUNT +18" AFF. U.O.N 48" = MOUNTING HEIGHT AFF. IN INC
S3	THREE WAY SWITCH, 20A 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N.	\mathbf{A}	TELEVISION OUTLET BOX AND CONNECTO MOUNT 18" AFF. TO BOTTOM OF BOX U.O.N PROVIDE 3/4" CONDUIT STUBBED ABOVE
S4	FOUR WAY SWITCH, 20A 120/277V, MOUNT 42" AFF TO BOTTOM OF BOX U.O.N.		ACCESSIBLE CEILING SPACE WITH RG-6 C BACK TO HEADEND MAIN EQUIPMENT U.O. 48" = MOUNTING HEIGHT AFF. IN INC
SM	FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER WITH OVERLOADS, 20A, 120V	TTD	
Soc	WALL BOX DUAL TECHNOLOGY OCCUPANCY SENSOR. 120/277V, MOUNT AT 42" AFF TO BOTTOM OF BOX U.O.N. SENSOR-SWITCH#WSXA WH OR EQUAL		TELECOMMUNICATIONS SYSTEM TERMINA TRANSFORMER, DRY TYPE
€	DUPLEX CONVENIENCE RECEPTACLE. 20A, 125VAC, NEMA 5-20R, MOUNT 18" AFF TO BOTTOM OF BOX	$\langle \mathbf{S} \rangle$	FIRE ALARM SYSTEM SMOKE SENSOR, CE U.O.N.
	U.O.N. S = DUPLEX RECEPTACLE WITH (2) USB PORTS WM = WIREMOLD	$\langle H \rangle$	FIRE ALARM SYSTEM HEAT SENSOR, CEILI U.O.N.
	G = GROUND FAULT INTERRUPTER 48 = MOUNTING HEIGHT AFF IN INCHES	F	FIRE ALARM SYSTEM CONNECTION TO FLO
	D= DEDICATED OUTLET ON DEDICATED CIRCUIT	$\langle T \rangle$	FIRE ALARM SYSTEM CONNECTION TO TAI
		$\langle A \rangle$	FIRE ALARM SYSTEM CONNECTION TO ALA
	TWO DUPLEX CONVENIENCE TYPE	Ρ	FIRE ALARM SYSTEM MANUAL PULL STATI +42" AFF, U.O.N.
 	RECEPTACLES(QUADRIPLEX), EACH NEMA 5-20R, MOUNT IN TWO GANG RECEPTACLE BOX WITH SINGLE COVER PLATE, MOUNT 18" AFF TO BOTTOM OF BOX	F	FIRE ALARM SYSTEM AUDIO ALARM, MOUN CEILING OR 90" AFF MAXIMUM
		Ē	FIRE ALARM SYSTEM VISUAL ALARM, MOU CEILING OR 90" AFF MAXIMUM
G	WEATHERPROOF DUPLEX CONVENIENCE RECEPTACLE. 20A, 125VAC, NEMA 5-20R, MOUNT 18" AFF TO BOTTOM OF BOX U.O.N. PROVIDE WITH	F F FACP	FIRE ALARM SYSTEM AUDIO/VISUAL ALARI 6"BELOW CEILING OR 90" AFF MAXIMUM
	IN-USE WP COVER WP = WEATHERPROOF		FIRE ALARM SYSTEM CONTROL PANEL
	G = GROUND FAULT INTERRUPTER CONDUIT HOMERUN WITH PANELBOARD & CIRCUIT		PUSH BUTTON (24 VOLT) MOUNT 52" AFG.
	DESIGNATIONS BRANCH CIRCUIT OF FEEDER WIRING IN CONDUIT. PROVIDE SIZE AND QUANTITY OF		DOOR BELL (24 VOLT) MOUNT ON WALL AT CEILING.
AL1-1	CONDUCTORS AS REQUIRED TO FACILITATE CIRCUIT CONFIGURATION AND/OR SWITCHING INDICATED.	No	DOOR BELL (24 VOLT) MOUNT 12" ABOVE (
	MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG (OR AS INDICATED), MINIMUM CONDUIT SIZE SHALL BE 1/2".	ΗŢ	BELL TYPE TRANSFORMER (120-24V) WALL
	BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO TICK MARKS INDICATE 2 CONDUCTORS & 1 GROUND IN CONDUIT UON. TICK MARKS, WHEN SHOWN, INDICATE QUANTITY OF CONDUCTORS IF OTHER THAN THREE; () INDICATES GROUND, () INDICATES INSULATED ISOLATED GROUND. FOR CONDUIT AND WIRE SIZES	\boxtimes	JUNCTION BOX AT 10'-0" AFF. MOTOR STARTER, CONTROLLER, OR F MECHANICAL EQUIPMENT. DEVICE SU MECHANICAL CONTRACTOR; INSTAL CONNECTED BY ELECTRICAL CONTRACTO EXACT LOCATION.
└╱╱ <u>╱</u> └ LP−1,3	REFER TO PANELBOARD SCHEDULES. HOMERUNS TO PANEL. PANEL & CIRCUIT DESIGNATIONS AS INDICATED.	ÈÒ	MOTOR CONNECTION, HP, AND CHARACT NOTED
$\left(\begin{array}{c} \\ \end{array} \right)$	CIRCUIT BREAKER	E	ELECTRICAL CONNECTION AS NOTED.
	PANELBOARD		JUNCTION BOX (J.B.) FLUSH MOUNTED 4"S REQ'D UON. S=SURFACE MOUNTED
2P <u>60</u> N1	DISCONNECT SAFETY SWITCH & CONNECTION 2P = NO. OF POLES 60 = SWITCH RATING	J	JUNCTION BOX (J.B.) SURFACE MOUNTED CEILING. SIZE AS NOTED ON DRAWINGS.
28 40 NI	40 = FUSE RATING (NF INDICATES NON-FUSIBLE). N1= NEMA RATING	$(\!\!\!W\!)$	WATER HEATER CONNECTION.
		00	DUAL TECHNOLOGIES CEILING MOUNT OC SENSOR. FEATURES TO DIM LIGHTING TO NO ACTIVITY AFTER 15 MINUTES.
		CA	CARD ACCESS ROUGH IN. PROVIDE BOX, AND PULL STRING.

IDE 3/4" CONDUIT STUBBED ABOVE SSIBLE CEILING SPACE WITH CAT-6 CABLING TO TELEPHONE MAIN EQUIPMENT U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES COMMUNICATIONS OUTLET BOX AND JACK. IT 18" AFF. TO BOTTOM OF BOX U.O.N. IDE 3/4" CONDUIT STUBBED ABOVE SSIBLE CEILING SPACE WITH CAT-6 CABLING TO TELEPHONE MAIN EQUIPMENT U.O.N. E AND DATA). MOUNT +18" AFF. U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES /ISION OUTLET BOX AND CONNECTOR. IT 18" AFF. TO BOTTOM OF BOX U.O.N. IDE 3/4" CONDUIT STUBBED ABOVE SSIBLE CEILING SPACE WITH RG-6 CABLING TO HEADEND MAIN EQUIPMENT U.O.N. 48" = MOUNTING HEIGHT AFF. IN INCHES COMMUNICATIONS SYSTEM TERMINAL BACKBOARD SFORMER, DRY TYPE ALARM SYSTEM SMOKE SENSOR, CEILING MOUNT, ALARM SYSTEM HEAT SENSOR, CEILING MOUNT, ALARM SYSTEM CONNECTION TO FLOW SWITCH ALARM SYSTEM CONNECTION TO TAMPER SWITCH ALARM SYSTEM CONNECTION TO ALARM CHECK ALARM SYSTEM MANUAL PULL STATION, MOUNT FF, U.O.N. ALARM SYSTEM AUDIO ALARM, MOUNT 6" BELOW NG OR 90" AFF MAXIMUM ALARM SYSTEM VISUAL ALARM, MOUNT 6" BELOW NG OR 90" AFF MAXIMUM ALARM SYSTEM AUDIO/VISUAL ALARM, MOUNT OW CEILING OR 90" AFF MAXIMUM ALARM SYSTEM CONTROL PANEL BUTTON (24 VOLT) MOUNT 52" AFG. BELL (24 VOLT) MOUNT ON WALL AT 6" ABOVE R BELL (24 VOLT) MOUNT 12" ABOVE CEILING/ TYPE TRANSFORMER (120-24V) WALL MOUNT TO TION BOX AT 10'-0" AFF. DR STARTER, CONTROLLER, OR RELAY FOR IANICAL EQUIPMENT. DEVICE SUPPLIED BY IANICAL CONTRACTOR; INSTALLED AND JECTED BY ELECTRICAL CONTRACTOR. VERIFY T LOCATION. DR CONNECTION, HP, AND CHARACTERISTICS AS TRICAL CONNECTION AS NOTED. TION BOX (J.B.) FLUSH MOUNTED 4"SQ x DEPTH D UON. S=SURFACE MOUNTED TION BOX (J.B.) SURFACE MOUNTED ABOVE NG. SIZE AS NOTED ON DRAWINGS. ER HEATER CONNECTION. TECHNOLOGIES CEILING MOUNT OCCUPANCY OR. FEATURES TO DIM LIGHTING TO 50% WHEN CTIVITY AFTER 15 MINUTES.

- ACCESS ROUGH IN. PROVIDE BOX, CONDUIT, PULL STRING.
- CAMERA ROUGH IN. PROVIDE BOX, CONDUIT, AND PULL STRING.

GENERAL NOTES

- 1. THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT. DEVICES AND FIXTURES SHALL DONE IN CONFORMANCE WITH ALL LOCAL AND STATE CODES, ORDINANCES, AND REGULATIONS, THE LATEST ADOPTED JURISDICTIONAL CODES, NATIONAL ELECTRICAL CODE, AUTHORITY HAVING JURISDICTION, AND UTILITY COMPANY REQUIREMENTS.
- 2. ALL RECEPTACLES AND SWITCHES SHALL BE FLUSH MOUNTED FOR ALL AREAS, UNLESS OTHERWISE NOTED.
- 3. THE ELECTRICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC. THE ELECTRICAL INSTALLATION SHALL BE COORDINATED WITH ALL OTHER TRADES SO THAT INTERFERENCES BETWEEN THE ELECTRICAL INSTALLATION AND ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION AND EQUIPMENT INSTALLATION WILL BE AVOIDED. REFER TO ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ALL RELATED ELECTRICAL NOTES AND SHALL BE RESPONSIBLE FOR INCLUDING FIELD VERIFICATIONS IN HIS BID. NO CHANGE ORDERS SHALL BE CONSIDERED FOR LACK OF FIELD VERIFICATION OF ALL PLAN NOTES AND DIMENSIONS.
- 4. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ROOM, AND AREA FINISHES, CEILING PLANS, DOOR SWINGS, FIRE RELATED PARTITIONS, CABINET AND CASE AND BUILT-IN DETAILS.
- 5. CONTRACTOR SHALL PROVIDE ALL DISCONNECTS TO MEET LOCAL CODES.
- 6. CONTRACTOR SHALL VERIFY ALL DOOR SWINGS BEFORE INSTALLING LIGHT SWITCHES. ALL LIGHT SWITCHES TO BE INSTALLED ON STRIKE SIDE OF DOOR UNLESS SPECIFICALLY NOTED OTHERWISE. WHERE SWITCHES ARE LOCATED ON HINGE SIDE OF DOOR, SWITCH SHALL BE INSTALLED A MINIMUM OF 36" FROM HINGE.
- 7. ALL FINAL CONNECTIONS SHOWN ON THE DRAWINGS ARE ACTUAL REQUIREMENTS OF THE EQUIPMENT AND ARE SHOWN IN THEIR APPROXIMATE LOCATION.
- 8. ALL MOTOR STARTERS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR FURNISHING THE EQUIPMENT AND INSTALLED, WIRED AND CONNECTED BY ELECTRICAL CONTRACTOR
- 9. ALL EXTERIOR EQUIPMENT AND DEVICES SHALL BE WEATHERPROOF AND RAIN TIGHT.
- 10. COORDINATE ALL LIGHTING WITH MECHANICAL AND PLUMBING EQUIPMENT.
- 11. ALL BATHROOM RECEPTACLES SHALL BE GROUND FAULT PROTECTED. (TYPICAL)
- 12. FINAL DETERMINATION OF FIRE STOPPING REQUIREMENTS SHALL BE BASED ON LOCAL CODE REQUIREMENT.
- 13. IT IS THE INTENT OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED, AND READY FOR OPERATION. WHENEVER THE WORK "PROVIDE" IS USED, IT SHALL MEAN TO "FURNISH AND INSTALL COMPLETE AND MAKE READY FOR USE
- 14. CONTRACTOR SHALL WALK THE WORK SITE PRIOR TO BIDDING AND VERIFY EXISTING CONDITIONS. DRAWINGS ARE DIAGRAMMATIC BE RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND MEASUREMENTS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BID.
- 15. REMOVAL OF FIRE ALARM PANEL AND ELECTRICAL PANEL "PA" SHALL BE DONE DURING OFF HOUR/WEEKEND WORK TIMES. SCHEDULE SHALL BE FROM 5:00 PM FRIDAY UNTIL 7:30AM MONDAY MORNING, NOTIFY ISLE OF WIGHT CO. TWO WEEKS PRIOR TO OUTAGE.
- 16. FURNISH AND INSTALL NEW CABLETRAY SYSTEM ABOVE CEILINGS. COORDINATE LAYOUT WITH EXISTING FIELD CONDITIONS.

		LIGHTING FIXTURE SCHEDULE										
TYPE	MANUFACTURER	CATALOG NUMBER	LAMP TYPE	COLOR TEMPERATURE	TOTAL WATTS	VOLTS	MOUNTING	NOTES				
А	LITHONIA	2BLT4 RB A 40L ADP EZ1 LP835 N80	LED	3500°K	32	MVOLT	LAY IN	1				
В	LITHONIA	2BLT2 RB A 33L ADP EZ1 LP835 N80	LED	3500° K	26.6	MVOLT	LAY IN	1				
Е	LITHONIA	ECBR LED M6	LED	-	2.32	120-277V	UNIVERSAL	1				
E1	LITHONIA	LQM SW 3 R 120/277 EL N M6	LED	-	.71	120-277V	UNIVERSAL	1				
E2	LITHONIA	ELA SGL LT24 LP05VS	LED	-	5.1	6-18VDC	WALL	1				
EM	LITHONIA	EU2C	LED	-	.56	120-277V	WALL	1				
NOTES	<u>S:</u>	· · · ·				· · ·						
1. OR APPROVED EQUAL												

2. COORDINATE FINISH AND EXACT MOUNTING LOCATION WITH ARCHITECT.

DARD TELEPHONE OUTLET BOX AND JACK. NT 18" AFF. TO BOTTOM OF BOX U.O.N.

Ø, PH A, AMP AFF AFG AIC APPROX E, EXIST FF EQUIP FLEX GFI GND

HP

ABBREVIATIONS

PHASE	
AMPERE	
ABOVE FINISHED FLOOR	
ABOVE FINISHED GRADE	
MPERE INTERRUPTING	
CAPACITY	
APPROXIMATELY	
CONDUIT	
ENTERLINE	
EXISTING	
XHAUST FAN	
QUIPMENT	
USE	
LEXIBLE	
GROUND FAULT	
NTERRUPTER	
GROUND	
IORSE POWER	

JUNCTION BOX
KILOVOLT AMPERES
KILOWATT
MAIN CIRCUIT BREAKER
MAIN LUGS ONLY
MOUNT (RMS SYMMETRICAL)
MOUNTED
MOUNTING
NEW
NONFUSIBLE
NOT TO SCALE
POLE
ROOF TOP UNIT
TYPICAL
UNLESS OTHERWISE NOTED
VOLT, VOLTAGE
WIRE
WEATHERPROOF

JB

KVA

KW

MCB

MLO

MTD

MTG Ν

NF

NTS

RTU

TYP

UON

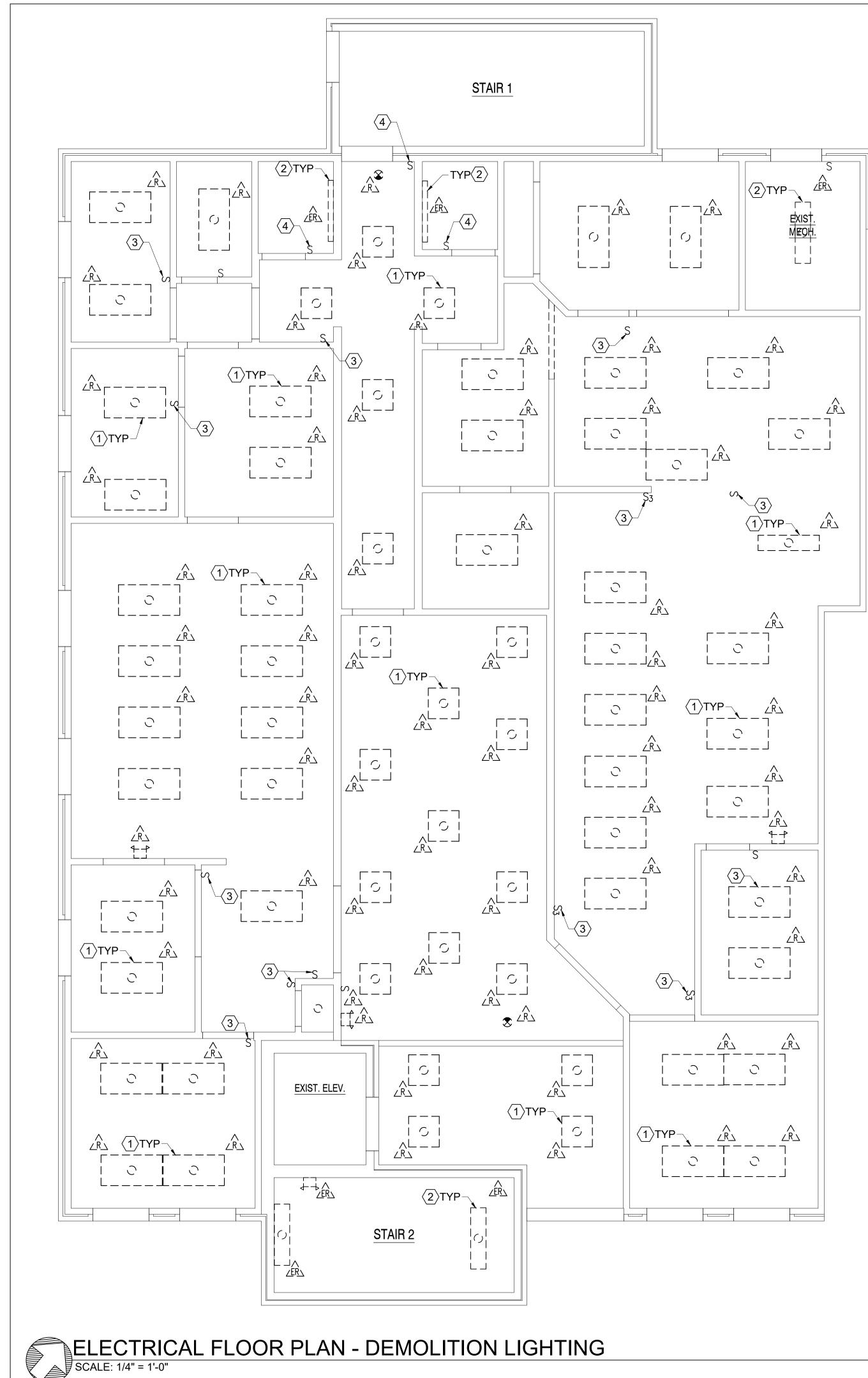
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	•	TES.		N/	7-20 LE ♦♦♦₹	VGIN		20-332
							: PROJ NO:	MK 20-
	SN:						ENG: REV:	RMKR
	DESCRIPTION:						CAD:	2 BPM
REVISIONS:	NO: DATE:						DATE:	06/09/22
	03/1 Center Drive, Suite 100 Norfolk Virginia 23502-4102	Phone (757) 965-2000 • Facsimile (757) 965-2001			ATIONS TO	FY DEVELOPMENT DEPARTMENT		VIRGINIA
					FIRST FLOOR RENOVATIONS TO	THE COMMUNITY DEVELOPN		
			I EGENID NIOTES ARREV		AND SCHEDULE			
			()-	1	
	SF	HEET			- 0	F –		



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DEMOLITION WORK NOTES: (THIS SHEET ONLY)

- (1) ALL LIGHT FIXTURES MARKED AS "R" ARE TO BE REMOVED AND PROPERLY DISPOSED OF. (TYPICAL)
- $\langle 2 \rangle$ ALL LIGHTS MARKED AS "ER" ARE EXISTING TO REMAIN.(TYPICAL)
- $\langle \underline{3} \rangle$ REMOVE EXISTING LIGHT SWITCH. REPLACE WITH WALL BOX OCCUPANCY SENSOR IF IN EXISTING WALL NOT BEING DEMOLISHED. IF WALL IS BEING DEMOLISHED REMOVE SWITCH, BOX, CONDUIT, WIRE, AND ALL ASSOCIATED HARDWARE.
- (4) EXISTING LIGHT SWITCH TO BE REPLACED WITH WALL BOX OCCUPANCY SENSOR.

GENERAL WORK NOTES:

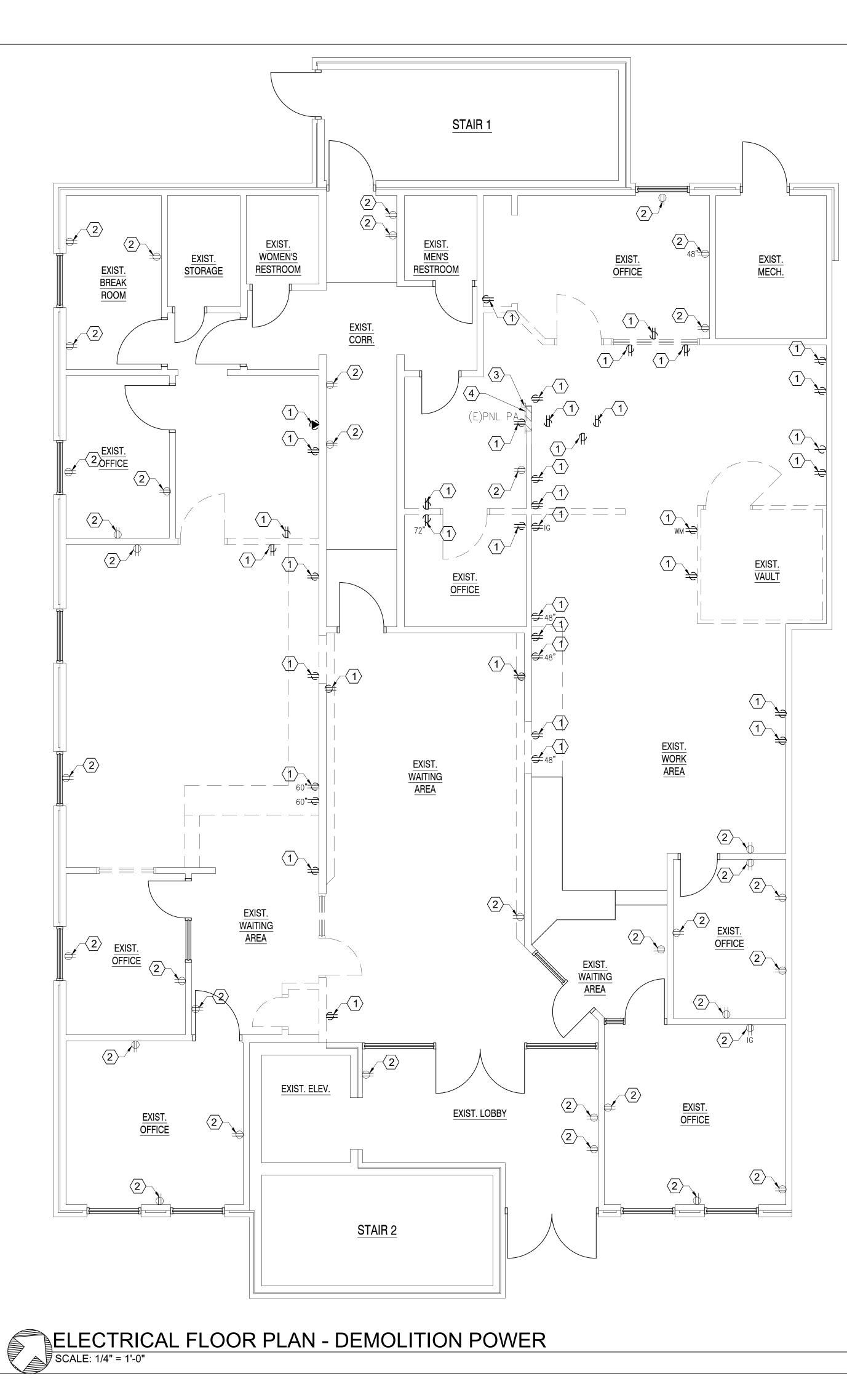
1. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING CIRCUITS PRIOR TO DISCONNECTING AND REMOVING LIGHTING, DEVICES, OR EQUIPMENT.

TES: (THIS SHEET ONLY) TO BE REMOVED AND	No.	D M. KLEIN 027864 09-2022
IG TO REMAIN.(TYPICAL) CE WITH WALL BOX OCCUPANCY DEMOLISHED. IF WALL IS BEING IDUIT, WIRE, AND ALL		AT Enco 20-332
O WITH WALL BOX OCCUPANCY		K Rev:
	DESCRIPTION:	cab: BPM RMK
	REVISIONS: NO: DATE:	DATE: 06/09/22
	6371 Center Drive, Suite 100 Norfolk, Virginia 23502-4102 Phone (757) 965-2000 • Facsimile (757) 965-2001 www.mdg-eng.com	FLOOR RENOVATIONS TO Y DEVELOPMENT DEPARTMENT LE OF WIGHT COUNTY, VIRGINIA
S: (THIS SHEET ONLY) SIFY ALL EXISTING CIRCUITS OVING LIGHTING, DEVICES, OR	McPHERSON DESIGN GROUP STRUCTURAL ENGINEERS	FIRST FLOOR RENOVATION THE COMMUNITY DEVELOPMEN ISLE OF WIGHT COUNTY, VIRGINIA
<u>IC SCALE</u> 0 2' 4' 8' 12' COASTAL ENCONFERENCE	E1	01
COASTAL ENGINEERING2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456Phone 757-563-9027Fax 757-563-9028	SHEET -	OF

1/4" = 1'-0"

GRAPHIC SCALE

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DEMOLITION WORK NOTES: (THIS SHEET ONLY)

- (1) REMOVE WIRING DEVICE TO INCLUDE DEVICE, PLATE, WIRE, AND ALL ASSOCIATED HARDWARE, AND ACCESSORIES. ABANDON BOX AND CONDUIT IN WALL.
- 2 EXISTING WIRING DEVICE TO BE REPLACED WITH NEW DEVICE AND PLATE. SEE SPECIFICATIONS ON SHEET E-701 FOR COLOR.
- $\langle 3 \rangle$ REMOVE EXISTING TIMECLOCK.
- 4 REMOVE EXISTING ELECTRICAL PANEL "PA" AND SUB-FEEDER INDICATED ON RISER DIAGRAM SHEET E-601. ADD NEW PANEL "PA" TO NEW LOCATION INDICATED ON SHEET E-202. REMOVE AND EXTEND EXISTING BRANCH CIRCUITS AS REQUIRED TO NEW LOCATION OF PANEL "PA".

GENERAL WORK NOTES:

(THIS SHEET ONLY)

1. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING CIRCUITS PRIOR TO DISCONNECTING AND REMOVING LIGHTING, DEVICES, OR EQUIPMENT.

GRAPHIC SCALE

1/4" = 1'-0"

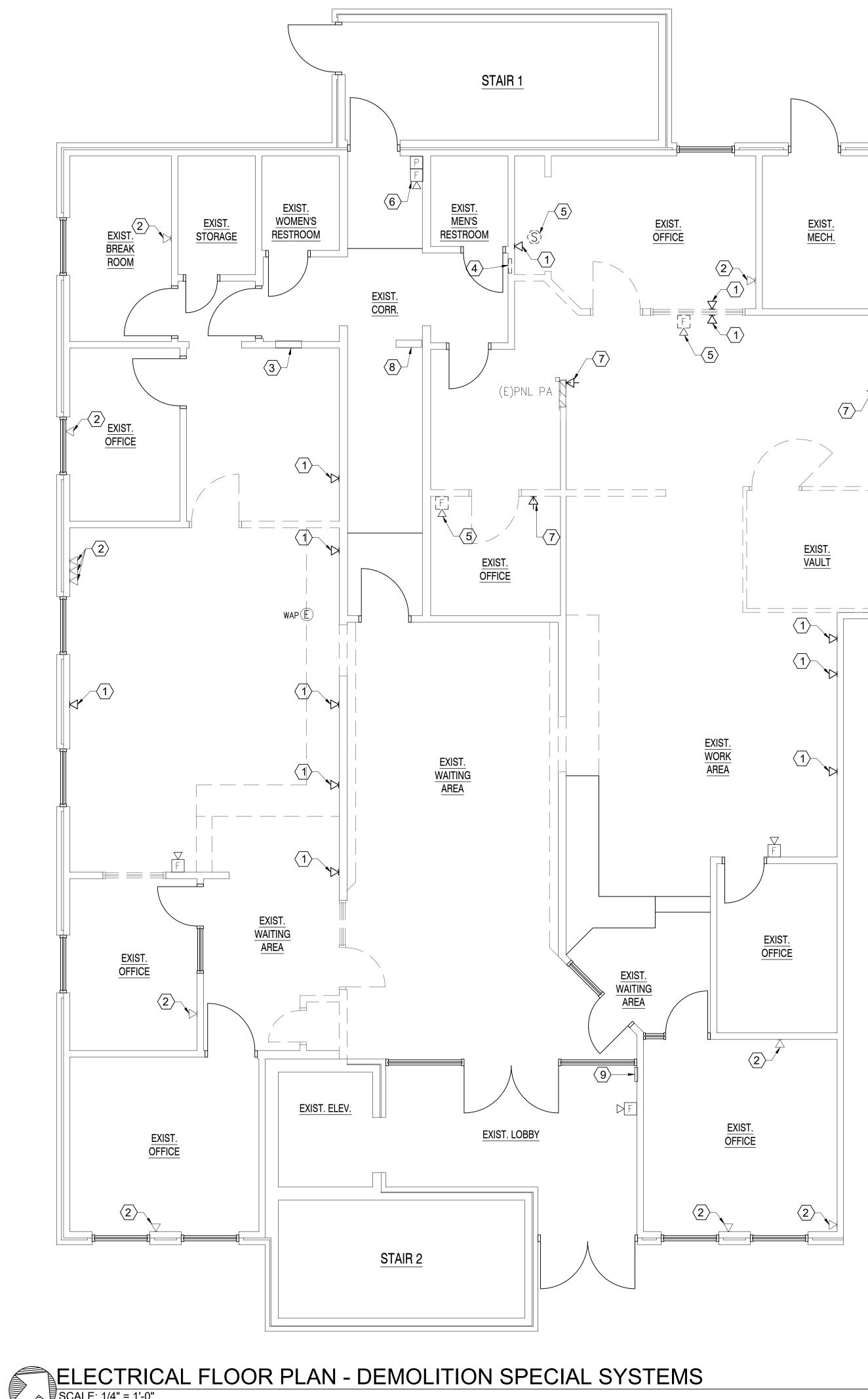
COASTAL ENGINEERING2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456Phone 757-563-9027Fax 757-563-9028

	R R R		/ /	M. K 27864 9-20	A A A A A A A A A A A A A A A A A A A	PROJ NO: A TAP Z	20-332
	DESCRIPTION:					CAD: ENG: REV: PR	BPM RMK RMK 2
REVISIONS:	NO: DATE:					DATE:	06/09/22
				FIRST FLOOR RENOVATIONS TO	THE COMMUNITY DEVELOPMENT DEPARTMENT		
				POWER			
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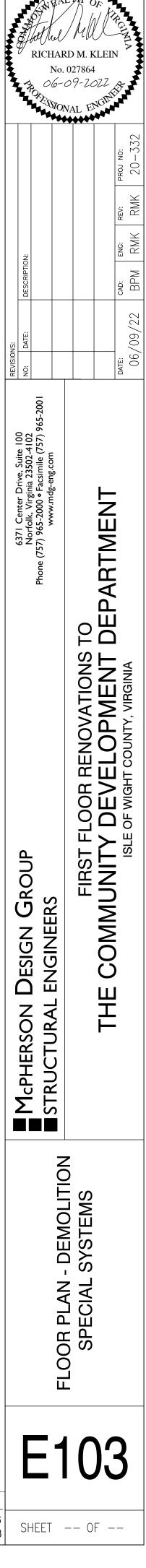
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SCALE: 1/4" = 1'-0"



DEMOLITION WORK NOTES: (THIS SHEET ONLY)

- $\langle 1 \rangle$ REMOVE EXISTING TELEPHONE/DATA JACK TO INCLUDE JACK, CABLING, AND ALL ASSOCIATED SUPPORTS AND HARDWARE. REMOVE CABLING BACK TO IT RACK. ABANDON BOX AND CONDUIT IN WALL.
- $\langle 2 \rangle$ EXISTING TELEPHONE/DATA JACK TO REMAIN. REMOVE JACK TO ALLOW ² FOR ANY NEW WALL COVERS OR WALL PAINTING. REMOVE ALL CABLING FROM JACK. NEW CABLING SHALL BE INSTALLED BY ISLE OF WIGHT CO. OIT DEPARTMENT. SEE ARCHITECTURAL DRAWINGS FOR WORK REQUIRED.
- $\langle 3 \rangle$ EXISTING IT RACK TO REMAIN. GENERAL CONTRACTOR TO PROVIDE $^{\prime}$ CUSTOM CABINET ENCLOSURE TO HIDE EQUIPMENT AND CABLING.
- $\langle 4 \rangle$ RELOCATE EXISTING FIRE ALARM CONTROL PANEL(FACP) TO NEW ⁷ LOCATION INDICATED. TEST SYSTEM PRIOR TO REMOVAL AND NOTIFY ENGINEER AND CITY OF ANY TROUBLES.
- $\langle 5 \rangle$ REMOVE EXISTING FIRE ALARM DEVICE. REMOVE CABLING AND ASSOCIATED HARDWARE.
- $\langle 6 \rangle$ EXISTING FIRE ALARM DEVICE TO REMAIN.
- $\langle \overline{7} \rangle$ REMOVE EXISTING TV PLATE AND CABLING.
- $\overline{(8)}$ EXISTING SECURITY SYSTEM EQUIPMENT ABOVE CEILING.
- $\langle 9 \rangle$ EXISTING FIRE ALARM ANNUNCIATOR PANEL(FAAP) TO REMAIN.
- $\langle 10 \rangle$ EXISTING FIBER OPTIC (FO) CABLE TO REMAIN.





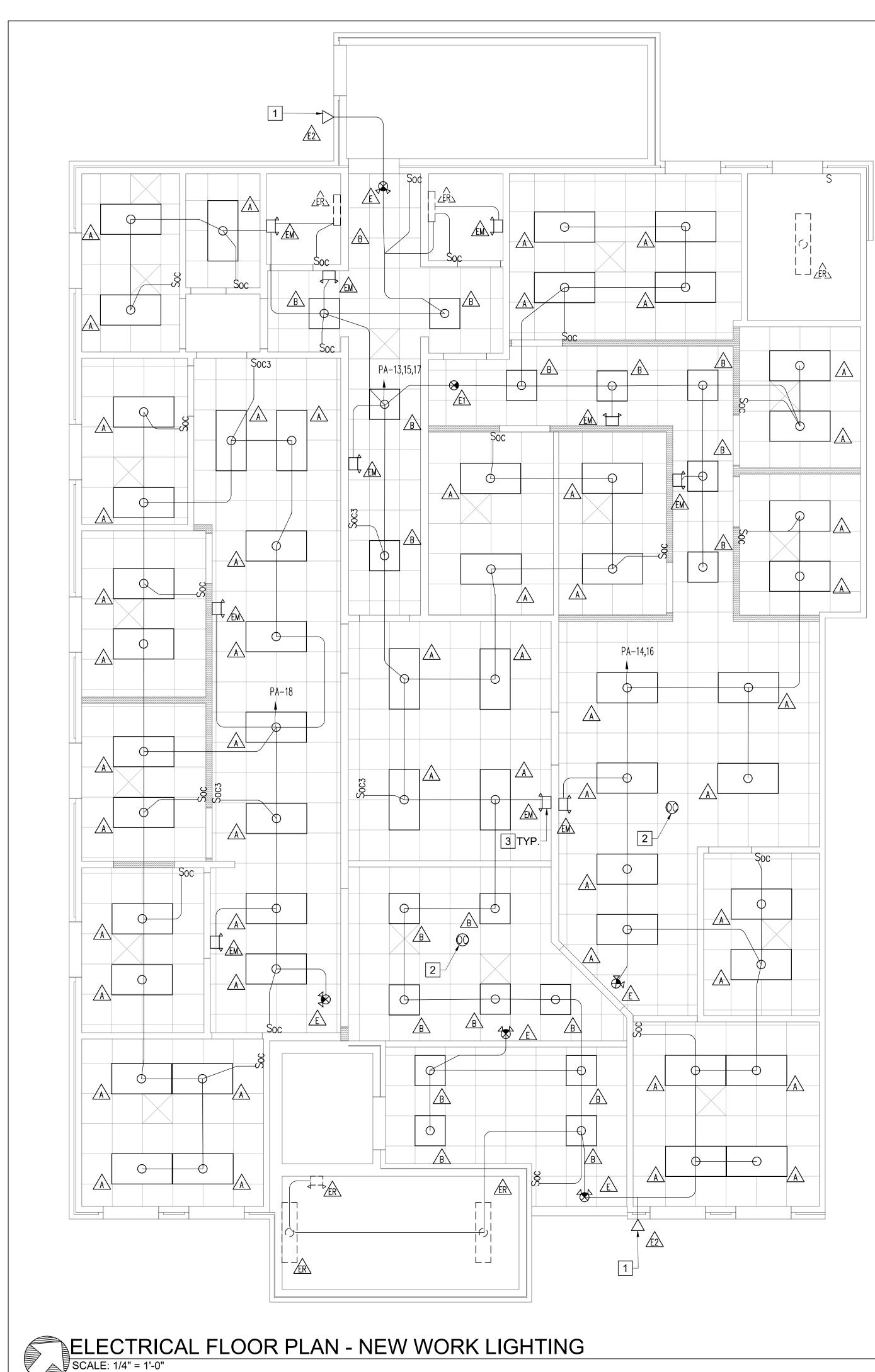
2'

1/4" = 1'-0"

COASTAL ENGINEERING
 2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456

 Phone 757-563-9027

 Fax 757-563-9028



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BY: NAV PRINTED DRAWING

NEW WORK NOTES:

(THIS SHEET ONLY)

- 1 CONNECT REMOTE SINGLE HEAD WEATHERPROOF EMERGENCY LIGHT TO NEAREST TYPE "E" OR "E1" FIXTURE AND RUN LV VOLTAGE WIRING BETWEEN THE TWO PER MANUFACTURERS RECOMMENDATIONS AND INSTRUCTIONS.
- 2 CEILING MOUNT PASSIVE INFRARED DUAL TECHNOLOGY LINE VOLTAGE OCCUPANCY SENSOR WITH OCCUPANCY CONTROLLED DIMMING. SENSOR-SWITCH# CMR PDT 10 D OR APPROVED EQUAL.
- 3 CONNECT NEW EMERGENCY LIGHT TO NEAREST LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. (TYPICAL)

RICHARD M. KLEIN No. 027864 06-09-2022 6371 Center Drive, Suite 100 Norfolk, Virginia 23502-4102 (757) 965-2000 • Facsimile (757) 965. www mds-ans com FIRST FLOOR RENOVATIONS TO THE COMMUNITY DEVELOPMENT DEPARTMENT McPHERSON DESIGN GROUP STRUCTURAL ENGINEERS WORK PLAN - NEW V OOR-E201

GENERAL WORK NOTES:

(THIS SHEET ONLY)

1. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING CIRCUITS PRIOR TO DISCONNECTING AND REMOVING LIGHTING, DEVICES, OR EQUIPMENT.



COASTAL ENGINEERING
 2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456

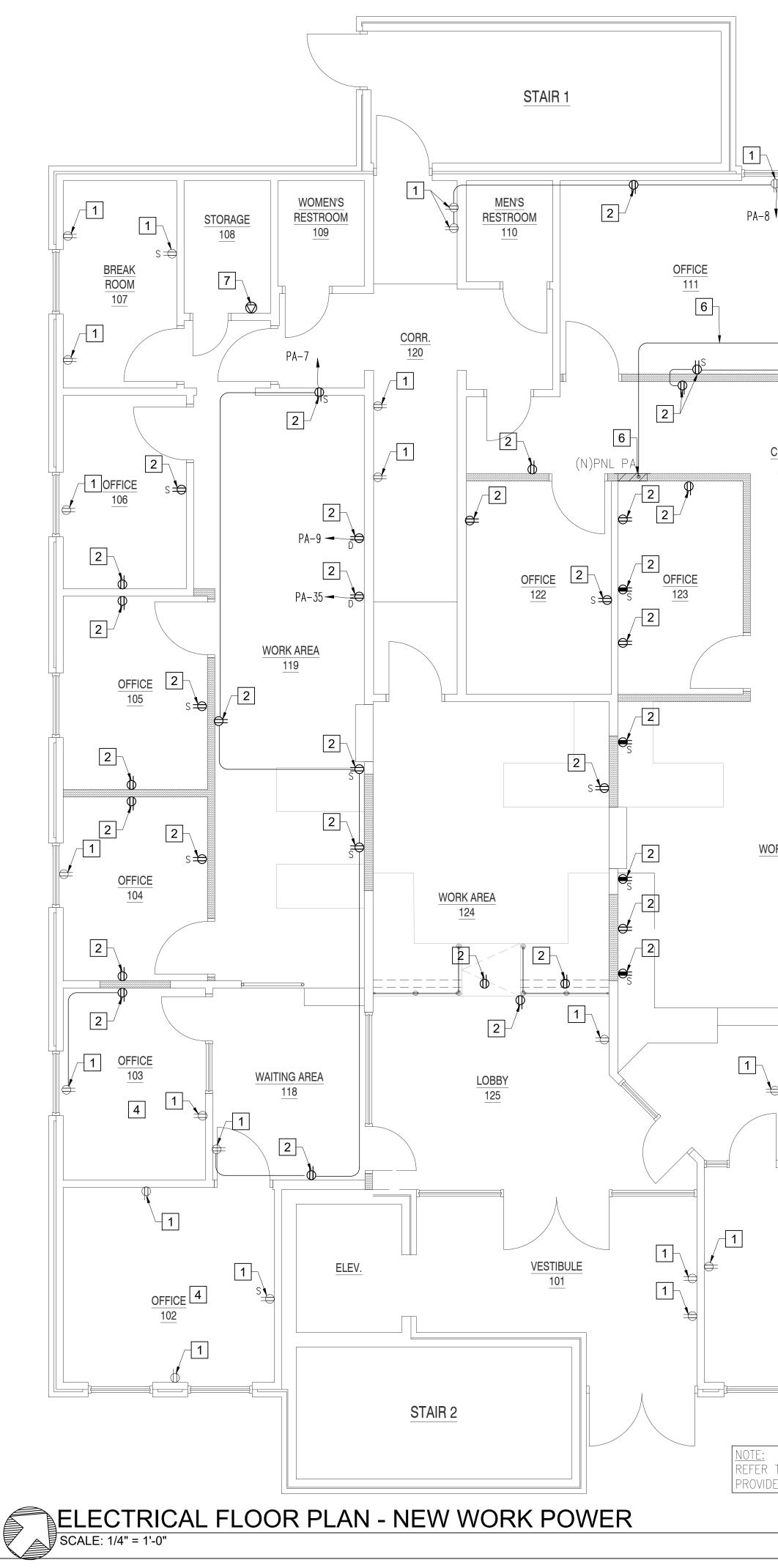
 Phone 757-563-9027

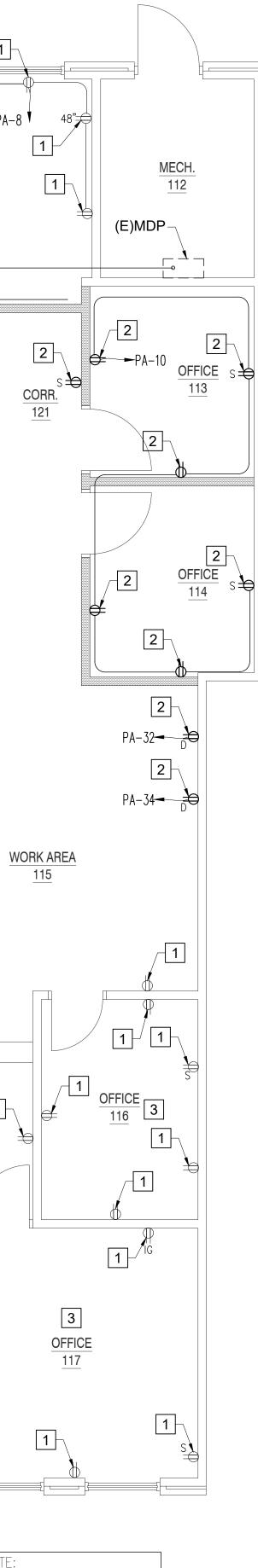
 Fax 757-563-9028

12'

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<u>note:</u> refer to furniture plan PROVIDED BY COUNTY.

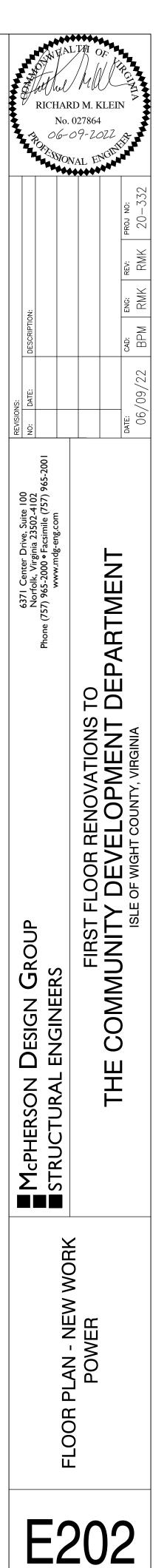
NEW WORK NOTES:

- 1 EXISTING WIRING DEVICE. PROVIDE NEW DEVICE AND PLATE. REPLACE $^{\square}$ WITH 20A 125V DUPLEX RECEPTACLE WITH USB PORT IF MARKED WITH "S".
- 2 FURNISH AND INSTALL NEW 20AMP 125V DUPLEX RECEPTACLE. SEE LEGEND FOR DESIGNATOR FOR RECEPTACLE TYPE.
- 3 EXISTING RECEPTACLES THIS AREA FED FROM CIRCUIT "PA-12". SEE GENERAL NOTE 1 BELOW.
- 4 EXISTING RECEPTACLES THIS AREA FED FROM CIRCUIT "PA-5". SEE GENERAL NOTE 1 BELOW.
- 5 NEW PANEL "PA". EXTEND EXISTING CIRCUITS INTO 12" X 12" X 36" N1 WIREWAY ABOVE CEILING AND PANEL TO TIE IN EXISTING CIRCUITS TO PANEL "PA".
- 6 NEW (3)#4/0 THHN/THWN CU, (1)#4 CU GND IN 2-1/2" CONDUIT FROM NEW 225AMP 2P BREAKER IN PANEL "MDP" TO NEW PANEL "PA" ROUTED ABOVE CEILING.
- 7 FURNISH AND INSTALL NEW 30AMP 2P 3W TWISTLOCK 250V OUTLET FOR NEW NETWORK/IT RACK. CONFIRM OUTLET AMPS, CONFIGURATION, AND ANY ADDITIONAL REQUIREMENTS WITH ISLE OF WIGHT CO. IT DEPARTMENT PRIOR TO ORDERING OF NEW ELECTRICAL PANEL AND ROUGH IN.

GENERAL WORK NOTES:

(THIS SHEET ONLY)

1. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING CIRCUITS PRIOR TO DISCONNECTING AND REMOVING LIGHTING, DEVICES, OR EQUIPMENT.





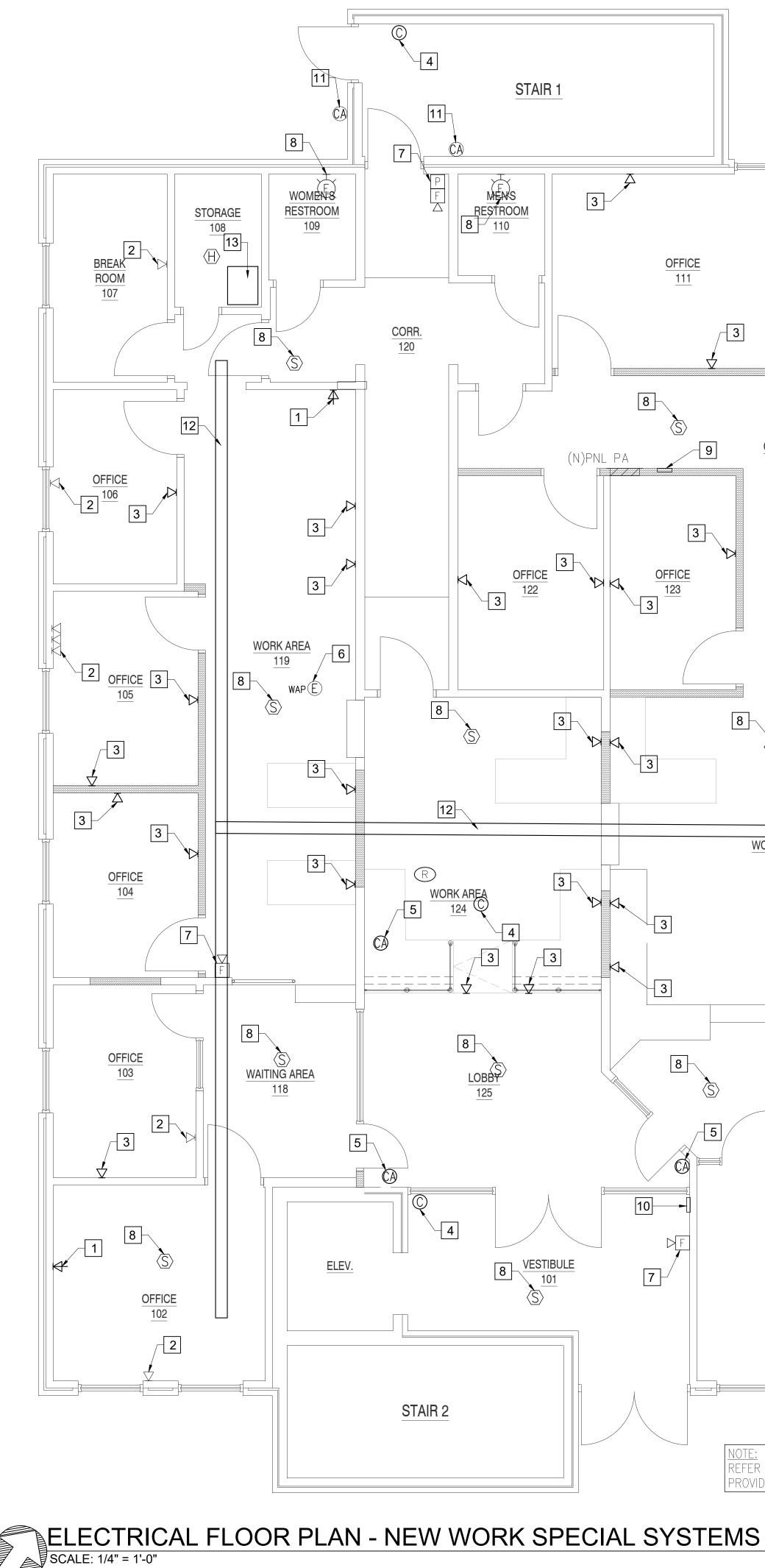
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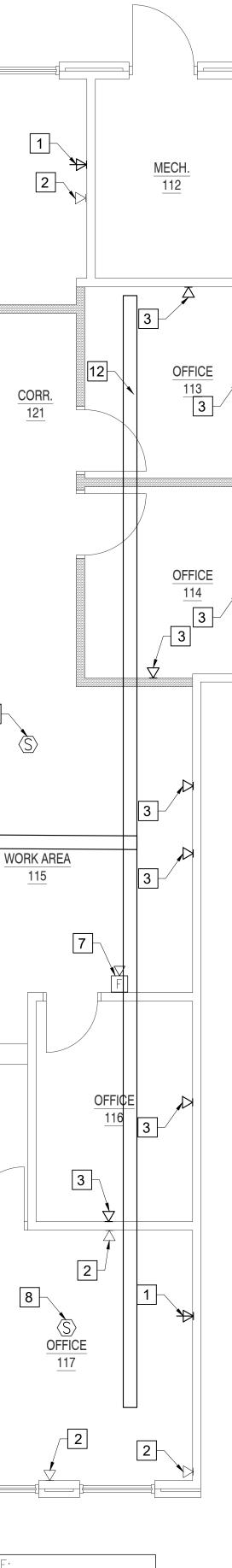
1/4" = 1'-0"

COASTAL ENGINEERING 2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 23456 Phone 757-563-9027 Fax 757-563-9028

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NOTE: REFER TO FURNITURE PLAN PROVIDED BY COUNTY.

NEW WORK NOTES:

- 1 NEW TV OUTLET MOUNTED AT 60" AFF UNLESS OTHERWISE NOTED. PROVIDE PASS & SEYMOUR #TV2MW OR APPROVED EQUAL.
- 2 EXISTING TELEPHONE/DATA JACK WITH NEW CABLING BY ISLE OF WIGHT CO. OIT DEPARTMENT.
- 3 NEW TELEPHONE/DATA JACK WITH (3) CABLES PER LOCATION. CONTRACTOR TO PROVIDE (1)3/4" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING AREA AND 4" SQUARE DEEP BOX. JACK AND CABLING FURNISHED AND INSTALLED BY ISLE OF WIGHT CO. IT DEPARTMENT. COORDINATE ALL LOCATIONS PRIOR TO ROUGH.
- 4 PROPOSED CAMERA LOCATION. ALL SECURITY EQUIPMENT, CABLING, AND INSTALLATION BY ISLE OF WIGHT CO. IT DEPT.
- 5 NEW CARD READER ACCESS. CONTRACTOR TO PROVIDE (1)3/4" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING AREA AND 4" SQUARE BOX. CARD READER DEVICE AND CABLING FURNISHED AND INSTALLED BY ISLE OF WIGHT CO. IT DEPARTMENT. COORDINATE ALL LOCATIONS PRIOR TO ROUGH.
- 6 EXISTING "WAP" WIRELESS ACCESS POINT
- 7 EXISTING FIRE ALARM DEVICE.
- 8 NEW FIRE ALARM DEVICE. PROVIDE COMPATIBLE MANUFACTURER TO MATCH EXISTING FIRE ALARM SYSTEM.
- 9 RELOCATED FIRE ALARM CONTROL PANEL(FACP). FACP SHALL REMAIN OPERATIONAL DURING REGULAR BUSINESS HOURS. RELOCATION SHALL BE DONE AFTER HOURS DURING A WEEKEND BETWEEN 5:00PM FRIDAY UNTIL 7:30AM MONDAY. COORDINATE WITH ISLE OF WIGHT CO. FACILITIES, ADMINISTRATION, AND OIT DEPARTMENTS. TEST FIRE ALARM SYSTEM PRIOR TO REMOVAL OF FIRE ALARM PANEL AND AFTER REINSTALLATION OF FIRE ALARM PANEL
- 10 EXISTING FIRE ALARM ANNUNCIATOR PANEL(FAAP)
- [11] EXISTING CARD READER.
- NEW 8"W X 4" DEEP ALUMINUM CABLE TRAY. FURNISH AND INSTALL CABLOFIL WIREMESH CABLE TRAY # EZ-CF105-200. ELECTROPLATED ZINC, ASTM B633 FINISH, CARBON STEEL ASTM A510 GRADE 1008 MATERIAL. OR APPROVED EQUAL. PROVIDE ALL HARDWARE, ACCESSORIES, BONDING, AND MISC. MATERIALS FOR A COMPLETE INSTALLATION. COORDINATE INSTALLATION WITH OTHER TRADES.
- 13 NEW NETWORK/IT RACK FURNISHED AND INSTALLED BY ISLE OF WIGHT IT DEPT. SEE POWER PLAN FOR POWER OUTLET REQUIREMENTS. PROVIDE #6 CU GND WIRE BACK TO MAIN SERVICE GROUND IN 3/4" CONDUIT.

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KICHARD M, KLEIN										
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REVISIONS:	NO: DATE:					рате: 06/09/22				
McPHERSON DESIGN GROUP 6371 Center Drive, Suite 100 Nortolk, Virginia 235024102 Phone (757) 965-2001 Nortolk, Virginia 235024102 None (757) 965-2001 STRUCTURAL ENGINEERS FIRST FLOOR RENOVATIONS TO THE COMMUNITY DEVELOPMENT DEPARTMENT None Name Phone Transmitter Structure None (757) 965-2001 Instructure FIRST FLOOR RENOVATIONS TO Non-mage-eng.com None Instructure FIRST FLOOR RENOVATIONS TO Non-mage-eng.com None Instructure FIRST FLOOR RENOVATIONS TO None Instructure Instructure None Instructure Instructure None Instructure Instructure None Instructure Instructure Instructure Instructure Instructure Instructure										
FLOOR PLAN - NEW WORK SPECIAL SYSTEMS										
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GRAPHIC SCALE

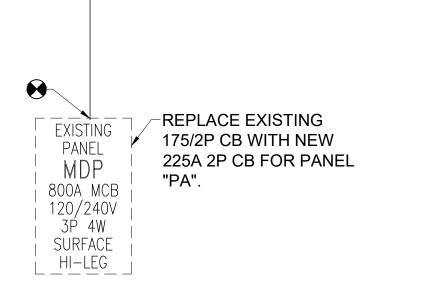
1/4" = 1'-0"

(NEW) PANELBOARD PA																
225A MLO, 240/120 VOLT, 1 PHASE, 3 W	'IRE, 10 k	KAIC MI	NIMUM,	FLUSH	MOUN	T										
	LOAD	(AMPS)	BKR	WIRE	GND	COND	CKT	PHASE	CKT	COND	GND	WIRE	BKR	LOAD ((AMPS)	
LOAD SERVED	Α	B	TRIP	SIZE	SIZE	SIZE	NO.	A B	NO.	SIZE	SIZE	SIZE	TRIP	Α	В	
RECEPTACLES	11.6		20/1P	12	12	1/2"	1		2	1/2"	12	12	20/1P	9.0		
RECEPTACLES		11.6	20/1P	12	12	1/2"	3		4	1/2"	12	12	20/1P		11.6	
*ASST.DIR. P&Z/ZONING RECEPTS.	12.0		20/1P	12	12	1/2"	5		6	1/2"	12	12	20/1P	10.0		
*PSC AREA RECEPTS.		9.0	20/1P	12	12	1/2"	7		8	1/2"	12	12	20/1P		11.6	
COPIER	8.0		20/1P	12	12	1/2"	9		10	1/2"	12	12	20/1P	9.0		
ELEVATOR PIT		5.0	20/1P	12	12	1/2"	11		12	1/2"	12	12	20/1P		15.0	
STORAGE/FILES LIGHTING	12.9		20/1P	12	12	1/2"	13		14	1/2"	12	12	20/1P	10.0		
HALLWAY/RESTROOM LIGHTING		11.6	20/1P	12	12	1/2"	15		16	1/2"	12	12	20/1P		9.6	
LOBBY/EMERGENCY LIGHTING	11.6		20/1P	12	12	1/2"	17		18	1/2"	12	12	20/1P	14.6		
OUTDOOR LIGHTING		9.1	20/1P	12	12	1/2"	19		20	1/2"	12	12	20/1P		6.0	
OUTDOOR LIGHTING	8.3		20/1P	12	12	1/2"	21		22	1/2"	12	12	20/1P	6.0		
IG RECEPTACLES		6.0	20/1P	12	12	1/2"	23		24	1/2"	12	12	20/1P		6.0	
IG RECEPTACLES	6.0		20/1P	12	12	1/2"	25		26	1/2"	12	12	20/1P	3.0		
OVER FILE CABINET RECEPTACLE		3.0	20/1P	12	12	1/2"	27		28	1/2"	12	12	20/1P		8.0	
SODA MACHINE	10.0		20/1P	12	12	1/2"	29		30	1/2"	12	12	20/1P	8.0		
SPARE			20/1P				31		32	1/2"	12	12	20/1P		6.0	
SPARE			20/1P				33		34	1/2"	12	12	20/1P	6.0		
COPIER		8.0	20/1P	12	12	1/2"	35		36	3/4"	10	10	30/2P		18.0	
							37		38					18.0		
							39		40							
							41		42							
TOTAL	80.4	63.3												93.6	91.8	
					TOTAL	CONNE	CTED	AMPS A	: 17 <mark>4</mark> .	0	B: 155.	1				

PROVIDE TYPE WRITTEN PANEL DIRECTORY. HAND WRITTEN NOT ACCEPTABLE. *-DENOTES EXISTING CIRCUIT WITH NEW LABEL

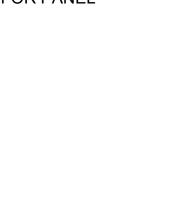
BOLD FONT INDICATES NEW CIRCUIT. ALL OTHER CIRCUITS ARE EXISTING AND TIED INTO

EXISTING PANEL IS SQUARE D TYPE NQOB. EXISTING CIRCUIT BREAKERS MAY BE REUSED IN NEW PANEL. EXISTING LOADS BASED ON EXISTING DRAWINGS/DESIGN



REMOVE EXISTING 175AMP 1PH SUB-FEEDER CONDUIT AND WIRE AND REPLACE WITH NEW (3)#4/0 CU, (1)#4CU IN 2-1/2" C TO NEW PANEL "PA" IN NEW LOCATION.

NEW PANEL PA 225A MLO 120/240V 1P 3W FLUSH 42KCT 10K



ELECTRICAL RISER DIAGRAM ____ NO SCALE

LOAD SERVED				
*CCD DIRECTOR RECEPT.				
RECEPTACLES				
RECEPTACLES				
RECEPTACLES				
*CC INSPECTIONS RECEPTS.				
*PE/ASST DIRECTOR RECEPTS.				
INSPECTIONS LIGHTING				
LIGHTING				
PUBLIC UTILITIES LIGHTING				
IG RECEPTACLES				
IG RECEPTACLES				
IG RECEPTACLES				
FIRE ALARM PANEL+				
LOAD SERVED				
FAX MACHINE				
COPIER				
COPIER				
NETWORK/IT RACK POWER				



1.a.	NERAL CONDITIONS WORK UNDER THIS DIVISION SHALL BE SUBJECT TO THE AIA GENERAL AND SPECIAL CONDITIONS.		5.a.b. INTERME 5.a.c. ELECTRI 5.a.d. FLEXIBLI 5.a.e. PLASTIC
2. SC 2.a.	THE WORK REQUIRED FOR THIS SECTION INCLUDES LABOR, MATERIALS, EQUIPMENT, APPURTENANCES, SERVICE AND SUPERVISION TO PROVIDE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS.	5.b.	JOIST IN MECHAN APPROVED BY TH ABOVE CEILINGS \$
3. SP 3.a.	ECIFICATIONS, CODES AND STANDARDS THE LATEST EFFECTIVE PUBLICATIONS OF THE FOLLOWING STANDARDS, CODES, ETC. FORM A PART OF THESE SPECIFICATIONS: 3.a.a. NATIONAL ELECTRICAL CODE (NEC)	5.c.	UP TO TWO INCHE
	3.a.b. STANDARD RULES OF THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS. 3.a.c. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	5.d.	MINIMUM SIZE CO BY THE NATIONAL
3.b.	3.a.d. VIRGINIA UNIFORM STATE BUILDING CODE 3.a.e. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) THIS CONTRACTOR SHALL GIVE REQUIRED NOTICES, OBTAIN NECESSARY PERMITS,	5.e.	RIGID CONDUIT FI EMT ABOVE SLAB FITTINGS SHALL BI
	AND PAY PERMIT FEES.	5.f.	FLEXIBLE CONDUI
4.a.	AWINGS THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT OF THE WORK. MINOR VARIATIONS IN LOCATION OF EQUIPMENT SHALL BE MADE UPON WRITTEN APPROVAL OF THE ARCHITECT AT NO ADDITIONAL CHARGE.		MOISTURE, OR WI HAVE PLASTIC CO BE STANDARD CONNECTORS SHA MINIMUM 18 INCHE
5. EQ 5.a.	UIPMENT STARTERS, CONTROLLERS, CONTROL TRANSFORMERS, RELAYS, CONTACTORS, ETC; SHALL BE PROVIDED UNDER THE DIVISION PROVIDING EQUIPMENT OTHERWISE NOTED.		OTHER EQUIPMEN OR SEMI-RECESSE
5.b.	POWER WIRING AND POWER CONNECTIONS TO EQUIPMENT SHALL BE PROVIDED UNDER "ELECTRICAL" UNLESS OTHERWISE INDICATED ON THE ELECTRICAL DRAWINGS.	5.g.	EXPOSED CONDU CONSTRUCTION A ACCORDANCE WIT THE ARCHITECT P
5.c.	WHEN SUBSTITUTED MOTORS AND/OR EQUIPMENT REQUIRES ELECTRICAL MODIFICATIONS, THE COST OF THE ELECTRICAL MODIFICATIONS AND COORDINATION SHALL BE INCLUDED UNDER THE DIVISION PROVIDING THE MOTOR AND/OR EQUIPMENT.	5.h.	CONDUIT SUPPOR OR PIPE STRAPS SURFACES WITH M
6. CO 6.a.	ORDINATION COOPERATE AND COORDINATE THE WORK OF THIS DIVISION WITH OTHER TRADES.	5.i.	OF TIE WIRE IS UN
6.b.	CONTRACTOR TO SUBMIT 6 SETS (OWNER WILL RETURN 3 SETS NOTED WITH ACTION TAKEN)SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER'S APPROVAL DOES NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND	0.1.	STUBS SHALL H TERMINATIONS O BUSHINGS.
	OPERATION. TERIAL AND EQUIPMENT	5.j.	CONDUITS AND (SEALED BY APPRO CLASSIFIED FIRE F
2.a.	 ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW, LISTED, AND LABELED BY AN APPROVED TESTING AGENCY. 2.a.a. INSTALL MATERIALS AND EQUIPMENT IN A FIRST CLASS AND WORKMANLIKE MANNER AND RUN CONCEALED THROUGHOUT THE BUILDING, EXCEPT AS INDICATED. 	5.k.	CONDUITS PASSIN BELOW GRADE AN SLEEVES IN THE C CONDUIT AND CAU ENTRANCE SEALS.
2.b. 2.c.	MATERIAL AND EQUIPMENT SHALL BE PROPERLY STORED AND PROTECTED AT THE PROJECT SITE. ELECTRONIC SCHEDULES OF MATERIALS AND EQUIPMENT PROPOSED FOR		SERIES AS APPL REQUIRED. CONDU SHALL BE PROVID SEALS FOR FOUND
	INSTALLATION SHALL BE SUBMITTED TO THE ARCHITECT WITHIN 30 DAYS AFTER AWARD OF THE CONTRACT. THE SCHEDULES SHALL INCLUDE CATALOG CUTS, DIAGRAMS AND SUCH OTHER DESCRIPTIVE DATA AND/OR SAMPLES AS MAY BE REQUIRED BY THE ARCHITECT. LIGHTING FIXTURE SUBMITTALS SHALL INCLUDE PHOTOMETRIC REPORTS BY INDEPENDENT TESTING LABORATORIES FOR EACH FIXTURE INDICATED BASED ON ITS PUBLISHED PROCEDURES.	6. RE 6.a.	CEPTACLE(WIRING I RECEPTACLE BOX KNOCKOUTS AS RECEPTACLE BOX DEEP. RECEPTAC SQUARE CORNER
2.d.	SUBMITTALS THAT DO NOT BEAR THE GENERAL CONTRACTORS STAMP OF APPROVAL THEREON WILL BE REJECTED WITHOUT REVIEW.	6.b.	RECEPTACLE BOX BE CAST AND PF
2.e.	CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN	6.c.	COVER. WHERE SEVERAL THE FEEDERS S
2.f.	AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES. EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.	7 \\\/	CHARACTERISTICS INFORMATION ON RING DEVICES
2.g.	THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN	7.a.	WIRING DEVICES S HUBBELL.
	FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS	7.b. 7.c.	DEVICE PLATES S ON UNFINISHED W DEVICES SHALL BE
3. SU	ARE FOUND.	8. DIS 8.a.	SCONNECT SWITCHE SWITCHES SHALL
3.a.	THE NAME OF A CERTAIN BRAND, MAKE, MANUFACTURER OF DEFINITE SPECIFICATION IS TO DENOTE THE QUALITY STANDARD OF ARTICLE DESIRED AS A BASIS OF DESIGN. SUBSTITUTION OF ANY OTHER BRAND, MAKE, OR MANUFACTURER, WHICH IN THE OPINION OF THE ENGINEER IS RECOGNIZED THE EQUAL OF THAT SPECIFIED, MAY BE	0.a.	NEMA TYPE "HD" U DISCONNECT SWI HAVE FULL COVER
2 h	ACCEPTED.	8.b.	FUSED SWITCHES SWITCHES SHALL
3.b.	WHERE THREE OR MORE MANUFACTURERS ARE SPECIFIED, THERE WILL BE NO SUBSTITUTIONS	8.c.	SWITCHES SHALL HAMMER. SWITCHES SHALL
4. RE 4.a.	CORD DRAWINGS UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT (1) ELECTRONIC, (1) CD COPY, AND (3) HARD COPIES OF AS-BUILT/MARKED UP DRAWINGS AND SKETCHES TO THE ARCHITECT.	8.d.	SWITCHES SHALL PROVIDE MISCEL STEEL ANGLES WH
5. CO 5.a.	NDUIT CONDUIT AND FITTINGS SHALL CONFORM TO THE FOLLOWING: 5.a.a. RIGID STEEL - ANSI C80.1	9. FU 9.a.	SES FUSES FOR PRO "FUSETRON" UL UNLESS OTHERWI

ВG

EDIATE METAL CONDUIT - UL 1242 RICAL METALLIC TUBING (EMT) - ANSI C80.3 E METAL CONDUIT - UL-1 CONDUIT (PVC) - NEMA TC-2 AND TC-3

BE RUN CONCEALED, EXCEPT CONDUIT MAY BE EXPOSED ABOVE NICAL ROOMS AND SPACES WITH EXPOSED CONSTRUCTION AS HE ARCHITECT. CONDUIT INDICATED CONCEALED IN WALLS AND SHALL BE THIN-WALL TYPE ELECTRICAL METALLIC TUBING FOR SIZES

IETAL CONDUIT SHALL BE PERMITTED IN LIEU OF RIGID WHERE CLE 345 OF THE NEC.

NDUIT SHALL BE ONE-HALF INCH WITH LARGER SIZES AS REQUIRED . ELECTRICAL CODE FOR NUMBER OF WIRES CONTAINED THEREIN.

ITTINGS SHALL BE THREADED, EXCEPT WHERE RIGID CHANGES TO FITTING MAY BE THREADLESS TYPE. ELECTRICAL METALLIC TUBE E GALVANIZED SET SCREW STEEL; CAST METAL NOT ACCEPTABLE.

SHALL BE GALVANIZED, SINGLE STRIP TYPE. IN AREAS SUBJECT TO HERE CALLED FOR ON THE DRAWINGS, FLEXIBLE CONDUIT SHALL VERING IN ACCORDANCE WITH NEC, ARTICLE 351-A. FITTINGS SHALL UL APPROVED WITH GROUND CONNECTOR. WATERTIGHT ALL BE USED WITH PLASTIC COVERED CONDUIT, FLEXIBLE CONDUIT, ES IN LENGTH, SHALL BE USED FOR CONNECTIONS TO MOTORS AND IT SUBJECT TO VIBRATION, AND FOR CONNECTIONS TO RECESSED ED FIXTURES.

ITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING AND SHALL BE SUPPORTED AS HEREINAFTER SPECIFIED AND IN TH NEC. THE METHODS OF INSTALLATION SHALL BE REVIEWED BY RIOR TO INSTALLATION.

TS SHALL BE APPROVED WALL BRACKETS, TRAPEZE, STRAP HANGER SECURED TO HOLLOW MASONRY WITH TOGGLE BOLTS; TO METAL MACHINE SCREWS; AND TO WOOD WITH WOOD SCREWS. ANY FORM ACCEPTABLE.

IATIONS ONE AND ONE-QUARTER INCH AND LARGER AND CONDUIT NE INCH AND SMALLER SHALL HAVE O.Z. TYPE "A" INSULATING

CABLES PASSING THROUGH FIRE RATED ASSEMBLIES SHALL BE IVED METHODS OR BY INSTALLING O.Z. FIRE-SEALS TO MAINTAIN "UL" RATING.

NG THROUGH EXTERIOR CONCRETE WALLS, FLOORS OR FOOTINGS ND SLAB ON GRADE SHALL BE MADE WATERTIGHT. PROVIDE PIPE CONCRETE WITH ONE-HALF INCH MINIMUM CLEARANCE AROUND THE JLK WITH ASKUM AND SEALANT OR PROVIDE O.Z. TYPE "FSK" CONDUIT PROVIDE CONDUIT SEALING BUSHINGS O.Z. TYPE "CSB" OR "CSBG" ICABLE AND PROVIDE WITH CABINET ADAPTER PLATES WHEN UITS PASSING THROUGH EXTERIOR CONCRETE WALLS BELOW GRADE DED WITH HYDRAULIC CONCRETE OR APPROVED POLYURETHANE DATION PIPE PENETRATIONS

DEVICE) BOXES

ES SHALL BE HOT DIPPED GALVANIZED STEEL TYPE WITH STANDARD REQUIRED FOR CONDUIT TERMINATION. MINIMUM SIZE OF X SHALL BE FOUR INCHES SQUARE, ONE AND ONE-QUARTER INCHES ACLE BOXES FOR EXPOSED TILE AND BLOCK SHALL BE PROVIDED WITH RED TILE RING, SIZE AS REQUIRED.

ES OCCURRING IN FINISHED OUTSIDE WALLS AND WET AREAS SHALL ROVIDED WITH GASKETS BETWEEN BOX AND WATERPROOF IN-USE

FEEDERS PASS THROUGH A COMMON PULL BOX OR JUNCTION BOX, SHALL BE TAGGED TO INDICATE CLEARLY THEIR ELECTRICAL S, CIRCUIT NUMBER, AND PANEL DESIGNATION. PAINT SAME COVER OF THE BOX.

SHALL BE AS MANUFACTURED BY LEVITON, PASS AND SEYMOUR, OR

HALL BE SMOOTH THERMOPLASTIC ON FINISHED WALLS AND METAL VALLS AS REQUIRED. COLOR SHALL MATCH DEVICE COLOR.

E IVORY U.O.N.

NEMA TYPE "GD" OR "HD" AS REQUIRED. FUSED SWITCHES SHALL BE UNLESS OTHERWISE INDICATED, WITH CLASS "R" FUSE CLIPS. MAIN TCHES AND SWITCHES RATED 600 VOLTS SHALL BE TYPE "HD" AND INTERLOCKS AND QUICK-MAKE, QUICK-BREAK MECHANISM.

SHALL BE PROVIDED COMPLETE WITH FUSES.

BE SQUARE D, GENERAL ELECTRIC, SIEMENS/I.T.E., OR CUTLER

BE SECURELY MOUNTED TO WALL, STRUCTURE, OR EQUIPMENT. LANEOUS ACCESSORIES FOR MOUNTING SWITCHES, INCLUDING HERE REQUIRED.

TECTION OF MECHANICAL AND PLUMBING EQUIPMENT SHALL BE CLASS "RK5" SIZED PER MANUFACTURERS RECOMMENDATION, SE INDICATED.

10. WIRE AND CABLE

- 10.a. WIRE AND CABLE SHALL BE INSTALLED IN CONDUIT. BRANCH CIRCUIT POWER AND LIGHTING WITHIN WALLS INSTALLED PER NEC CODE ARTICLE 330.
- 10.b. WIRE AND CABLE SHALL BE GENERAL ELECTRIC, ANACON OR PHELPS DODGE.
- 10.c. WIRE AND CABLE SHALL BE COPPER 600 VOLT INSULATION "THW", "THWN" OR "THHN" AS APPLICABLE, UNLESS DRAWINGS.
- 10.d. BRANCH CIRCUIT WIRING AND WIRING IN FLUORESCEN "THHN".
- 10.e. WIRES NO. 10 AND 12 AWG SHALL BE CONNECTED WITH NUT" OR "WING-NUT" CONNECTORS MANUFACTURED APPROVED EQUAL. CONNECTORS SHALL BE RATED 600 AND LARGER SHALL BE JOINED OR TERMINATED WIT CONNECTORS.

10.f. WIRE SHALL BE COLOR CODED AS FOLLOWS:

- 10.f.a. 120/240 VOLT SYSTEM 10.f.a. PHASE A - BLACK
- 10.f.b. PHASE B RED
- 10.f.c. NEUTRAL WHITE 10.f.d. GROUND - GREEN
- 10.g. ELECTRICAL DESIGNS ARE BASED ON COPPER WIRE A AND CABLE SHALL NOT BE PERMITTED.)

11. LIGHTING FIXTURES

- 11.a. LIGHTING FIXTURES SHALL BE PROVIDED COMPLETE WITH HARDWARE AND ACCESSORIES.
- 11.b. WHERE RECESSED LIGHTING FIXTURES ARE INDICATED, RESPONSIBLE FOR COORDINATING THE TYPE FIXTURES BEING INSTALLED. THIS SHALL INCLUDE CHANGES RESU ITEMS, CHANGE ORDERS, ETC.
- 11.c. SURFACE MOUNTED LIGHTING FIXTURES SHALL BE M CEILING CONSTRUCTION. LIGHTING FIXTURES MOUNTE SHALL ALSO BE MOUNTED INDEPENDENT OF CEILIN RECESSED FLUORESCENT LIGHTING FIXTURES OCCUR I SPLINE CEILINGS, THE ELECTRICAL CONTRACTOR S ACCORDANCE WITH ARTICLE 410-16(C) OF NEC AND HAV INSTALL ADDITIONAL SUPPORTING HANGERS WHERE FIX FIXTURES INDEPENDENTLY OF CEILING.
- 11.d. FIXTURES SUPPORTED INDEPENDENTLY OF CEILING CHANNEL, THREADED RODS AND NUTS, OR AS APPROVED
- 11.e. INSULATION SHALL NOT BE PLACED ON TOP OF RECESSE
- 11.h. LED FIXTURES, DRIVERS, AND COMPONENTS SHALL MEET DIMMABLE 1-10VDC. POWER FACTOR OF MINIMUM .90 PF.

12. CUTTING AND PATCHING

12.a. CUTTING, DRILLING, AND CHANNELING REQUIRED FOR UNDER THIS SECTION BY SKILLED MECHANICS OF TRADE

13. EQUIPMENT MARKING AND PAINTING

- 13.a. SAFETY SWITCHES, CABINETS, ETC., SHALL BE PRC ATTACHED (ADHESIVES NOT ACCEPTABLE) ENGRAVED BA TO INDICATE EQUIPMENT OR CIRCUIT CONTROLLED.
- 13.b. EXPOSED CONDUIT, SUPPORTS, HANGERS, AND UNF RECEIVE A MINIMUM OF TWO COATS OF PAINT SUITAB COLORS SHALL BE AS SELECTED OR APPROVED BY THE A

14. ACCESS DOORS

14.a. THIS CONTRACTOR SHALL FURNISH. AND THE GENERAL STEEL ACCESS DOORS WHERE REQUIRED, STYLE NECESS PLACED. SUBMIT SHOP DRAWINGS OF PROPOSED MA EXACT LOCATIONS TO THE ARCHITECT FOR APPROVAL.

15. SUBSTANTIAL COMPLETION

- 15.a. UPON COMPLETION OF THE ENTIRE WORK, THE CONTRAC TESTS AS REQUIRED BY THE ARCHITECT. THE ARCHITEC NOTICE BEFORE TESTS ARE MADE. THE CONTRA ARCHITECT A CERTIFICATE OF APPROVAL FROM THE LO HAVING JURISDICTION.
- 16. WARRANTY
- 16.a. CONTRACTOR SHALL FURNISH WRITTEN WARRAN GUARANTEED BY THE GENERAL CONTRACTOR, STATING UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 M ACCEPTANCE. DEFECTS DEVELOPING DURING THAT PE WITHOUT COST TO THE OWNER. LED FIXTURES, DRIVER YEAR WARRANTY.

17. POWER OUTAGE/FIRE ALARM PANEL RELOCATION.

17.a. THE CONTRACTOR SHALL PLAN AND COORDINATE THE OF NEW PANEL "PA", CIRCUITING, AND FIRE ALARM WEEKEND "OFF-BUSINESS" HOURS TIME. THIS WORK SH OF WIGHT CO. TWO WEEKS PRIOR TO WORK PE ACCOMPLISHED AND COMPLETE FROM A FRIDAY OPERATIONAL BY 7:30AM THE FOLLOWING MONDAY AFTER

MC CABLING ALLOWED FOR AND ABOVE CEILINGS WHERE	
ONDA, ROME, GENERAL CABLE,	
ON, MINIMUM SIZE NO. 12, TYPE 6 OTHERWISE INDICATED ON	
NT FIXTURES SHALL BE TYPE	
TH COIL SPRING INSERT "WIRE- D BY IDEAL INDUSTRIES OR VOLTS. COPPER WIRES NO. 8 TH PRESSURE TYPE COPPER	
AND CABLE. (ALUMINUM WIRE	
TH LAMPS, DRIVERS, MOUNTING	
THIS CONTRACTOR SHALL BE S WITH THE ACTUAL CEILING ULTING FROM ALTERNATE BID	
MOUNTED INDEPENDENT OF ED IN OR ON PLASTER CEILING NG CONSTRUCTION. WHERE IN LAY-IN TILE OR CONCEALED SHALL INSTALL FIXTURES IN VE THE CEILING CONTRACTOR IXTURES OCCUR, OR SUPPORT	
SHALL BE HUNG BY STEEL D.	
ED LIGHTING FIXTURES.	
T IP 67 , UL1310, UL CLASS 2, BE	
R THIS WORK SHALL BE DONE E INVOLVED.	
OVIDED WITH PERMANENTLY AKELITE DESIGNATION PLATES	
IFINISHED EQUIPMENT SHALL BLE FOR SERVICE INTENDED. ARCHITECT.	
CONTRACTOR SHALL INSTALL SSARY FOR SURFACE IN WHICH IATERIAL, INSTALLATION AND	
ACTOR SHALL PERFORM SUCH CT SHALL BE GIVEN 48 HOURS ACTOR SHALL FURNISH THE OCAL INSPECTION AUTHORITY	
NTY, COUNTERSIGNED, AND G THAT THE WORK EXECUTED BE FREE FROM DEFECTS OF MONTHS FROM DATE OF FINAL PERIOD SHALL BE CORRECTED RS, LAMPS SHALL CARRY A (5)	
E REMOVAL AND INSTALLATION PANEL RELOCATION DURING HALL BE SCHEDULE WITH ISLE PERFORMED AND SHALL BE AFTER 5:00PM AND BACK ER WEEKEND WORK.	

