I2C FIRST FLOOR CFR BUILD OUT

ARCHITECT
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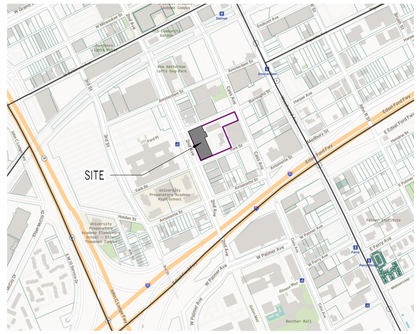
CONTRACTOR
TBD



PROJECT INFORMATION

WSU PROJECT NUMBER	212-355739
OWNER:	WAYNE STATE UNIVERSTIY
ADDRESS:	6000 SECOND AVENUE DETROIT, MI 48202
PARCEL ID NUMBER:	02002433
REGULATING BODY:	WAYNE STATE UNIVERSITY
ZONING:	SD2

BUILDING INFORMATION

FIRE PROTECTION	SPRINKLERED
NUMBER OF STORIES	1 (FIRST FLOOR)
PROJECT AREA:	2,463 SF
BUILDING AREA	41,835 SF
ALTERATION TYPE	ALT 2
ALT 2 WORK AREA	2,463 SF (5.9% BUILDING AREA)
COMPLIANCE METHOD	WORK AREA COMPLIANCE METHOD - MRCEB 301.1.2

SHEET LIST

#	SHEET NAME	BID SET (3/13/23)
T-000	TITLE SHEET	•
G-000	CODE REVIEW	•
G-001	GENERAL NOTES	•
G-002	ACCESSIBILITY AND STANDARDS	•
D-100	DEMO PLANS	•
A-001	SCHEDULES + WALL SECTION	•
A-101	FIRST FLOOR PLAN + FURNITURE PLAN	•
A-201	FIRST FLOOR RCP + POWER PLAN	•
A-600	INTERIOR ELEVATIONS	•
A-601	INTERIOR ELEVATIONS	•
M-101	VENTILATION SCHEDULE + MECH DETAIL	•
E-001	ELECTRICAL SYMBOLS, & NOTES	•
E-002	ELECTRICAL SPECIFICATION	•
E-003	ELECTRICAL DETAILS	•
E-101	FIRST FLOOR PLAN + ELECT DEMOLITION	•
E-201	FIRST FLOOR PLAN + ELECTRICAL	•

ALTERNATE PRICING TO BE PROVIDED:
1. DEDUCT ALTERNATE TO REMOVE WOOD VENEER PANELING ON OPEN OFFICE WALLS SHOWN IN ELEVATIONS 3/A-600, 4/A-600, AND 1/A-601. PAINT WALLS WITH PNT-1 INSTEAD.
2. DEDUCT ALTERNATE TO REMOVE WOOD VENEER PANELING ON ENTRY WALSL SHOWN IN ELEVATIONS 1/A-600, 2/A-600. PAINT WALLS WITH PNT-1 INSTEAD.
3. DEDUCT ALTERNATE TO REMOVE BULLETIN BOARD SHOWN IN ELEVATION 1/A-601 FROM SCOPE.
4. DEDUCT ALTERNATE TO REMOVE GRID OF (9) PENDANT LIGHTS IN ROOM 100 SHOWN ON A-201 FROM SCOPE. PROVIDE LABOR COST TO INSTALL (2) NEW FIXTURES IN EXISTING LIGHTING J-BOXES SHOWN ON D-100.

CODE COMPLIANCE

THE PROPOSED CONSTRUCTION IS IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL ORDINANCES

THE CONSTRUCTION SHOWN ON THIS DOCUMENT DOES NOT INFRINGE ON THE EXISTING LIFE SAFETY FOR THIS BUILDING. PERFORM ALL WORK IN ACCORDANCE WITH BUILDING CODES, LAWS AND ORDINANCES HAVING JURISDICTION ON THE PROJECT. ORDINANCES HAVING JURISDICTION ON THE PROJECT INCLUDE BUT ARE NOT LIMITED TO:

2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS
2015 MICHIGAN BUILDING CODE
2015 MICHIGAN MECHANICAL CODE
2018 MICHIGAN PLUMBING CODE
2017 MICHIGAN ELECTRICAL CODE
2015 MICHIGAN ENERGY CODE
2009 ICC/ANSI + MICHIGAN BARRIER FREE CODE
2015 NFPA 101 LIFE SAFETY CODE
2013 ANSI/ASHRAE/IES 90.1
2009 ICC A117.1

OCCUPANCY

CURRENT USE GROUP	B - BUSINESS
PROPOSED USE GROUP	B - BUSINESS
OCCUPANT LOAD	28 OCCUPANTS (AREAS FILED UNDER PERMIT) SEE SHEET G-000

SCOPE OF WORK

RENOVATION OF EXISTING OFFICE SUITE INTO NEW OFFICE SUITE FOR THE WSU CORPORATE AND FOUNDATION RELATIONS AND OFFICE OF BUSINESS INNOVATION TEAMS. SCOPE OF WORK INCLUDES DIVIDING AN EXISITNG KITCHETTE INTO TWO (2) PHONE BOOTHS AND ONE (1) SMALLER KITCHENETTE. CHANGES TO INTERIOR FINISHES INCLUDES ADDING WOOD VENEER WALL PANELING, NEW PAINT, AND NEW CARPET TILE. NO CHANGES TO EXISTING PLUMBING WILL BE REQUIRED. CHANGES TO EXISTING HVAC, ELECTRICAL AND LIGHTING, FIRE ALARM AND FIRE SUPPRESSION IS INCLUDED IN THIS SCOPE.

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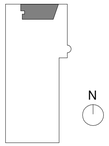
KEY PLAN



I2C FIRST FLOOR
CFR BUILD OUT
6000 SECOND ST
DETROIT MICHIGAN 48202

NO.	ISSUE/REV.	DATE
	BID SET	03/13/2023

TITLE SHEET

T-000

OCCUPANCY LOAD

#	ROOM NAME	OCCUPANCY	AREA	LOAD FACTOR	OCC. LOAD
100	ENTRY	BUSINESS	408 SF	100 SF	5
101	OFFICE	BUSINESS	144 SF	100 SF	2
102	OFFICE	BUSINESS	183 SF	100 SF	2
103	OFFICE	BUSINESS	147 SF	100 SF	2
104	OPEN OFFICE	BUSINESS	1398 SF	100 SF	14
105	PHONE BOOTH	BUSINESS	52 SF	100 SF	1
106	PHONE BOOTH	BUSINESS	52 SF	100 SF	1
107	KITCHENETTE	BUSINESS	80 SF	100 SF	1
			2463 SF		28

CODE REVIEW: CONSTRUCTION TYPE & FIRE RESISTANCE

FIRE SEPARATION REQUIREMENTS

SINGLE OCCUPANCY, NO SEPARATION NEEDED

INTERIOR FINISHES

WALL & CEILING FINISHES FLAME SPREAD (MBC TABLE 803.11)	CLASS
VERTICAL EXITS & PASSAGEWAYS	B
CORRIDORS & ENCLOSURES	C
ROOMS AND ENCLOSED SPACES	C

CODE REVIEW: FIRE PROTECTION

PORTABLE FIRE EXTINGUISHERS (MBC SEC. 906.1)	COMPLIANCE
IN GROUP B, PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:	
WITHIN 30' OF COMMERCIAL COOKING EQUIPMENT	N/A
IN AREAS WHERE COMBUSTIBLE LIQUIDS ARE STORED	N/A
ON EACH FLOOR OF STRUCTURES UNDER CONSTRUCTION	COMPLIES

FIRE ALARM AND DETECTION SYSTEMS (MBC SEC. 907.2.1)	COMPLIANCE
IN GROUP B. FIRE ALARM SHALL BE INSTALLED WHERE OCC. LOAD ≥ 500	EXISTING / COMPLIES

CODE REVIEW: EGRESS

EGRESS REQUIREMENTS	REQUIRED	COMPLIANCE
EXITS REQUIRED (MRCEB SEC 805.4.1.1)	2	2 - COMPLIES
DOOR SWING (MRCEB SEC 805.4.2)	N/A	N/A
PANIC HARDWARE REQUIRED (MRCEB SEC 805.4.4)	NO	N - COMPLIES

EXIT ACCESS DISTANCE	REQUIRED	COMPLIANCE
MAX. COMMON PATH OF TRAVEL (MBC TABLE 1006.2.1)	100'	COMPLIES
MAXIMUM TRAVEL DISTANCE(MBC TABLE 1017.2)	300' (S)	COMPLIES
DEAD END CORRIDOR LENGTH (MRCEB SEC 805.6)	35'	COMPLIES
TRAVEL DIST. STORIES W/ ONE EXIT (MBC TABLE 1006.3.2(2))	75'	N/A

EGRESS WIDTH	REQUIRED	COMPLIANCE
STAIRWAYS @ 0.3"/OCC (MBC SEC. 1005.3.2)	8.4"	N/A
DOORS @ 0.2"/OCC (MBC SEC. 1005.3.2)	4.2"	72" - COMPLIES

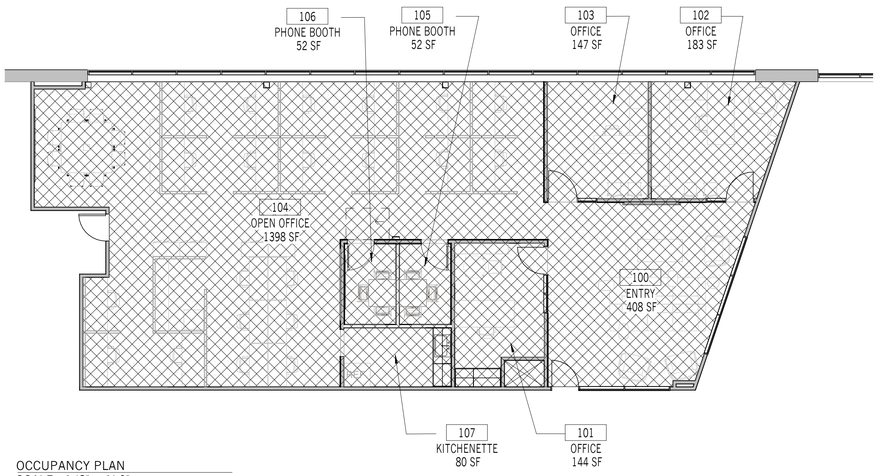
DISTANCE BETWEEN EXITS (MBC SEC. 1007.1)

1/2 OF THE MAXIMUM DIAGONAL DIMENSION	86'-9" / 2 = 43'-4.5"	54'-0" - COMPLIES

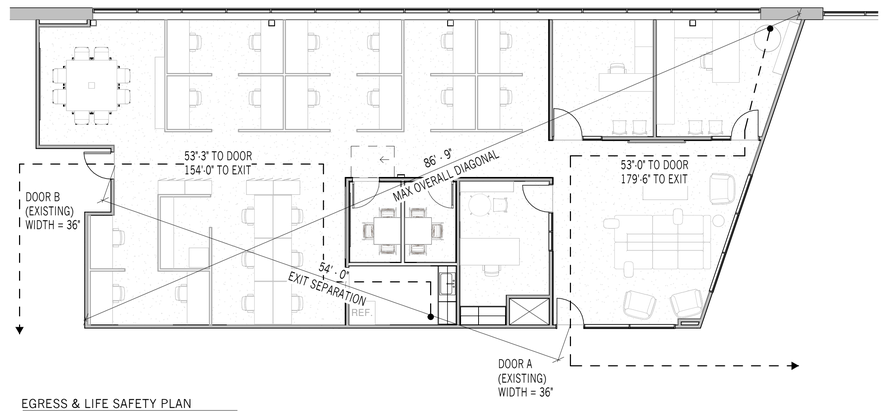
EGRESS THROUGH INTERVENING SPACES

PER MBC SECTION 1016.2 - 2. EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREAS AND THE AREA SERVED ARE ACCESSORY TO ONE OR THE OTHER, ARE NOT A GROUP H OCCUPANCY AND PROVIDE A DISCERNIBLE PATH OF EGRESS TRAVEL TO AN EXIT.

COMPLIES



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



1 EGRESS & LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"

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KEY PLAN

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6000 SECOND ST
DETROIT MICHIGAN 48202

NO.	ISSUE/REV.	DATE
	BID SET	03/13/2023

STATE OF MICHIGAN
ELISE DECHARD
ARCHITECT
No. 1301068801
LICENSED ARCHITECT

CODE REVIEW

G-000

MATERIAL KEY

- EXISTING WALL TO REMAIN
- NEW WALL CONSTRUCTION
- CAST IN PLACE CONCRETE
- CONCRETE MASONRY UNIT (CMU)
- BRICK MASONRY
- CRUSHED STONE
- STEEL
- ALUMINUM
- RIGID INSULATION
- DRYWALL / PLASTER
- EARTH / SOIL
- PLYWOOD
- WOOD
- WOOD - DIMENSIONAL LUMBER
- WOOD - BLOCKING
- BATT INSULATION
- SPRAY FOAM INSULATION
- DEMO WALL

DRAWING SYMBOL KEY

- 101 / ROOM NAME / ## SF — ROOM TAG
- 1-01 — DOOR TAG
- 01 — WINDOW TAG
- A — WALL TYPE
- P-01 — PLUMBING/EQUIP TAG
- A-301 (1) — EXTERIOR ELEVATION: DWG NUMBER / SHEET NUMBER
- A-801 (1, 2, 3, 4) — INTERIOR ELEVATION(S)
- A-400 (1) — SECTION: DWG NUMBER / SHEET NUMBER
- A-501 (1) — DETAIL CALL OUT

F	FLOOR
W	WALL
C	CEILING
B	BASE
T	TRIM
CR	CROWN
MW	MILLWORK
UPH	UPHOLSTERY

FINISH TAG

- 1 — REVISION TAG
- 1 — STRUCTURAL GRID LINE
- LANDING EL: 0'-0" — ELEVATION MARKER
- LOT LINE
- SETBACK
- ONE HOUR WALL
- TWO HOUR WALL

POWER & DATA KEY

SYMBOL	DESCRIPTION
	DUPLEX
	DUPLEX - SPECIFIC MOUNTING HT.
GFCI	DUPLEX - GFCI
WP	DUPLEX - WATERPROOF
S	DUPLEX - SWITCHED
E	DENOTES EXISTING
	QUADPLEX
	DUPLEX IN FLOOR / COUNTER
	DUPLEX IN CEILING
$OS	SWITCH
$D	DIMMER SWITCH
$3	THREE-WAY SWITCH
$3D	THREE-WAY DIMMER SWITCH
$J	JAMB SWITCH
$OCC	SWITCH WITH OCC. SENSOR
	TELEPHONE
	DATA
	TELEPHONE & DATA
TV	TELEVISION
S	SMOKE DETECTOR
C	CARBON MONOXIDE DETECTOR
S	SPEAKER LOCATION
S	SPEAKER INPUT
	CAMERA

MECHANICAL KEY

SYMBOL	DESCRIPTION
	EXHAUST FAN
	FLOOR/CLNG SUPPLY REGISTER
	FLOOR/CLNG RETURN GRILLE
	WALL/HORIZ. SUPPLY REGISTER
	WALL/HORIZ. RETURN REGISTER
	CEILING GRID SUPPLY REGISTER
	CEILING GRID RETURN GRILLE
	ROUND SUPPLY REGISTER

LIGHTING KEY

SYMBOL	DESCRIPTION
	RECESSED FIXTURE
	WALL MOUNTED SCONCE
	PENDANT FIXTURE
	FLUSH MOUNT FIXTURE
	LED STRIP LIGHT
	TRACK LIGHT
	LINEAR LENSED FIXTURE
	TROFFER FIXTURE
M	MOTION SENSOR FLOOD LIGHT
	EXTERIOR FLOOD LIGHT
W	DENOTES WET-RATED FIXTURE
X / X EMER	DENOTES EXISTING FIXTURES
	CEILING FAN
RE	REC. LIGHT VENT FAN COMBO

LIFE SAFETY KEY

SYMBOL	DESCRIPTION
	EXIT SIGN W/ ONE LIGHT
	EXIT SIGN W/ DIR. ARROW
	EXIT SIGN W/ TWO LIGHTS
	EXIT SIGN W/ EMERGENCY LTG
	EMERGENCY LIGHTING
RE	PORTABLE FIRE EXTINGUISHER

PLUMBING KEY

SYMBOL	DESCRIPTION
	COLD WATER
	HOT WATER
	DRAIN
	VENT
FD	FLOOR DRAIN
RD	ROOF DRAIN

GENERAL NOTES

1. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, INCIDENTALS, AND ANY OTHER ITEMS REQUIRED FOR THE COMPLETION OF THE WORK AS SHOWN IN THE CONTRACT DOCUMENTS, UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS, AND ANY OTHER APPLICABLE REGULATIONS INCLUDING FIRE DEPARTMENT REGULATIONS, UTILITY COMPANY REQUIREMENTS, AND BEST TRADE PRACTICES.
3. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL FILE ALL REQUIRED CERTIFICATES OF INSURANCE, OBTAIN ALL REQUIRED PERMITS, AND PAY ALL FEES REQUIRED BY GOVERNING AGENCIES.
4. NOTIFY ARCHITECT FOR CLARIFICATION IN CASE OF ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS IN THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS. AN ADDENDUM TO THE CONTRACT DOCUMENTS WILL BE PROVIDED AS NECESSARY.
5. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS SHOWN ON PLANS AT THE JOB SITE BEFORE COMMENCING ANY WORK, AND SHALL REPORT ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS TO THE ARCHITECT.
6. DIMENSIONING RULES:
   - 6.1. DIMENSIONS ARE TAKEN FROM FACE OF FINISHED SURFACE TO FACE OF FINISHES SURFACE, UNLESS OTHERWISE NOTED.
   - 6.2. DIMENSIONS MARKED "VERIFY", "VERIFY IN FIELD" OR "VIF" SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND DISCUSSED WITH THE ARCHITECT IF DISCREPANCIES ARISE.
   - 6.3. DIMENSIONS MARKED "CLEAR" OR "CLR" OR "HOLD" MUST BE PRECISELY MAINTAINED
   - 6.4. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL BY ARCHITECT UNLESS MARKED "+/-"
   - 6.5. DO NOT SCALE DRAWINGS. NOTIFY ARCHITECT FOR CLARIFICATION IF WRITTEN DIMENSION IS NOT SHOWN IN DRAWINGS.
7. CONTRACTOR SHALL LAY OUT THEIR OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES.
8. ABBREVIATIONS ON THE DRAWINGS ARE AS NOTED IN THE KEY. NOTIFY ARCHITECT OF ANY ABBREVIATIONS IN QUESTION.
9. MAINTAIN A FREE AND SAFE PASSAGE TO AND FROM CONSTRUCTION AREA AND ADJACENT BUILDING AREAS AT ALL TIME. REQUIRED EXITS SHOULD NOT BE BLOCKED AT ANY TIME.
10. SUBMIT SHOP DRAWINGS, MOCK-UPS, SAMPLES, AND OTHER REQUIRED SUBMITTALS IN A TIMELY FASHION AND ALLOW ARCHITECT SUFFICIENT TIME, MINIMUM OF (5) WORKING DAYS, FOR REVIEW PRIOR TO FABRICATION OR ORDER PLACEMENT.

DEMOLITION NOTES

1. DEMOLITION SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES, ORDINANCES, AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY, AND ENVIRONMENTAL PROTECTION.
2. ALL EXISTING WALLS, GLAZING, AND OTHER WORK TO REMAIN SHALL BE FULLY PROTECTED FROM DAMAGE PROVIDE BRACING OR SHORING AS REQUIRED TO SUPPORT THE STRUCTURE DURING DEMOLITION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DAMAGE AND SHALL MAKE REQUIRED REPAIRS WITHOUT ADDITIONAL COST TO THE OWNER. REPAIR DAMAGED SURFACES TO MATCH ADJACENT SURFACES.
3. COORDINATE DEMOLITION REQUIRED TO PERFORM NEW WORK WITH CONTRACT DOCUMENTS. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
4. REMOVE ABANDONED HVAC EQUIPMENT, DUCTWORK, ELECTRICAL, AND PLUMBING BACK TO THEIR PRIMARY SOURCE OR AS DIRECTED. DISCONNECT, CAP, AND IDENTIFY ALL UTILITIES IN AREAS OF DEMOLITION. MAINTAIN UTILITIES TO ALL OCCUPIED AREAS OF THE BUILDING AND COORDINATE TEMPORARY DISRUPTION WITH OWNER AND ANY OTHER AFFECTED PARTIES.
5. CAREFULLY REMOVE, PROTECT, AND STORE FOR REINSTALLATION OR SALVAGE ALL: LIGHT FIXTURES, PLUMBING FIXTURES, DOORS, FIRE SAFETY & EMERGENCY FIXTURES.
6. PROVIDE ENCLOSURE AND PROTECTION AS REQUIRED TO CONTAIN SPREAD OF ALL DUST, FUMES, ETC. PRODUCED DURING DEMOLITION AND CONSTRUCTION.
7. REMOVE AND LEGALLY DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OR CONSTRUCTION. IN OCCUPIED AREAS, CLEAN AND DISPOSE OF MATERIALS DAILY.
8. REMOVE TOOLS AND EQUIPMENT FROM SITE UPON COMPLETION OF WORK. LEAVE AREAS AND SITE BROOM SWEPT, ORDERLY, AND IN CONDITION ACCEPTABLE FOR CONSTRUCTION.

PLAN NOTES

1. LAYOUT PARTITIONS AS NOTED ON DRAWING. CUT AND FIT COMPONENTS OF EXISTING WORK AS REQUIRED TO INSTALL NEW WORK. ALL NEW FINISHES ARE TO ALIGN FLUSH WITH EXISTING FINISHES WITHOUT EVIDENCE OF ADDITION. WHERE NEW GYPSUM BOARD ALIGNS WITH EXISTING PLASTER. ALIGN THE PARTITION STUD TO CREATE FLUSH SURFACE.
2. TYPICAL DETAILS ARE KEYED AND NOTED "TYPICAL" AND ARE USUALLY REPRESENTATIVE OF TYPICAL CONDITIONS THROUGHOUT. IN CASE OF QUESTION OR DISCREPANCY, NOTIFY ARCHITECT.
3. PROVIDE EXTRA STUD FOR SWITCH OR POWER OUTLETS AS REQUIRED. REINFORCE DOOR AND WINDOW JAMBS WITH EXTRA STUD AS REQUIRED.
4. PROVIDE FIRE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FIRE RATED ASSEMBLIES.
5. ALL FIRE RATED DOORS AND WINDOWS SHALL BE LABELED AS REQUIRED BY CODE. TEMPERED GLASS TO BE INSTALLED WITH MANUFACTURER'S SEAL IN BOTTOM CORNER.

FINISH NOTES

1. FINISHES SHALL BE CONTINUOUS THROUGHOUT UNLESS OTHERWISE NOTED. APPLY FINISHES AND COVERINGS SO SURFACE IS DIVIDED WITH A MINIMUM NUMBER OF SEAMS AND EQUAL WIDTH PANELS, UNLESS OTHERWISE NOTED.
2. ALL FINISH MATERIALS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS AND ALL APPLICABLE CODES AND REGULATIONS.
3. PROVIDE LEVELING COMPOUND AS REQUIRED SO THAT FLOORING TRANSITIONS ARE SMOOTH FROM ONE SURFACE TO THE NEXT. FEATHER TRANSITIONS AT 1" PER 20" MAXIMUM. ALL TRANSITIONS BETWEEN FLOOR FINISHES TO BE LOCATED DIRECTLY UNDER CENTER OF DOOR, UNLESS OTHERWISE NOTED. PROVIDE TRANSITION STRIPS AS REQUIRED, COORDINATE FINISH & LOCATION WITH ARCHITECT.

RCP, MECHANICAL, ELECTRICAL, AND PLUMBING NOTES

1. UNLESS OTHERWISE NOTED, ALL MECHANICAL, ELECTRICAL, AND PLUMBING FIXTURES SHALL BE LOCATED AS SHOWN IN THE TYPICAL MOUNTING RULES DIAGRAM. ACCESS PANELS SHALL BE PROVIDED AS REQUIRED BY CODE AND PER MANUFACTURER'S INSTRUCTIONS FOR MAINTENANCE AND REPAIRS.
2. IF EXISTING LOCATIONS DO NOT CONFLICT WITH CODE OR MAXIMUM/MINIMUM REACH HEIGHTS, RECEPTACLES SHOULD BE MOUNTED TO MATCH THE HEIGHT AND ORIENTATION OF EXISTING RECEPTACLES IN ROOM. SWITCHES TO BE MOUNTED TO MATCH THE HEIGHT OF EXISTING SWITCHES IN ROOM. IF NO REFERENCE EXISTS, ALL RECEPTACLES & LIGHT FIXTURES SHALL BE MOUNTED AT THE HEIGHTS SPECIFIED IN THE TYPICAL MOUNTING RULES DIAGRAM, UNLESS OTHERWISE NOTED.
3. SWITCHES, FIXTURES, AND RECEPTACLES SHOWN ADJACENT ON PLAN WITH DIMENSION ONLY TO ONE OF THEM SHOULD BE GANGED IN BANKS. SWITCHES, FIXTURES, AND RECEPTACLES WITH DISSIMILAR MOUNTING HEIGHTS SHOWN ADJACENT ON PLAN SHALL BE STACKED VERTICALLY.
4. EXISTING OUTLETS, FIXTURES, AND SWITCHES NOT SHOWN ON PLAN TO REMAIN AND BE REUSED.
5. ALL APPLIANCE-SPECIFIC OUTLETS TO BE COORDINATED WITH APPLIANCE SELECTION.
6. OUTLETS AND SWITCHES SHOULD NOT BE INSTALLED BACK-TO-BACK WITHOUT SEPARATING STUD OR INSULATION.
7. PROVIDE GFCI OUTLETS AND WET-RATED FIXTURES IN ALL WET AREAS, OUTDOOR AREAS, AND ANY OTHER LOCATION REQUIRED BY CODE.
8. ALL SWITCH PLATES AND OUTLETS COVERS, ETC., SHOULD BE INSTALLED AFTER PAINTING AND WALL COVERINGS ARE INSTALLED.PROTECTIVE COVERINGS ON ALL FIXTURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED. DAMAGED FIXTURES SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
9. PROVIDE EMERGENCY LIGHTING AND EXIT SIGNAGE AS REQUIRED BY CODE.
10. COORDINATE LIGHT FIXTURE AND MECHANICAL REGISTER LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. IF ANY CONFLICT OCCURS BETWEEN THE WORK OF SEPARATE TRADES OR BETWEEN DRAWINGS AND EXISTING CONDITIONS, COORDINATE WITH ARCHITECT IN FIELD.
11. WHERE ACOUSTICAL TILES ARE REQUIRED TO BE CUT, CUT TO MAINTAIN A SHARP AND NEAT EDGE. INSTALL ALL LIGHTS, REGISTERS, SIGNAGE, AND OTHER FIXTURES AND EQUIPMENT IN THE CENTER OF TILE UNLESS OTHERWISE NOTED.
12. UNLESS OTHERWISE NOTED, ALL CONDUIT SHOULD BE STRAIGHT AND TRUE AND AT RIGHT ANGLES, AND AS EFFICIENT AS POSSIBLE, UNLESS OTHERWISE NOTED.

ABBREVIATIONS

ABV	ABOVE
ACOUS	ACOUSTICAL
ADA	AMERICANS WITH DISABILITIES ACT
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALW	ALLOW
ALWB	ALLOWABLE
ALUM	ALUMINUM
ANOD	ANODIZED
ARCH	ARCHITECT
ASMB	ASSEMBLY
BLDG	BUILDING
BLT-IN	BUILT-IN
BTW	BETWEEN
B/W	BETWEEN
CAB	CABINET
CEM	CEMENT
CIP	CAST IN PLACE
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CTR	CENTER
CW	COLD WATER
DBL	DOUBLE
DEMO	DEMOLITION
DIA	DIAMETER
DEG	DEGREE
DIM	DIMENSION
DW	DRYWALL
DISP	DISPENSER
DN	DOWN
DR	DOOR
DSPT	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
ENG	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
EST	ESTIMATE(D)
EXH	EXHAUST
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
F&I	FURNISH AND INSTALL
FAB	FABRICATE
FBO	FURNISH BY OWNER
FLDR	FLOOR DRAIN
FIN	FINISH(ED)
FLG	FLOORING
FLR	FLOOR
FLUOR	FLUORESCENT
FND	FOUNDATION
FP	FIRE PROOFING
FO	FACE OF
FT	FOOT/FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GAR	GARAGE
GC	GENERAL CONTRACTOR
GLZ	GLAZING
GR	GRADE
GUT	GUTTER
GWB	GYPSUM WALL BOARD
H/C	HANDICAPPED
HALG	HALOGEN
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDF	HIGH DENSITY FIBER BOARD
HDWR	HARDWARE
HM	HOLLOW METAL
HORZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HW	HOT WATER
HWH	HOT WATER HEATER
ID	INSIDE DIAMETER
IN	INCH
INCAND	INCANDESCENT
INSUL	INSULATION
INT	INTERIOR
JBOX	JUNCTION BOX
JC	JANITORS CLOSET
JST	JOIST
JNT	JOINT
KIT	KITCHEN
L	LENGTH
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAR FEET
LN	LINEAR
LT	LIGHT
MACH	MACHINE
MAS	MASONRY
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MDF	MEDIUM DENSITY FIBER BOARD
MECH	MECHANICAL
MEMB	MEMBRANE
MFTD	MANUFACTURED
MFTR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MMR	MOISTURE & MOLD RESISTANT
MO	MASONRY OPENING
MTL	METAL
MUL	MULLION
NFC	NOT FOR CONSTRUCTION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OPT	OPTION(AL)
OZ	OUNCE
PH	PENTHOUSE
PL	PROPERTY LINE
PLAS	PLASTIC
PLUM	PLUMBING
PLY	PLYWOOD
PNT	PAINT
POL	POLISHED
PRTN	PARTITION
PSF	POUNDS PER SQUARE FOOT
PT	PRESSURE TREATED
PTD	PAINTED
QUAL	QUALITY
QTY	QUANTITY
R	RISER
RAD	RADIUS
RD	ROOF DRAIN
RECT	RECTANGULAR
REF	REFERENCE
REINF	REINFORCED
REQD	REQUIRED
REV	REVISION
RF	ROOF
RM	ROOM
RO	ROUGH OPENING
SAN	SANITARY
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STR	STAIR
STRUC	STRUCTURE
SUP	SUPPLY
SUSP	SUSPENDED
SYM	SYMMETRICAL
SYST	SYSTEM
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UPH	UPHOLSTERY
VNL	VINYL
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WIDTH
W/	WITH
W/O	WITHOUT
WAT	WATER
WC	WATER CLOSET
WD	WOOD
WP	WATERPROOFING
WPT	WORKING POINT
WT	WEIGHT
&, +	AND
@	AT

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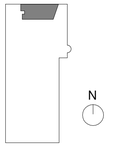
KEY PLAN



I2C FIRST FLOOR CFR BUILD OUT

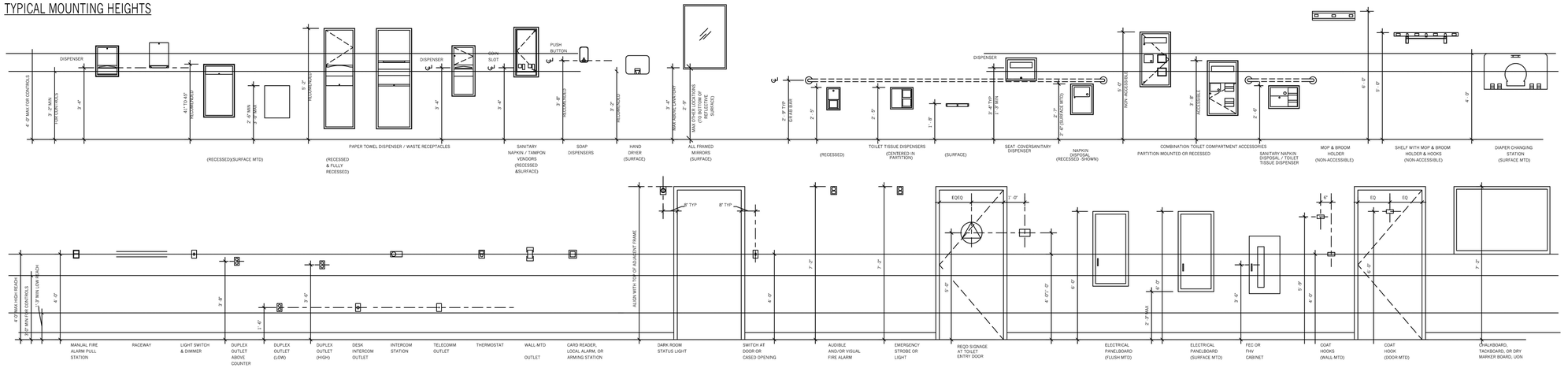
6000 SECOND ST
DETROIT MICHIGAN 48202

NO.	ISSUE/REV.	DATE
	BID SET	03/13/2023

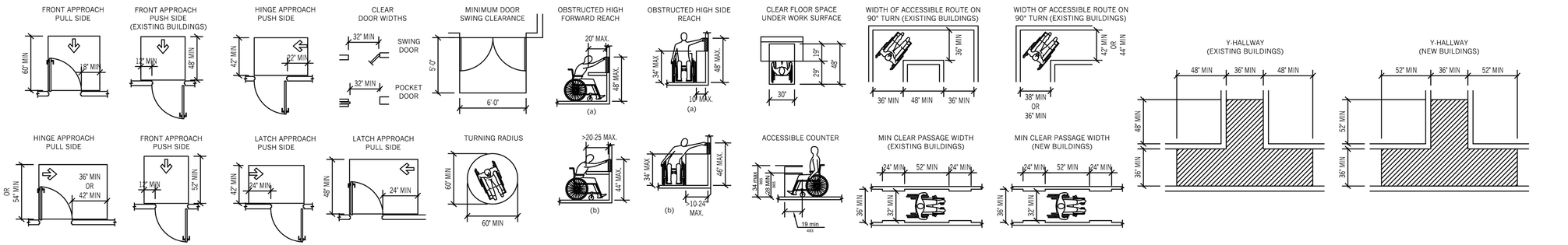
GENERAL NOTES

G-001

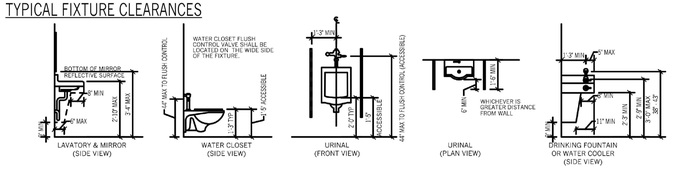
TYPICAL MOUNTING HEIGHTS



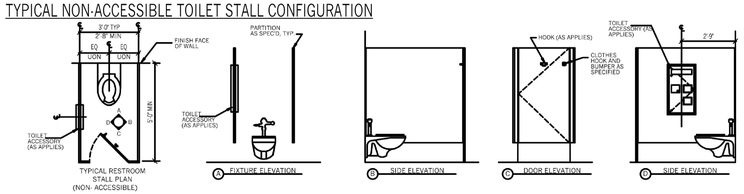
ACCESSIBIILITY STANDARDS



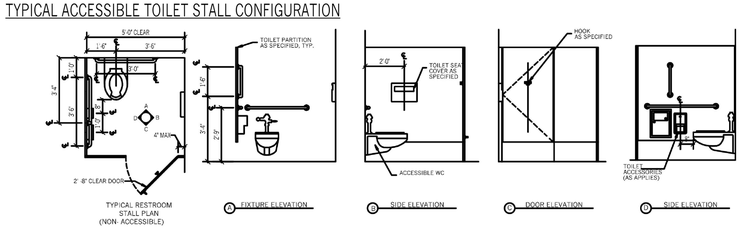
TYPICAL FIXTURE CLEARANCES



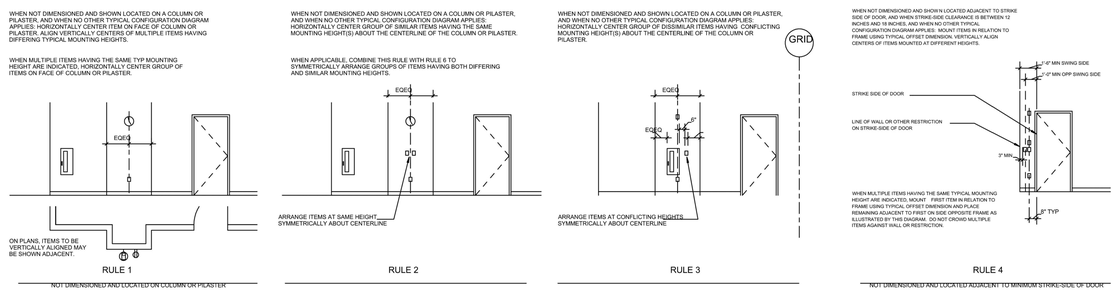
TYPICAL NON-ACCESSIBLE TOILET STALL CONFIGURATION



TYPICAL ACCESSIBLE TOILET STALL CONFIGURATION



RULES FOR MOUNTING HEIGHTS AND LOCATIONS



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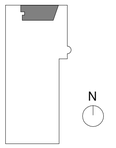


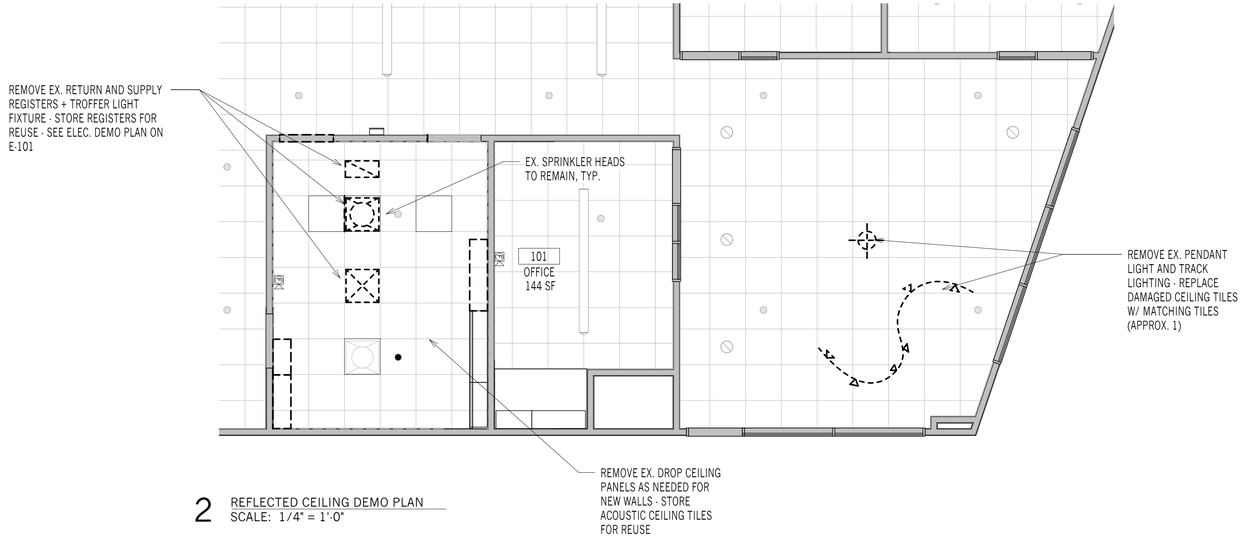
I2C FIRST FLOOR CFR BUILD OUT

6000 SECOND ST
DETROIT MICHIGAN 48202

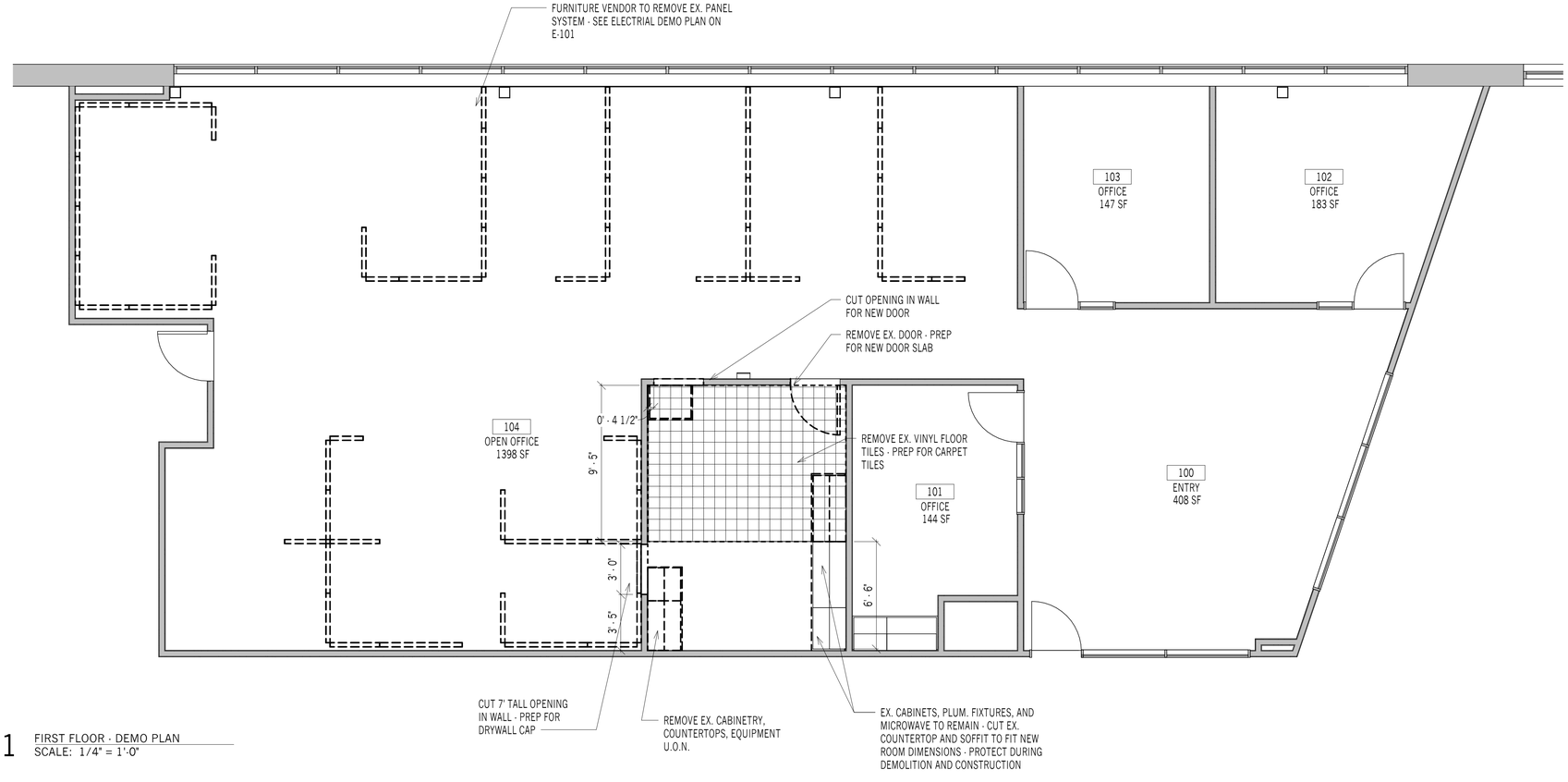
NO.	ISSUE/REV.	DATE
	BID SET	03/13/2023

ACCESSIBILITY AND STANDARDS

G-002



2 REFLECTED CEILING DEMO PLAN
SCALE: 1/4" = 1'-0"



1 FIRST FLOOR · DEMO PLAN
SCALE: 1/4" = 1'-0"

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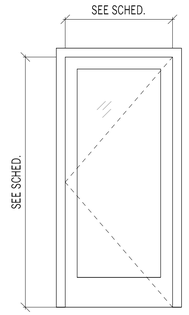
DEMO PLANS

D-100

DOOR SCHEDULE

#	MANUFACTURER	MODEL	STYLE	SIZE		TYPE	HARDWARE	FINISH			U-VAL	SHGC	FIRE RATING	NOTES
				W	H			INT.	EXT.	GLAZING				
Interior														
101	TBD	TBD	FULL LITE WOOD DOOR	3' - 0"	7' - 0"	A	01	SOLID CORE WD VENEER	SOLID CORE WD VENEER	CLEAR IGU, TEMPERED				MATCH FINISH TO EXSITING INTERIOR DOORS · PROVIDE CONTINUOUS ACOUSTIC GASKET AROUND DOOR JAMB · INSTALL WITH ACOUSTIC DOOR SWEEP
102	TBD	TBD	FULL LITE WOOD DOOR	3' - 0"	7' - 0"	A	01	SOLID CORE WD VENEER	SOLID CORE WD VENEER	CLEAR IGU, TEMPERED				MATCH FINISH TO EXSITING INTERIOR DOORS · PROVIDE CONTINUOUS ACOUSTIC GASKET AROUND DOOR JAMB · INSTALL WITH ACOUSTIC DOOR SWEEP



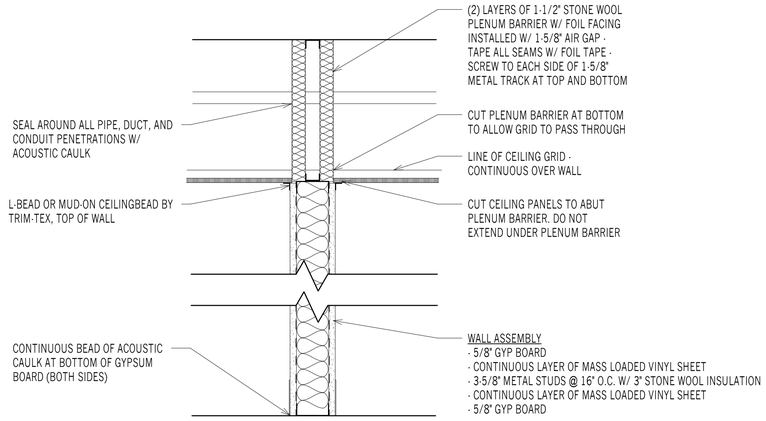
01 DOOR TYPE A
SCALE: 1/2" = 1'-0"

HARDWARE SETS

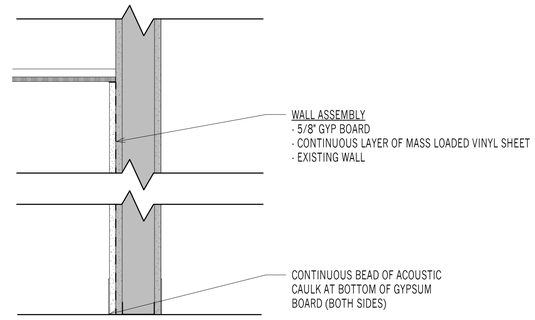
HARDWARE SPECS PROVIDED BY ALLEGION
FORMAT · QTY DESCRIPTION · CATALOGUE NUMBER · FINISH · MFR

01. SINGLE · INTERIOR LOCKSET · OCCUPANCY INDICATOR
3 HINGES · # 5BB1 4.5 X4.5 · FINISH 652 · IVE
1 PRIVACY LOCK · # L9040 03N 09-544 L283-722 · FINISH 626 · SCH
1 WALL STOP · #WS33X · FINISH 626 · IVE

WALL TYPES



02 WALL TYPE A SECTION
SCALE: 1 1/2" = 1'-0"



03 WALL TYPE B SECTION
SCALE: 1 1/2" = 1'-0"

LIGHTING SCHEDULE

#	LOCATION	ITEM NAME	MANUFACTURER	MODEL	DIMENSIONS	FINISH	BRIGHTNESS	COLOR TEMP	INSTALL NOTES
L-1	ENTRY + PHONE BOOTHS	LEO HANGING GLOBE PENDANT	SEA GULL LIGHTING	SGL2186095	12" DIAM	WHITE	1000 lm	3000 K	

EQUIPMENT SCHEDULE

#	LOCATION	ITEM NAME	MANUFACTURER	MODEL	FINISH	INSTALL NOTES
E-1	ENTRY	90" TV	TBD	TBD	BLACK	BY OWNER
E-2	KITCHENETTE	EXISTING 36" REFRIGERATOR	N/A	N/A	Stainless Steel	BY OWNER, EXISTING

FINISH SCHEDULE

#	LOCATION	ITEM NAME	MANUFACTURER	MODEL / DESCRIPTION	DIMENSIONS	COLOR	FINISH	INSTALL NOTES
PAINT								
PNT-01	ENTRY + OPEN OFFICE	WHITE PAINT	SHERWIN WILLIAMS	EMERALD INTERIOR ACRYLIC LATEX PAINT	·	SW7004 SNOWBOUND	SATIN	PROVIDE APPROPRIATE PAINT & PRIMER FOR BASE MATERIAL
PNT-02	PHONE BOOTHS	GREEN PAINT	SHERWIN WILLIAMS	EMERALD INTERIOR ACRYLIC LATEX PAINT	·	SW6193 PRIVILEGE GREEN	SATIN	PROVIDE APPROPRIATE PAINT & PRIMER FOR BASE MATERIAL
PNT-03	KITCHENETTE	YELLOW PAINT	SHERWIN WILLIAMS	EMERALD INTERIOR ACRYLIC LATEX PAINT	·		SATIN	PROVIDE APPROPRIATE PAINT & PRIMER FOR BASE MATERIAL
FLOOR								
CPT-01	PHONE BOOTHS	CARPET TILE	INTERFACE	MONOCHROME MODULAR CARPET TILE W/ GLASBAC BACKING	50cm X 50cm	101853 OCEAN	N/A	INSTALL PER MFR INSTRUCTIONS
WALLS								
WD-01	ENTRY AND OPEN OFFICE	3/8" ARCHITECTURAL PANEL	FLEXIBLE MATERIALS	SLIP MATCHED WOOD VENEER PANEL	4' X 12'	WHITE MAPLE	SATIN	INTALL WITH Z CLIPS · SEE A-601 FOR DETAILS
LIN-01	OPEN OFFICE	LINOLEUM BULLETIN BOARD	FORBO	BULLETIN BOARD TACKABLE SURFACE SHEET MATERIAL	72" WIDE ROLL	NUTMEG SPICE	N/A	DIRECT WALL INSTALLATION · INSTALL ACCORDING TO MFR INSTRUCTIONS
BASE								
B-1	PHONE BOOTHS	VINYL BASE	ROPPE	1/8" VINYL WALL BASE- 700 SERIES	4" NO TOE BASE	649 SWEET BASIL	N/A	
B-2	KITCHENETTE	VINYL BASE	ROPPE	1/8" VINYL WALL BASE- 700 SERIES	4" STANDARD BASE	644 SUNBEAM	N/A	

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KEY PLAN

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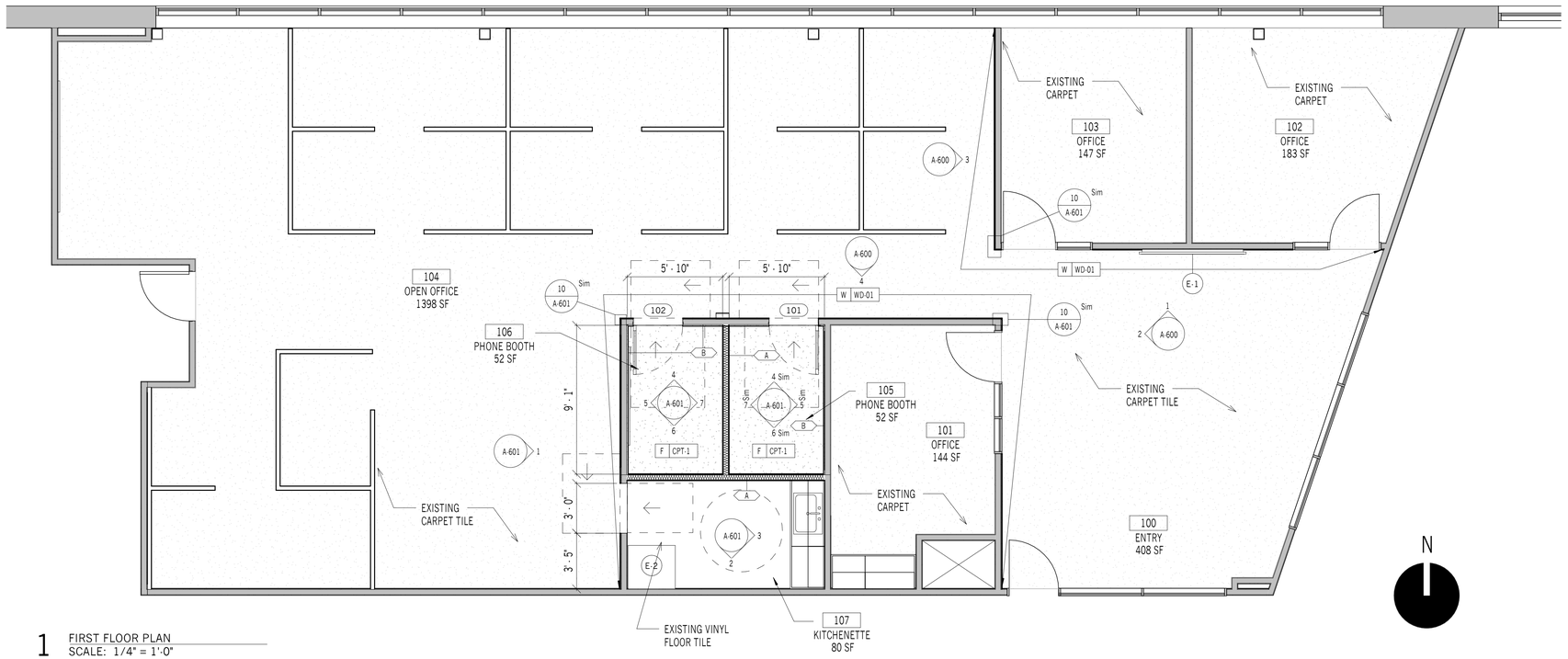
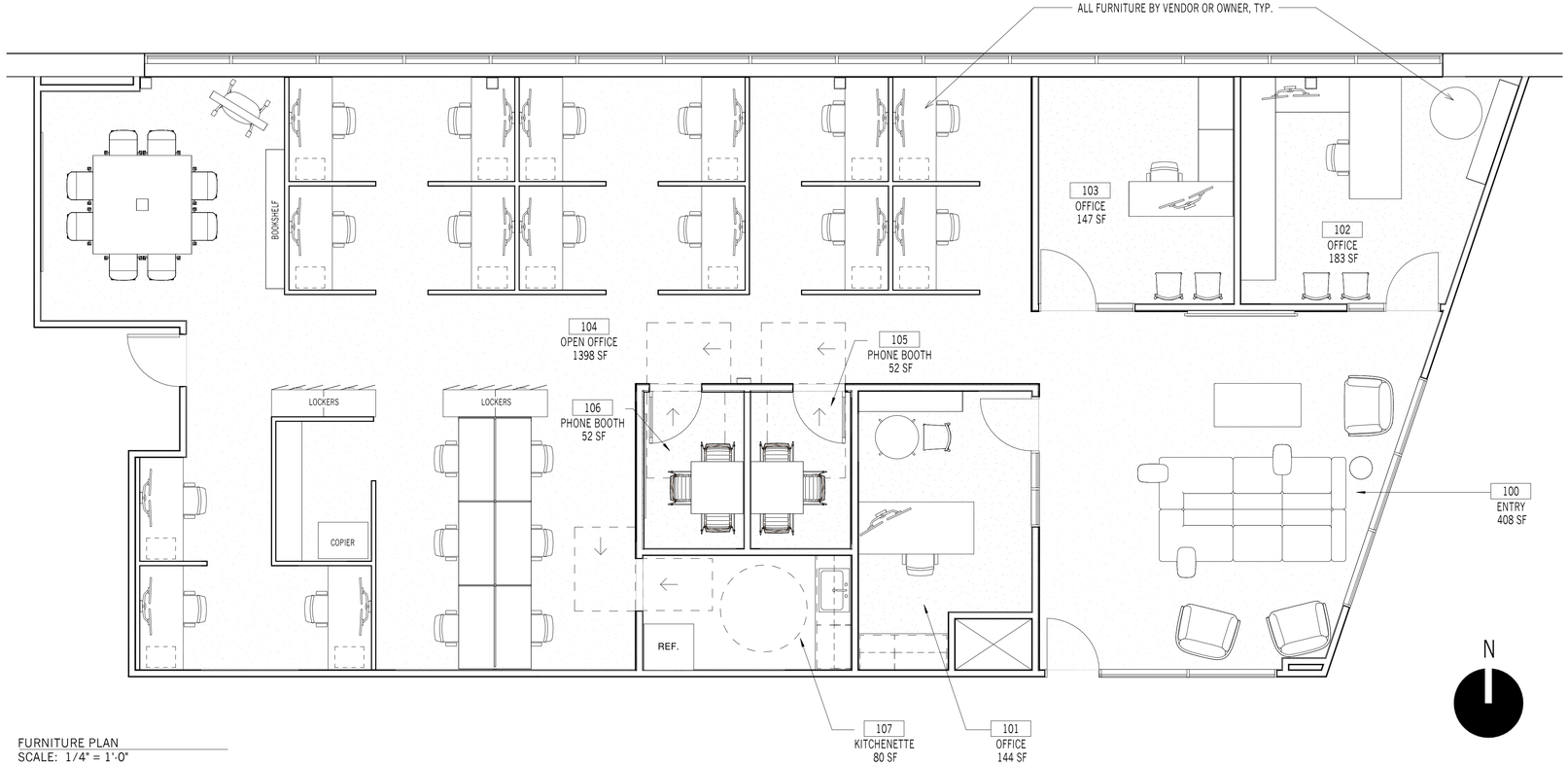
SCHEDULES + WALL SECTION

A-001



1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 FURNITURE PLAN
SCALE: 1/4" = 1'-0"

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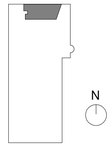

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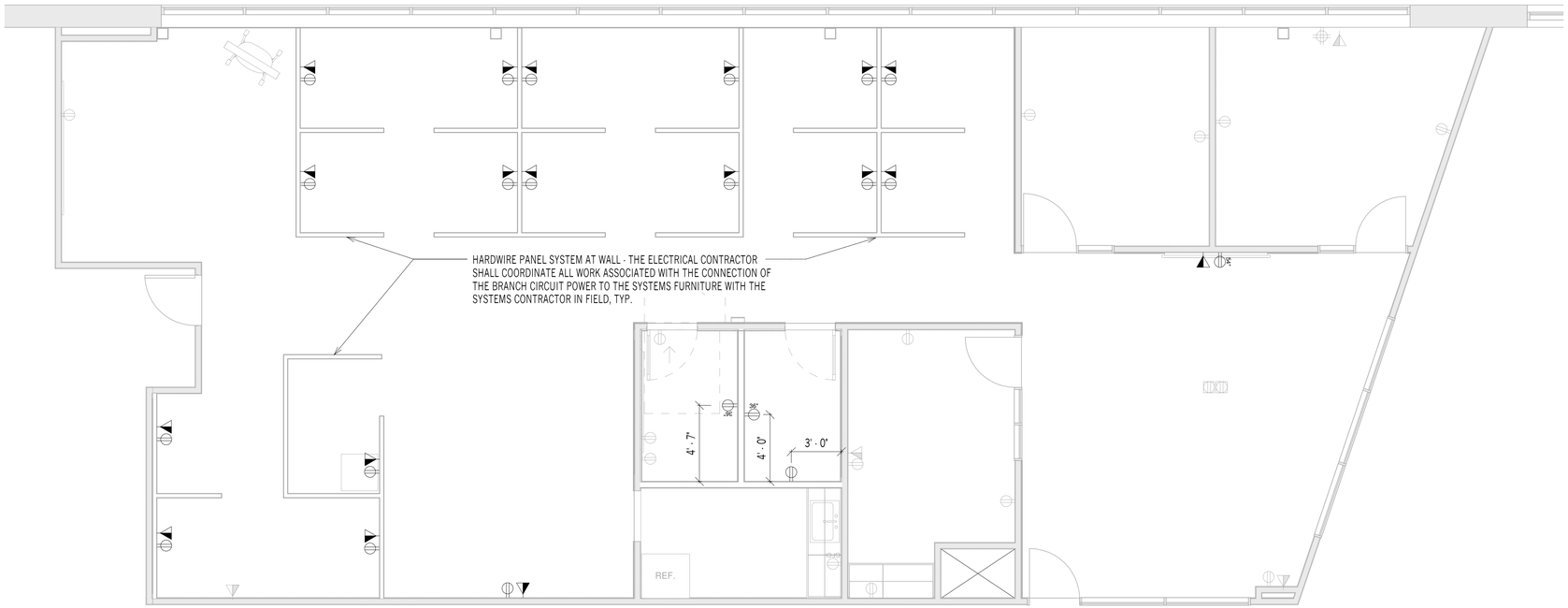
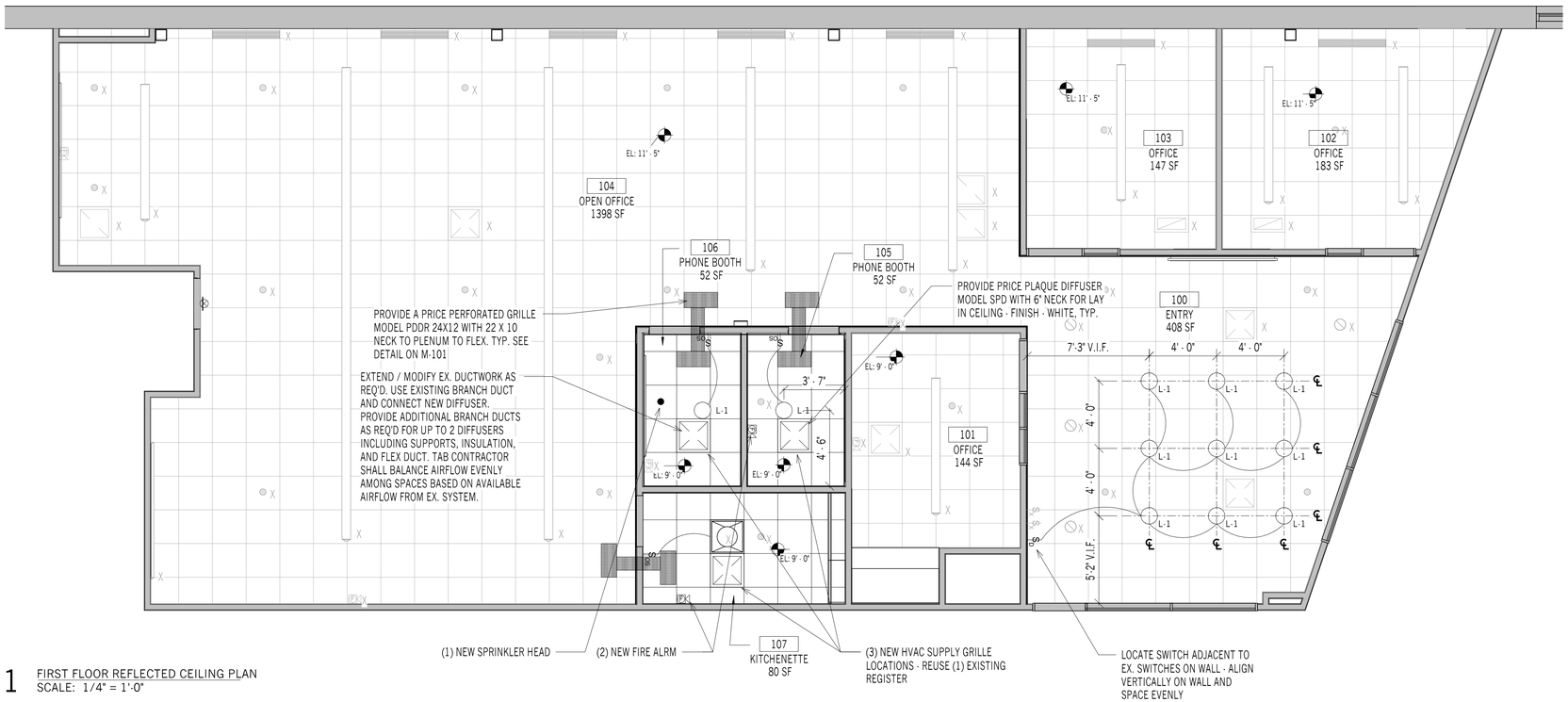
FIRST FLOOR PLAN + FURNITURE PLAN

A-101



2 FIRST FLOOR · POWER PLAN
SCALE: 1/4" = 1'-0"



1 FIRST FLOOR REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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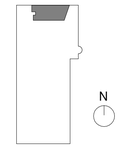
KEY PLAN



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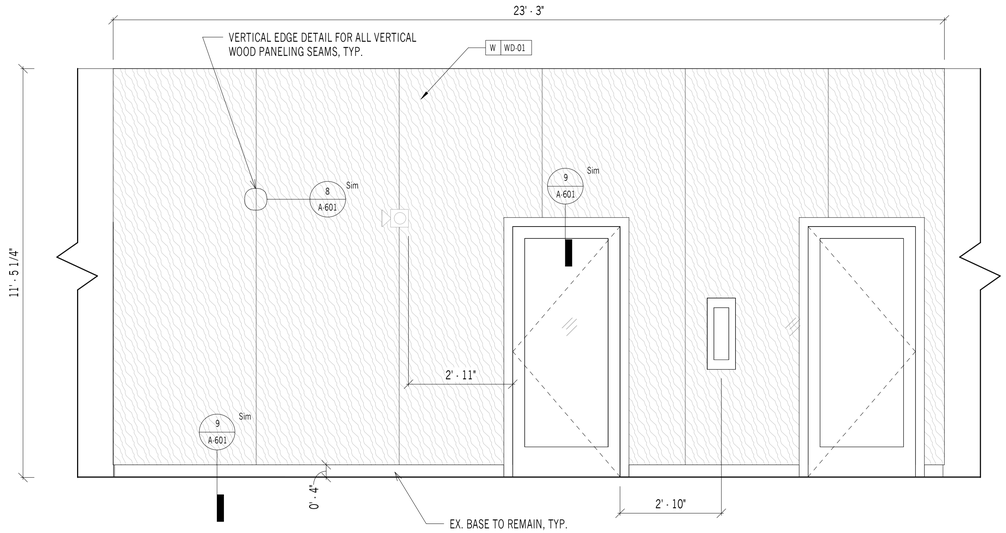
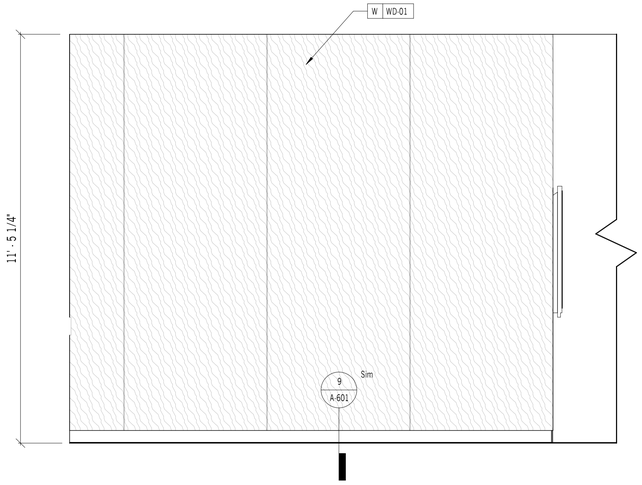
STATE OF MICHIGAN
ELISE DECHARD
ARCHITECT
No. 1301068801
LICENSED ARCHITECT

FIRST FLOOR RCP + POWER PLAN

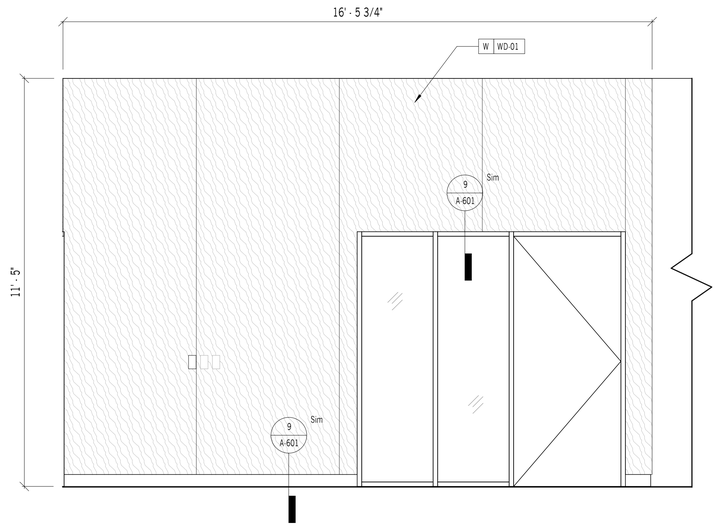
A-201



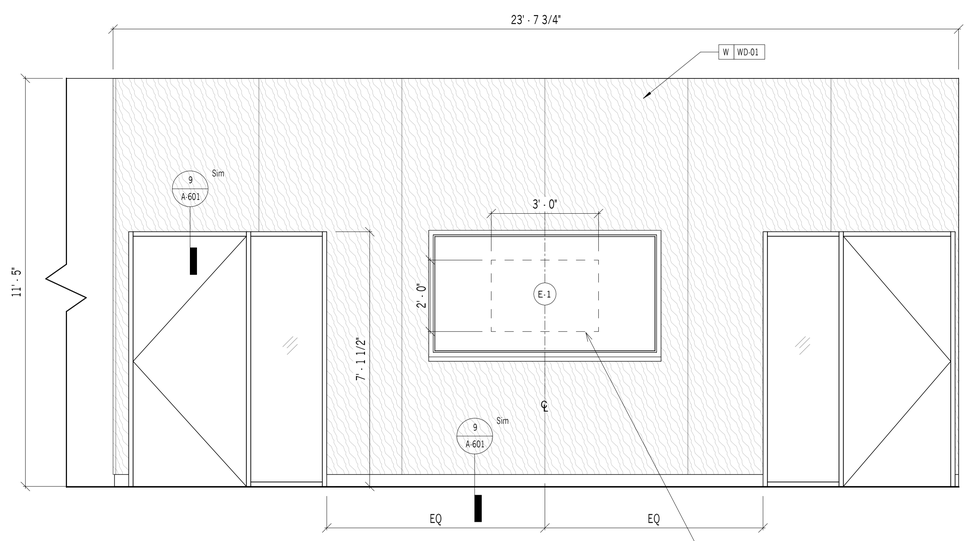
4 OPEN OFFICE SOUTH ELEVATION 1
SCALE: 1/2" = 1'-0"



3 OPEN OFFICE EAST ELEVATION 1
SCALE: 1/2" = 1'-0"



2 ENTRY WEST ELEVATION
SCALE: 1/2" = 1'-0"



1 ENTRY NORTH ELEVATION
SCALE: 1/2" = 1'-0"

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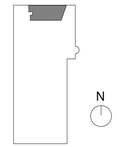

I2C FIRST FLOOR CFR BUILD OUT

6000 SECOND ST
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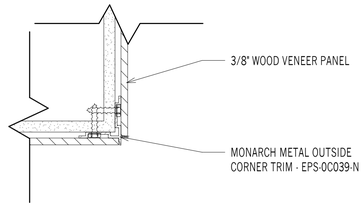
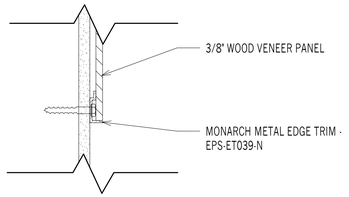
INTERIOR ELEVATIONS

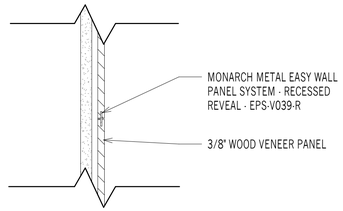
A-600



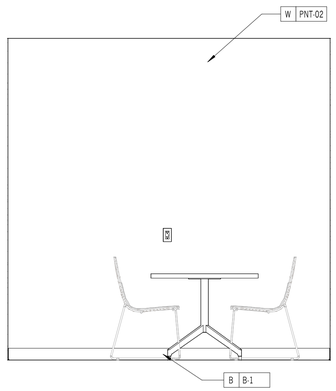
10 WALL PANELING OUTSIDE CORNER DETAIL
SCALE: 3" = 1'-0"



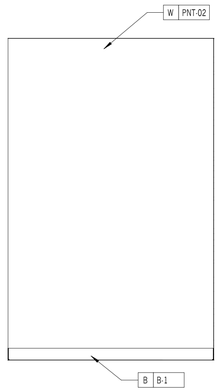
9 WALL PANELING EDGE DETAIL
SCALE: 3" = 1'-0"



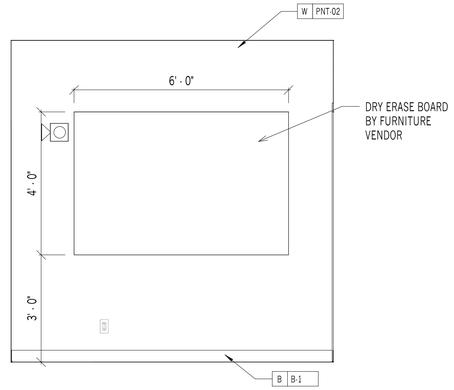
8 WALL PANELING VERTICAL REVEAL DETAIL
SCALE: 3" = 1'-0"



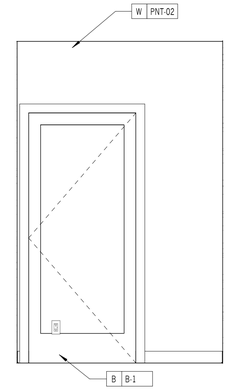
7 PHONE BOOTH EAST ELEVATION
SCALE: 1/2" = 1'-0"



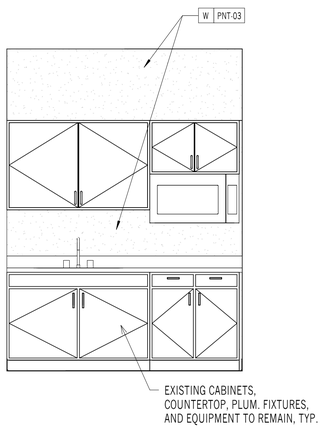
6 PHONE BOOTH SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



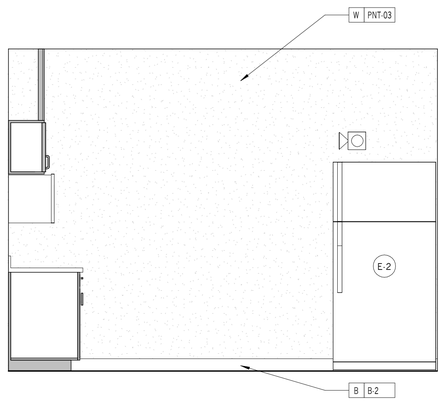
5 PHONE BOOTH WEST ELEVATION
SCALE: 1/2" = 1'-0"



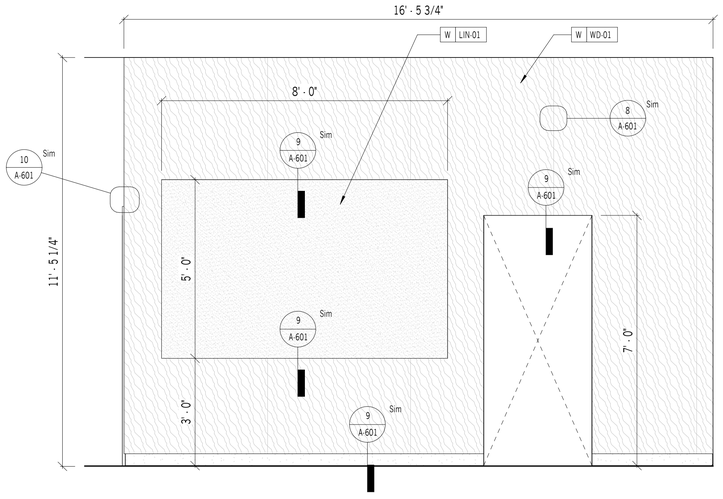
4 PHONE BOOTH NORTH ELEVATION
SCALE: 1/2" = 1'-0"



3 KITCHENETTE EAST ELEVATION
SCALE: 1/2" = 1'-0"



2 KITCHENETTE SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



1 OPEN OFFICE EAST ELEVATION 2
SCALE: 1/2" = 1'-0"

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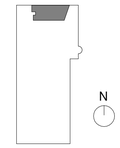

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INTERIOR ELEVATIONS

A-601

GreenPath Design		
	Project Name	I2C FIRST FLOOR CFR BUILD OUT
	Project Number	212-355739
	Engineer Initials	KBS
	Date	3/14/2023
	System Number	NA

Duct Leakage/ Future Capacity	
Does System have Economizer?	Yes
Is the System 100% Outside Air?	No

Zone Information / Load Information

Room Number	Zone	Room Name	Square Footage	Ceiling Height	Space Volume	Load Maximum Airflow CFM	Load Minimum Occupied Airflow CFM	Space Air Change Rate (Supply or Exhaust)
105		PHONE BOOTH	52	9	468	50	50	
106		PHONE BOOTH	52	9	468	50	50	
107		KITCHENETTE	80	9	720	100	100	
		Total	184		1656	200	200	

Diversified System Load Airflow	

Code Ventilation Rates — Outside Air / Exhaust Air

Room Number	Air Change Rate	Occupancy Category	People OA Rate CFM/person Rp	Area OA Rate CFM/sqft Ra	Occupant Density people/ 1000 sqft	People	Exhaust Rate CFM/sqft	Exhaust Rate CFM	Column1
105		Conference/meeting	5	0.06	50				
106		Conference/meeting	5	0.06	50				
107		Break rooms	5	0.06	25				

Space Conditions / Transfer

Room Number	Number of Water Closets/ Urinals	Air Transferred to Space (Y or Blank)	Entire Space Exhausted? (Y or Blank)	Recirculation Air Handling System - FPB (Y or Blank)	CO2 Sensor (Y or Blank)	Constant Volume (Y or Blank)	Column2	Transfer Aiflow CFM	Space Pressurization Neutral, Negative or Positive	Column3	General Exhaust within Space Airflow CFM	Column4
105									neutral			
106									neutral			
107									neutral			

People

Room Number	People Required by Code	People Override	Total People Pz	Column5
105	3		3	
106	3		3	
107	2		2	
Total	7		7	
Diversified Total				

Outside Airflow

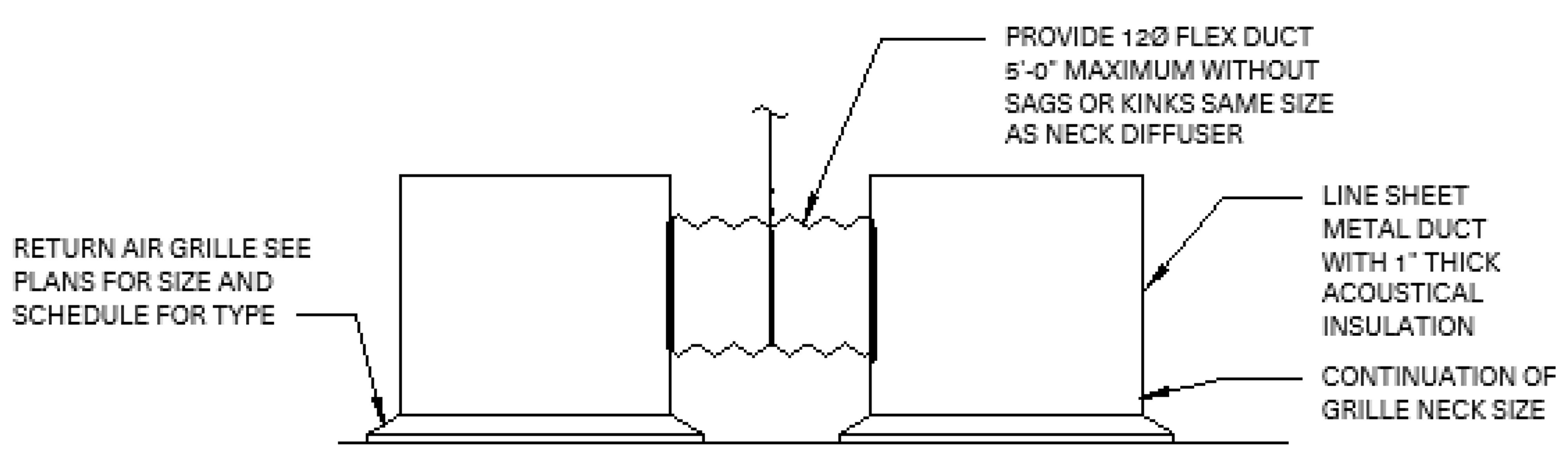
Room Number	Air Distribution Effectiveness Ez (Default-0.8)	OA People Rp * Pz	OA Sq. Ft. Ra * Az	Breathing Zone Outdoor Airflow Vbz	Zone Outdoor Airflow Voz	Breathing Zone OA with CO2 Sensor Voz	Airflow based on ACHR	Minimum Zone Primary Air at Full Occupancy Vpz	Outside Air Fraction at Minimum SA Zpz	Column6
105	1	13	3	16	16			50	0.32	
106	1	13	3	16	16			50	0.32	
107	1	10	5	15	15			100	0.15	
Total		36	11	47	47			200		

Maximum Airflow / Minimum Airflow / Exhaust Airflow / Return Airflow

Room Number	Load Airflow CFM	Additional Airflow CFM	Total Maximum Airflow CFM	Total AC/HR	Minimum Airflow Override	Total Minimum Airflow CFM	Total Minim AC/HR	Column7	Total Exhaust CFM	Column8	Maximum CFM	Minimum CFM
105	50		50	6		16	2				50	16
106	50		50	6		16	2				50	16
107	100		100	8		15	1				100	15
Total	200		200	7		47					200	47
Diversified	200		200								200	

ASHRAE 62.1 System Results		
System Ventilation Efficiency, Ev		0.91
Max	Airflow, CFM	200
	Outside Airflow, CFM	52
	Outside Airflow Fraction, %	26%
Min	Airflow, CFM	52
	Outside Airflow, CFM	52
	Outside Airflow Fraction, %	100%
Occupant Diversity		100%
System Primary Airflow, Vps		200
System Uncorrected Outdoor Airflow, Vou		47
Average Outdoor Air Fraction, Xs		0.24
Outdoor Air Intake Airflow (multi-zone), Vot		52
Outdoor Air Intake Airflow (100% OA), Vot		47

Results			
Supply	Max	Airflow, CFM	200
		Outside Airflow, CFM	52
		Outside Airflow Fraction, %	26%
	Min	Airflow, CFM	52
		Outside Airflow, CFM	52
		Outside Airflow Fraction, %	100%
Return	Max	Airflow, CFM	200
	Min	Airflow, CFM	47
System	Exhaust Airflow, CFM		
	Max	Pressurization	52
	Min	Pressurization	52
	Minimum/Maximum Airflow Percentage		26%
	Outside Air Required for Exhaust Compensation		



NOTES:
1. SUPPORT FLEX DUCT INDEPENDANT OF CEILING GRID
2. RIGID FIBER BOARD MAY BE USED IN LIEU OF LINED SHEET METAL DUCT

1 TRANSFER RETURN AIR GRILLE DETAIL
SCALE: NOT TO SCALE

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KEY PLAN

N

I2C FIRST FLOOR CFR BUILD OUT
6000 SECOND ST
DETROIT MICHIGAN 48202

NO.	ISSUE/REV.	DATE
	BID SET	03/13/2023

STATE OF MICHIGAN ELISE DECHARD ARCHITECT No. 1301068801 LICENSED ARCHITECT

VENTILATION SCHEDULE + MECH DETAIL

M-101

LIGHTING SYMBOL LEGEND

(NOT ALL SYMBOLS USED)

XXX	LIGHT FIXTURE TYPE, REFER TO LIGHT FIXTURE SCHEDULE
	SURFACE OR PENDANT LIGHT FIXTURE, CHEVRON INDICATED WALL WASH AIMING, SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	RECESSED LIGHT FIXTURE, CHEVRON INDICATED WALL WASH AIMING, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	SURFACE OR PENDANT LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	RECESSED LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	RECESSED ARCHITECTURAL LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	SURFACE OR CHAIN HUNG STRIP LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE, HALF-SHADING INDICATES EMERGENCY EGRESS LIGHT FIXTURE
	TRACK MOUNTED LIGHT FIXTURE
	EXIT SIGN, PROVIDE ARROWS/CHEVRONS AS INDICATED ON PLANS, SHADED AREA INDICATES FACE, FOOT ON SYMBOL INDICATES WALL MOUNTED, LIGHT HEADS INDICATE COMBINATION EXIT/BATTERY POWERED EMERGENCY LIGHTING UNIT
	BATTERY POWERED EMERGENCY LIGHTING UNIT, LIGHT HEADS ON SIDES OF UNIT INDICATES CEILING MOUNTED
S_{Xa}	SINGLE POLE SWITCH - 20A, 125/277V UON, -'a' INDICATES WHICH FIXTURES/DEVICES ARE CONTROLLED VIA SWITCH -'X' DENOTES TYPE: BLANK - SINGLE POLE D - DIMMER O - WALL BOX OCCUPANCY SENSOR - PASSIVE INFRARED V - WALL BOX VACANCY SENSOR - PASSIVE INFRARED
OS Xa, VS Xa, OS Xa, VS Xa	OCCUPANCY/VACANCY SENSOR, FOOT ON SYMBOL INDICATES WALL MOUNTED, -'a' INDICATES WHICH FIXTURES ARE CONTROLLED VIA SENSOR -'X' DENOTES TYPE: A - 180° DUAL TECHNOLOGY OCCUPANCY SENSOR B - 360° DUAL TECHNOLOGY OCCUPANCY SENSOR C - 180° PASSIVE INFRARED OCCUPANCY SENSOR D - 360° ULTRASONIC OCCUPANCY SENSOR
C	LIGHTING CONTACTOR, SIZE AS INDICATED ON DRAWINGS/DETAIL

AUXILIARY SYMBOLS SCHEDULE

(NOT ALL SYMBOLS USED)

TELE/DATA

- 2 VOICE/2 DATA OUTLET WITH 1"C STUBBED ABOVE ACCESSIBLE CORRIDOR UON. CEILING UON. 2 GANG BOX / 1 GANG PLASTER RING, WITH CABLING.
- DATA OUTLET JUNCTION BOX WITH 1-1/4"C TO NEAREST TELECOM CABLE TRAY UON. 2 GANG BOX / 1 GANG PLASTER RING, WITH CABLING.
- TV DATA OUTLET WITH 1"C STUBBED ABOVE ACCESSIBLE CEILING UON. 2 GANG BOX / 1 GANG PLASTER RING, WITH CABLING. COORDINATE CABLING REQUIREMENTS WITH WSU C&IT

SEE SPECIFICATIONS FOR CABLING REQUIREMENTS

FIRE ALARM

- FIRE ALARM STROBE

ELECTRICAL DEMOLITION NOTES

1. THE CONTRACTOR SHALL REMOVE THE EXISTING ELECTRICAL WORK NECESSARY TO PROVIDE THE INTENDED ARRANGEMENT OF WALLS AND CELINGS, AND SHALL RECONNECT ALL CIRCUITS INTERRUPTED BY THIS DEMOLITION WHERE THOSE CIRCUITS ARE UTILIZED BEYOND THE DEMOLITION, WHETHER SUCH CIRCUITS ARE INDICATED OR NOT.
2. WHERE AN ELECTRICAL DEVICE THAT IS TO BE REMOVED IS AN "END OF LINE" OR A SINGLE DEVICE, THE CONDUCTORS SHALL BE DISCONNECTED AT THE NEXT UPSTREAM DEVICE TO REMAIN OR AT ITS RELATED PANELBOARD. ALL NON-FUNCTIONAL CONDUCTORS INCLUDING POWER AND TELECOMMUNICATION CABLES SHALL BE REMOVED.
3. DEMOLITION: ACCURACY OF ORIGINAL PLANS HAS NOT BEEN VERIFIED. THE CONTRACTORS SHALL MAINTAIN CIRCUIT CONTINUITY OF ALL EXISTING FIXTURES AND DEVICES THAT ARE TO REMAIN.
4. EXISTING CIRCUITS, IF INDICATED, ARE DIAGRAMMATIC ONLY. VERIFY EXACT CONDUIT LOCATION AND ROUTING OF EXISTING CONDUIT RUNS AND NUMBER OF CONDUCTORS. AND PROVIDE ADDITIONAL CONDUITS / CONDUCTORS AS NECESSARY TO ACCOMPLISH THE DESIGN INTENT.
5. CIRCUIT BREAKERS ADDED TO THE EXISTING PANELBOARDS SHALL MATCH THE EXISTING BREAKER TYPE, MANUFACTURER, AND AIC RATING. PROVIDE NEW TYPE WRITTEN, UPDATED DIRECTORIES IN THE EXISTING PANELBOARDS TO REFLECT CHANGES MADE BY THIS RENOVATION.
6. ALL ADDITIONS TO SYSTEMS SHALL MATCH THE MANUFACTURER'S EXISTING SYSTEMS PRESENTLY INSTALLED IN THE FACILITY UNLESS OTHERWISE NOTED.
7. EXISTING SYSTEMS SHALL REMAIN UNLESS NOTED FOR REMOVAL OR RELOCATION. ALL SYSTEMS SHALL BE CHECKED TO ENSURE THEY ARE IN PROPER WORKING ORDER BEFORE ANY DEMOLITION IS STARTED. SYSTEMS NOT FOUND TO BE IN SATISFACTORY WORKING CONDITION SHALL BE REPORTED TO THE OWNER IN WRITING PRIOR TO THE START OF ANY DEMOLITION WORK. ALL SYSTEMS SHALL BE CHECKED TO ENSURE THAT THEY ARE WORKING PROPERLY AFTER THE DEMOLITION WORK IS FINISHED AND AFTER THE NEW ELECTRICAL INSTALLATION IS COMPLETE.
8. DEMOLITION, WHERE INDICATED ON PLAN, IS BASED ON EXISTING DRAWINGS AND LIMITED FIELD INVESTIGATION OF EXISTING CONDITIONS. SELECT DEMOLITION MAY BE REQUIRED FOR NEW CONSTRUCTION AND MAY NOT BE DELINEATED ON THIS DRAWING. CAREFULLY COORDINATE DEMOLITION WITH NEW CONSTRUCTION PLANS OF ALL DISCIPLINES TO VERIFY ACTUAL EXTENT OF DEMOLITION. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND FULLY UNDERSTAND THE EXTENT OF DEMOLITION WORK.
9. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
10. QUANTITY AND LOCATION OF EXISTING DEVICES SHOWN ON PLANS ARE APPROXIMATE. FIELD VERIFY DEVICES AND LOCATIONS.
11. ITEMS SHOWN HEAVY LINE WEIGHT DASHED LINES, HATCHED AND/OR NOTED SHALL BE DEMOLISHED AND ALL ASSOCIATED DEVICES, CONDUIT, AND WIRING SHALL BE REMOVED BACK TO THE NEAREST ACTIVE JUNCTION BOX OR SOURCE UNLESS NOTED OTHERWISE. SEE DEMOLITION LEGEND FOR ADDITIONAL INFORMATION.
12. ALL EXISTING EQUIPMENT MAY NOT BE INDICATED. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. EXISTING ITEMS NOT SHOWN HATCHED SHALL REMAIN IN OPERATION. REVISE THE EXISTING CIRCUITRY TO MAINTAIN OPERATION OF ITEMS TO REMAIN.
13. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES, AND EQUIPMENT THAT ARE OUTSIDE AREA OF RENOVATION. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.
14. RECYCLE OR DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL ASSOCIATED COSTS IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING LEED REQUIREMENTS, TCLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
15. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS. MARK ALL UNUSED CIRCUIT BREAKERS "SPARE" AND PLACE IN THE "OFF" POSITION.
16. VERIFY ALL UNDERGROUND AND IN SLAB UTILITY LOCATIONS PRIOR TO SAW-CUTTING OR PENETRATING ANY FLOOR SLAB.
17. OFFER OWNERS REPRESENTATIVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED FROM SPACE.
18. PROVIDE CODE-COMPLIANT SUPPORT TO EXISTING-TO-REMAIN UNSUPPORTED CONDUITS AND BOXES WHERE CEILINGS ARE TO BE REMOVED. RE-ROUTE BRANCH CIRCUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.

POWER SYMBOL LEGEND

(NOT ALL SYMBOLS USED)

	SIMPLEX RECEPTACLE - NEMA 5-20R, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	DUPLEX RECEPTACLE - NEMA 5-20R, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	DUPLEX RECEPTACLE - NEMA 5-20R, GROUND FAULT INTERRUPTING, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	DUPLEX RECEPTACLE - NEMA 5-20R, TAMPER RESISTANT, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	SPLIT-WIRED DUPLEX RECEPTACLE - NEMA 5-20R, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	COMBINATION DUPLEX RECEPTACLE (NEMA 5-20R)/USB (TYPE A, 2.0), TWO CHARGING USB PORTS, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER
	QUADPLEX RECEPTACLE - NEMA 5-20R, HORIZONTAL LINE INDICATES MOUNTED AFC UON, SHADING INDICATES CIRCUITED TO GENERATOR/UPS POWER (ALL OTHER NEMA 5-20R QUAD RECEPTACLE SYMBOLS FOLLOW SAME STACKED DUPLEX PATTERN)
J	JUNCTION BOX, LEG INDICATES WALL/EQUIPMENT MOUNTING IS REQUIRED, SQUARE INDICATES FLOOR MOUNTED
	DISTRIBUTION PANELBOARD. SOLID FILL INDICATES 480V LINE TO LINE, NO FILL INDICATES 208V OR 240V LINE TO LINE. DASHED LINE INDICATES NEC WORKING SPACE.
	SURFACE MOUNTED PANELBOARD. SOLID FILL INDICATES 480V LINE TO LINE, NO FILL INDICATES 208V OR 240V LINE TO LINE. INSTALL DOOR HINGE ON THE SIDE SHOWN ON SYMBOL. DASHED LINE INDICATES NEC WORKING SPACE. HALF-TONE LINE INDICATES WALL.
	FLUSH/RECESSED MOUNTED PANELBOARD. SOLID FILL INDICATES 480V LINE TO LINE, NO FILL INDICATES 208V OR 240V LINE TO LINE. INSTALL DOOR HINGE ON THE SIDE SHOWN ON SYMBOL. DASHED LINE INDICATES NEC WORKING SPACE. HALF-TONE LINE INDICATES WALL.
FACP	FIRE ALARM CONTROL PANEL (FURNISHED BY OTHERS)
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
RP1-1,3,5	INDICATES CIRCUITS TO PANEL, 'RP1' INDICATES PANEL DESIGNATION AND '1,3,5' INDICATED POLE POSITION(S)
X#Y, X#YG ,Z"C	'X' INDICATES QUANTITY AND 'Y' INDICATES SIZE OF CONDUCTORS, Z INDICATES CONDUIT SIZE
RP1	PANEL TAG, i.e. CIRCUITS WITHIN AREA WHERE TAG IS LOCATED ON PLAN ARE CIRCUITED TO PANEL 'RP1' UON
WSHP-2 MECH	MECHANICAL EQUIPMENT CONNECTION TAG. DESIGNATION ON TOP INDICATES EQUIPMENT IDENTIFIER AND DESIGNATION ON BOTTOM INDICATES ASSOCIATED EQUIPMENT CONNECTION SCHEDULE AS FOLLOWS: MECH = MECHANICAL, KTCH = KITCHEN, PUMP = PUMP, HEAT = HEATER, FAN = FAN. REFER TO ELECTRICAL SCHEDULES SHEETS FOR ADDITIONAL INFORMATION.

ELECTRICAL DEMOLITION LEGEND

TAG	SYMBOLOGY	DESCRIPTION
(EX)		EXISTING DEVICE TO REMAIN.
(ED)		EXISTING DEVICE TO BE DEMOLISHED.
(ER)		EXISTING DEVICE TO BE RELOCATED.
(EL)		EXISTING DEVICE SHOWN IN NEW LOCATION TO BE REINSTALLED.
(EN)		EXISTING DEVICE TO BE REPLACED WITH NEW DEVICE IN SAME LOCATION.

ELECTRICAL GENERAL NOTES

1. PRIOR TO BID, THE CONTRACTOR SHALL VISIT SITE TO SURVEY EXISTING CONDITIONS AFFECTING WORK. INCLUDE NECESSARY MATERIALS AND LABOR TO ACCOMPLISH THE ELECTRICAL WORK, INCLUDING RELOCATION OF EXISTING EQUIPMENT TO ALLOW FOR NEW CONSTRUCTION. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND RESOLVED PRIOR TO BID. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES.
2. THESE DRAWINGS ARE A PART OF A COMPLETE SET OF ARCHITECTURAL/ENGINEERING DRAWINGS. DRAWINGS SHOWING ELECTRICAL WORK ARE DIAGRAMATIC.
REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GUIDANCE AND COORDINATION WITH DIMENSIONS, CEILINGS, DOOR SWINGS, ELEVATIONS, CASEWORK, FINISHES, STRUCTURAL CONCRETE, FRAMING, DUCTWORK, AND PIPING.
3. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE NEC AND LOCAL ORDINANCES INCLUDING ALL REQUIREMENTS OF APPLICABLE CODES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS.
4. ALL SYMBOLS SHOWN ON THESE LEGENDS MAY NOT BE USED.
5. PROVIDE EXPANSION JOINT FITTINGS ON ALL CONDUITS THAT CROSS EXPANSION JOINTS OR CONDUITS THAT PENETRATE WALLS WITH SEISMIC BRACING. SEE ARCHITECTURAL DRAWINGS.
6. ALL FLUSH MOUNTED PANELS SHALL HAVE (4) 1" EMPTY CONDUITS STUBBED OUT ABOVE ACCESSIBLE CEILING FOR FUTURE CIRCUITS.
7. VERIFY LOCATION OF ALL FLOOR OUTLETS WITH ARCHITECT PRIOR TO ROUGH-IN.
8. ALL WALL OUTLETS NOT PROVIDED WITH A DEVICE BY THIS CONTRACTOR SHALL BE PROVIDED WITH BLANK WALL PLATES.
9. MULTI-WIRE BRANCH CIRCUITS ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE.
10. FINAL EQUIPMENT CONNECTIONS - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS REQUIRED TO MAKE FINAL CONNECTIONS TO ALL EQUIPMENT FURNISHED BY THIS CONTRACTOR AND/OR EQUIPMENT FURNISHED BY OTHERS. VERIFY ALL REQUIREMENTS, CONDUCTOR SIZE, OVERCURRENT PROTECTION, PHASE, VOLTAGE, ETC., INDICATED ON DRAWINGS WILL SATISFY EQUIPMENT SUPPLIER REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE FUSED DISCONNECT IF REQUIRED BY MANUFACTURER.
11. REFER TO "TYPICAL MOUNTING AND ALIGNMENT CRITERIA" DETAIL FOR OUTLET DEVICE MOUNTING HEIGHT AND LOCATIONS.
12. TYPE "ENT" ELECTRICAL NON-METALLIC TUBING SHALL NOT USED.
13. PROVIDE ACCESS PANELS IN GYPBOARD CEILINGS WHERE ACCESS TO JUNCTION BOXES IS REQUIRED.
14. PROVIDE A MINIMUM OF (1) 3/4"C. WITH PULLSTRING AND NYLON END BUSHING STUBBED TO ABOVE ACCESSIBLE CEILING FOR ALL WALL MOUNTED AUXILIARY DEVICE, JUNCTION BOXES INCLUDING, BUT NOT LIMITED TO CARD READERS, PUSH PLATES, ETC, UON.
15. ALL 120V RECEPTACLE OUTLETS WITHIN 6FT OF A WATER SOURCE SHALL BE GFCI PROTECTED.
16. VERIFY ALL DOOR SWINGS W/ ARCHITECT PRIOR TO ROUGH-IN OF WALL MOUNTED LIGHTING CONTROLS, ACCESS CONTROLS, DOOR OPERATORS, ETC.
17. PROVIDE ADDITIONAL STEEL SUPPORTS FOR MOTOR CONTROLLERS, FIXTURES, RACEWAYS, CABINETS, BOXES, AND THE LIKE WHRE THE BUILDING, EQUIPMENT, OR STRUCTURE IS NOT SUITABLE FOR MOUNTING DIRECTLY THEREON.
18. "PROVIDE" USED IN SPECIFICATIONS AND DRAWINGS SHALL MEAN "TO FURNISH, INSTALL, CONNECT, AND PLACE IN SERVICE COMPLETELY IN SPECIFIED OR APPROVED MANNER THE ITEM DESCRIBED."
19. ELECTRICAL WORK EMBEDDED IN CONCRETE OR OTHERWISE PERMANENTLY CONCEALED SHALL NOT BE COVERED UNTIL INSPECTED BY THE OWNER'S REPRESENATIVE.
20. ALL PENETRATIONS THROUGH FIRE RESISTANT WALLS AND OTHER SUCH RATED ASSEMBLIES SHALL BE FIRESTOPPED TO MAINTAIN ITS RATING.

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION
(ED)	EXISTING TO BE DEMOLISHED
(EL)	EXISTING DEVICE SHOWN IN NEW LOCATION TO BE REINSTALLED
(EN)	EXISTING TO BE REPLACED WITH NEW.
(ER)	EXISTING TO BE RELOCATED
(EX)	EXISTING TO REMAIN
A, AMP	AMPERES
AF	AMP FRAME - CIRCUIT BREAKER; AMP FUSE - FUSED SWITCH
AFC, AC	ABOVE FINISHED CABINET/COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT INTERRUPTER
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ALSI	ARC FLASH ENERGY REDUCTION, LONG TIME, SHORT TIME, INSTANTANEOUS
ALSIG	ARC FLASH ENERGY REDUCTION, LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
BKR, CB	CIRCUIT BREAKER
C	CONDUIT
CM	COFFEE MAKER
CPT	CONTROL POWER TRANSFORMER
CR	CRITICAL / CRITICAL BRANCH EMERGENCY
CT	CURRENT TRANSFORMER
CU	COPPER
DISC	DISCONNECT
DIV	DIVISION
DW	DISHWASHER
EC	ELECTRICAL CONTRACTOR
ECB	ENCLOSED CIRCUIT BREAKER
EG	EQUIPMENT GROUND
EM	EMERGENCY
EO	ELECTRICALLY OPERATED
EPO	EMERGENCY POWER OFF
EQ	EQUIPMEN BRANCH EMERGENCY
EWC	ELECTRIC WATER COOLER
FLA	FULL LOAD AMPS
FWE	FURNISHED WITH EQUIPMENT
G, GND	GROUND
GD	GARBAGE DISPOSAL
GDS	GENERATOR DOCKING STATION
GFI, GFCI	GROUND FAULT INTERRUPTER
GFPE	GROUND FAULT PROTECTION OF EQUIPMENT
H	HORIZONTAL, HORIZONTALLY MOUNTED
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
IAW	IN ACCORDANCE WITH
IG	ISOLATED GROUND
IM	ICE MACHINE
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KWH	KILOWATT-HOURS
LS	LIFE SAFETY BRANCH EMERGENCY
LSI	LONG TIME, SHORT TIME, INSTANTANEOUS
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
LTS	LIGHTS
MCA	MAXIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MECHANICAL CONTROL PANEL
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MRS	MOTOR RATED SWITCH
MW	MEGAWATT
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT - FIXTURE CONTROLLED AT BRANCH CIRCUIT BREAKER ONLY
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
P	POLE
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
RECEPT, RCPT	RECEPTACLE
REF	REFRIGERATOR
SPD	SURGE PROTECTION DEVICE
SWBD	SWITCHBOARD
TR	TAMPER-RESISTANT
TYP	TYPICAL
UNO,UON	UNLESS NOTED OTHERWISE
UPS	UNINTERUPTABLE POWER SUPPLY
V	VOLTS
VA	VOLT-AMPERES
VB	VIEWBOX
W	WATTS, WIRE
WP	WEATHERPROOF WHILE IN USE COVER
XFMR	TRANSFORMER
XP, EP	EXPLOSION PROOF

ELECTRICAL INDEX OF DRAWINGS

SHEET NUMBER	SHEET NAME
E-001	ELECTRICAL SYMBOLS, & NOTES
E-002	ELECTRICAL SPECIFICATION
E-003	ELECTRICAL DETAILS
E-101	FIRST FLOOR PLAN + ELECT DEMOLITION
E-201	FIRST FLOOR PLAN + ELECTRICAL

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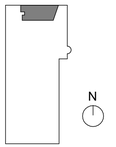
KEY PLAN



I2C FIRST FLOOR CFR BUILD OUT

6000 SECOND ST
DETROIT MICHIGAN 48202

NO.	ISSUE/REV.	DATE
	BID SET	03.13.23

STATE OF MICHIGAN
JUSTIN LEE BUETS
License No. 6201062021
03/13/23
REGISTERED PROFESSIONAL ENGINEER

ELECTRICAL SYMBOLS, & NOTES

E-001

ELECTRICAL GENERAL REQUIREMENT:

A. SCOPE OF WORK: ALL MATERIAL SHALL BE NEW UNLESS OTHERWISE INDICATED. FURNISH ALL LABOR, EQUIPMENT, TECHNICAL SUPERVISION, AND INCIDENTAL SERVICES REQUIRED TO COMPLETE, TEST AND LEAVE READY FOR OPERATION THE ELECTRICAL SYSTEMS AS SPECIFIED AND AS INDICATED ON DRAWINGS.

B. ORDINANCES AND CODES: PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES AND REGULATIONS, THE RULES AND REGULATIONS OF NFPA, NECA, AND UL UNLESS OTHERWISE INDICATED.

C. UNLESS OTHERWISE INDICATED, ALL REQUIRED PERMITS, LICENSES, INSPECTIONS, APPROVALS AND FEES FOR ELECTRICAL WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, RULES AND REGULATIONS.

D. THE DRAWINGS SHOW THE LOCATION AND GENERAL ARRANGEMENT OF EQUIPMENT, ELECTRICAL SYSTEMS AND RELATED ITEMS. THEY SHALL BE FOLLOWED AS CLOSELY AS ELEMENTS OF NEW CONSTRUCTION WILL PERMIT.

E. EXAMINE THE DRAWINGS OF OTHER TRADES AND VERIFY THE CONDITIONS GOVERNING THE WORK ON THE JOB SITE. ARRANGE WORK ACCORDINGLY, PROVIDING LABOR AND MATERIALS AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

F. COORDINATE ARRANGEMENT, MOUNTING AND SUPPORT OF ELECTRICAL EQUIPMENT WITH OTHER TRADES.

G. VISIT THE SITE, EXAMINE AND VERIFY THE CONDITIONS UNDER WHICH THE WORK MUST BE CONDUCTED BEFORE SUBMITTING PROPOSAL THE SUBMISSION OF A PROPOSAL IMPLIES THAT THE CONTRACTOR HAS VISITED THE SITE AND UNDERSTANDS THE CONDITIONS UNDER WHICH THE WORK MUST BE CONDUCTED. NO ADDITIONAL CHARGES WILL BE ALLOWED BECAUSE OF FAILURE TO MAKE THIS EXAMINATION OR TO INCLUDE ALL MATERIALS AND LABOR TO COMPLETE THE WORK.

H. BIDS SHALL BE BASED UPON MANUFACTURED EQUIPMENT SPECIFIED. VOLUNTARY ALTERNATES MAY BE SUBMITTED FOR CONSIDERATION, WITH LISTED ADDITION OR DEDUCTION TO THE BID.

I. WARRANTY: CONTRACTOR SHALL WARRANTY THAT THE ELECTRICAL INSTALLATION IS FREE FROM DEFECTS AND AGREES TO REPLACE OR REPAIR, TO THE OWNER'S SATISFACTION, ANY PART OF THIS ELECTRICAL INSTALLATION WHICH BECOMES DEFECTIVE WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION FOLLOWING FINAL ACCEPTANCE, PROVIDED THAT SUCH FAILURE IS DUE TO DEFECTS IN THE EQUIPMENT, MATERIAL WORKMANSHIP OR FAILURE TO FOLLOW THE CONTRACT DOCUMENTS.

J. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY SERVICES INCLUDING EQUIPMENT AND INSTALLATION REQUIRED TO MAINTAIN OPERATION AS A RESULT OF ANY EQUIPMENT FAILURE OR DEFECT DURING WARRANTY PERIOD.

K. FILE WITH THE OWNER ANY AND ALL WARRANTIES FROM THE EQUIPMENT MANUFACTURERS INCLUDING THE OPERATING CONDITIONS AND PERFORMANCE CAPACITIES THEY ARE BASED ON.

L. IN GENERAL DEMOLITION WORK IS INDICATED ON THE DRAWINGS. HOWEVER, THE CONTRACTOR SHALL VISIT THE JOB SITE TO DETERMINE THE FULL EXTENT AND CHARACTER OF THIS WORK.

M. UNLESS SPECIFICALLY NOTED TO THE CONTRARY, REMOVED MATERIALS SHALL NOT BE REUSED IN THE WORK. SALVAGED MATERIALS THAT ARE TO BE REUSED SHALL BE STORED SAFE AGAINST DAMAGE AND TURNED OVER TO THE APPROPRIATE TRADE FOR REUSE. SALVAGED MATERIALS OF VALUE THAT ARE NOT TO BE REUSED SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS SUCH OWNERSHIP IS WAIVED. ITEMS ON WHICH THE OWNER WAIVES OWNERSHIP SHALL BECOME THE PROPERTY OF THE CONTRACTOR, WHO SHALL REMOVE AND LEGALLY DISPOSE OF SAME, AWAY FROM THE PREMISES.

N. CONSULT WITH THE OWNER'S REPRESENTATIVE AS TO THE METHODS OF CARRYING ON THE WORK SO AS NOT TO INTERFERE WITH THE OWNER'S OPERATION ANY MORE THAN ABSOLUTELY NECESSARY. ACCORDINGLY, ALL SERVICE LINES SHALL BE KEPT IN OPERATION AS LONG AS POSSIBLE AND THE SERVICES SHALL ONLY BE INTERRUPTED AT SUCH TIME AS WILL BE DESIGNATED BY THE OWNER'S REPRESENTATIVE.

O. ALL CUTTING, PATCHING AND REPAIR WORK SHALL BE PERFORMED BY THE CONTRACTOR THROUGH APPROVED, QUALIFIED SUBCONTRACTORS. CONTRACTOR SHALL INCLUDE FULL COST OF SAME IN BID.

P. INSPECT THE INSTALLATION OF ALL EQUIPMENT PER THE MANUFACTURER'S RECOMMENDATION AND APPLICABLE CODES.

Q. PROVIDE UL APPROVED FIRE-STOPPING SYSTEM FOR ALL PENETRATIONS PASSING THROUGH FIRE RATED ASSEMBLES.

R. COMPLY WITH NECA 1.

S. PROVIDE COMPLETE OPERATION AND MAINTENANCE INSTRUCTIONAL MANUALS COVERING ALL ELECTRICAL EQUIPMENT HEREIN SPECIFIED, TOGETHER WITH PARTS LISTS.

T. CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, RECORD DRAWINGS ON ELECTRONIC MEDIA OR BLACK LINE REPRODUCTIONS WHICH HAVE BEEN NEATLY MARKED TO REPRESENT AS-BUILT CONDITIONS FOR ALL NEW ELECTRICAL WORK.

U. MATERIALS AND MEANS AND METHODS SHALL ADHERE TO LATEST WSU DESIGN AND CONCTRUCTION STANDARDS. WHERE DISCREPANCIES EXIST BETWEEN THESE SPECIFICATIONS AND DRAWINGS AND THE WSU STANDARDS, WSU STANDARDS SHALL TAKE PRESCEDENT.

V. SUBMIT FOR APPROVAL SHOP DRAWINGS FOR ALL ELECTRICAL SYSTEMS OR EQUIPMENT BUT NOT LIMITED TO THE ITEMS LISTED BELOW:
1. WIRING DEVICES
2. LIGHTING FIXTURES
3. LIGHTING CONTROL SYSTEMS AND DEVICES

LIGHTING CONTROL DEVICES

A. INSTALL LIGHTING CONTROL DEVICES AS INDICATED ON PLAN.

B. COORDINATE OCCUPANCY/VACANCY SENSOR LOCATIONS, COVERAGE AND REQUIRED QUANTITIES WITH MANUFACTURER'S RECOMMENDATIONS. COVERAGE AREAS INDICATED ON THE DRAWINGS ARE FOR MINOR MOTION (6 TO 8 INCHES OF HAND MOVEMENT). PROVIDE ADDITIONAL OCCUPANCY SENSORS AND CONTROL UNITS AS REQUIRED TO ACHIEVE COMPLETE MINOR MOTION COVERAGE OF THE SPACE INDICATED.

C. OCCUPANCY/VACANCY SENSOR ADJUSTMENTS: WHEN REQUESTED WITHIN 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION, PROVIDE ON-SITE ASSISTANCE IN ADJUSTING SENSORS TO SUIT ACTUAL OCCUPIED CONDITIONS PROVIDE UP TO TWO VISITS TO SITE OUTSIDE NORMAL OCCUPANCY HOURS FOR THIS PURPOSE.

D. OCCUPANCY/VACANCY SENSOR:
1. WALL SWITCH DUAL TECHNOLGY SENSOR: SENSOR SWITCH WSX WSU OR APPROVED EQUAL
2 DUAL RELAY, DUAL TECHNOLOGY SENSOR: SENSOR SWITCH WSX2P OR WSU APPROVED EQUAL
3. 360° CEILING MOUNTED DUAL TECHNOLOGY SENSOR: SENSOR SWITCH CM OR WSU APPROVED EQUAL

E. OCCUPANCY/VACANCY SENSOR CONTROL UNITS:
1. DESCRIPTION: TRANSFORMER AND RELAY COMBINED IN SINGLE UNIT TO PROVIDE 24DC POWER TO SENSORS AND PROVIDE 20A CONTACT(S) FOR CONTROL OF LIGHTING LOADS AT 120 OR 277V. CONTROL UNIT INPUT POWER SHALL BE FROM UNSWITCHED LEG OF LIGHTING CIRCUIT IT IS CONTROLLING.
   a. CONTROL UNITS SHALL BE PROVIDED AS REQUIRED TO POWER CEILING MOUNTED OCCUPANCY SENSORS, CONTROL LIGHTING LOADS AND PROVIDE A MINIMUM OF ONE AUXILIARY CONTACT.
   b. OCCUPANCY SENSOR CONTROL UNITS SHALL MOUNT EXTERNAL TO 4-INCH SQ JUNCTION BOX IN THE CEILING SPACE. ALL WIRING BETWEEN CONTROL UNIT AND OCCUPANCY SENSOR SHALL BE PLENUM RATED.
   c. LOCATE CONTROL UNIT IN ACCESSIBLE LOCATION IN GYP-BOARD CEILINGS, ADJACENT TO RETURN AIR GRILLES, OR PROVIDE ACCESS PANEL
   d. ADDITIONAL AUXILIARY RELAY MODULES SHALL BE PROVIDED AS REQUIRED TO PROVIDE CONTROL OF ALL LIGHTING CIRCUITS AND ADDITIONAL AUXILIARY CONTACTS AS REQUIRED.
   e. IT IS ACCEPTABLE TO PROVIDE CONTROLS AND AUXILIARY CONTACTS AS REQUIRED INTEGRAL TO NEW CEILING SENSOR, PROVIDED ALL REQUIRED CONTACTS ARE PROVIDED.
   f. MAXIMUM OF 3 SENSORS PER POWER PACK. VERIFY EXACT QUANTITIES REQUIRED WITH MANUFACTURER.

IDENTIFICATION

A. COMPLY WITH ANSI A13.1, ANSI C2, NFPA 70, AND 29 CFR 1910.145.

B. COORDINATE IDENTIFICATION NAMES, ABBREVIATIONS, COLORS, AND OTHER FEATURES WITH REQUIREMENTS IN THE CONTRACT DOCUMENTS, SHOP DRAWINGS, MANUFACTURER'S WIRING DIAGRAMS, AND THE OPERATION AND MAINTENANCE MANUAL AND WITH THOSE REQUIRED BY CODES, STANDARDS, AND 29 CFR 1910.145. USE CONSISTENT DESIGNATIONS THROUGHOUT PROJECT.

C. COORDINATE INSTALLATION OF IDENTIFYING DEVICES WITH COMPLETION OF COVERING AND PAINTING OF SURFACES WHERE DEVICES ARE TO BE APPLIED, WITH LOCATION OF ACCESS PANELS AND DOORS.

D. INSTALL IDENTIFYING DEVICES BEFORE INSTALLING ACOUSTICAL CEILINGS AND SIMILAR CONCEALMENT.

E. INSTALL ENGRAVED, LAMINATED ACRYLIC OR MELAMINE LABELS THAT ARE PUNCHED OR DRILLED FOR SCREW MOUNTING WITH SELF TAPPING STAINLESS STEEL SCREW. LABELS SHALL HAVE BLACK LETTERS ON A WHITE BACKGROUND [AND WHITE LETTERS ON RED BACKGROUND FOR EMERGENCY]. MINIMUM LETTER HEIGHT SHALL BE 3/8 INCH (10 MM). LABELS SHALL BE INSTALLED ON ALL ELECTRICAL EQUIPMENT AFFECTED BY PROJECT.
1. PANELBOARD AND TRANSFORMER NAMEPLATES IDENTIFY SOURCE FED FROM, VOLTAGE, SIZE, NAME.
2. ENCLOSED CONTROLLERS, CIRCUIT BREAKERS, DISCONNECT SWITCHES IDENTIFY SOURCE AND LOAD SERVED.

F. WIRING DEVICES: USE ADHESIVE LABEL WITH BLACK[, RED FOR EMERGENCY,] FILM LETTERING ON FACE OF WALL PLATE [ON THE REAR OF THE FACEPLATE] AND DURABLE WIRE MARKERS OR TAGS INSIDE OUTLET BOXES. LABELS SHALL BE CLEAR POLYESTER WITH BLACK LETTER[, RED LETTER FOR EMERGENCY], FONT SIZE OF 7. IDENTIFY PANELBOARD AND CIRCUIT NUMBER FROM WHICH SERVED.

G. USE THE COLORS USED BELOW FOR UNGROUNDED SERVICE, FEEDER, AND BRANCH-CIRCUIT CONDUCTORS.
1. COLOR SHALL BE FACTORY APPLIED OR, FOR SIZES LARGER THAN NO. 10 AWG IF AUTHORITIES HAVING JURISDICTION PERMIT, FIELD APPLIED.
2. COLORS FOR 208/120-V CIRCUITS
   a. PHASE A BLACK
   b. PHASE B: RED
   c. PHASE C: BLUE
   d. NEUTRAL: WHITE
3. COLORS FOR 480/277-V CIRCUITS:
   a. PHASE A: BROWN
   b. PHASE B: ORANGE
   c. PHASE C: YELLOW
   d. NEUTRAL: GRAY
4. FIELD-APPLIED, COLOR-CODING CONDUCTOR TAPE APPLY IN HALF-LAPPED TURNS FOR A MINIMUM DISTANCE OF 6 INCHES FROM TERMINAL POINTS AND IN BOXES WHERE SPLICES OR TAPS ARE MADE. APPLY LAST TWO TURNS OF TAPE WITH NO TENSION TO PREVENT POSSIBLE UNWINDING. LOCATE BANDS TO AVOID OBSCURING FACTORY CABLE MARKINGS.

H. WARNING LABELS FOR INDOOR CABINETS, BOXES, AND ENCLOSURES FOR POWER AND LIGHTING: COMPLY WITH 29 CFR 1910.145 AND APPLY SELF-ADHESIVE WARNING LABELS. IDENTIFY SYSTEM VOLTAGE WITH BLACK LETTERS ON AN ORANGE BACKGROUND. APPLY TO EXTERIOR OF DOOR, COVER, OR OTHER ACCESS.
1. EQUIPMENT WITH MULTIPLE POWER OR CONTROL SOURCES APPLY TO DOOR OR COVER OF EQUIPMENT INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
   a. AUTOMATIC TRANSFER SWITCHES.
   b. SERVICE ENTRANCE EQUIPMENT.
2. EQUIPMENT REQUIRING WORKSPACE CLEARANCE ACCORDING TO NFPA 70: UNLESS OTHERWISE INDICATED, APPLY TO DOOR OR COVER OF EQUIPMENT BUT NOT ON FLUSH PANELBOARDS AND SIMILAR EQUIPMENT IN FINISHED SPACES.

I. ACCESSIBLE RACEWAYS AND CABLES OF AUXILIARY SYSTEMS IDENTIFY THE FOLLOWING SYSTEMS WITH COLOR-CODED, SELF-ADHESIVE VINYL TAPE APPLIED IN BANDS OR PAINTED RACEWAY
1. FIRE ALARM SYSTEM: RED.
2. SECURITY SYSTEM: BLUE AND YELLOW.
3. TELECOMMUNICATION SYSTEM: GREEN AND YELLOW.
4. CONTROL WIRING: GREEN AND RED.

WIRING DEVICES

A. STRAIGHT-BLADE-TYPE RECEPTACLES: HEAVY DUTY SPECIFICATION GRADE. COMPLY WITH NEMA ID 1, NEMA ID 6, DSCC W-C-596G, AND UL 498. CONFIGURATION 5-20R DUPLEX RECEPTACLE HUBBELL HBL5362X OR EQUAL BY PASS & SEYMOUR OR COOPER.

B. GFI RECEPTACLES: STRAIGHT BLADE FEED-THROUGH TYPE, GENERAL DUTY GRADE, WITH INTEGRAL NEMA WD 6, CONFIGURATION 5-20R DUPLEX RECEPTACLE; COMPLYING WITH UL 498 AND UL 943. DESIGN UNITS FOR INSTALLATION IN A 2-3/4-INCH- (70-MM-) DEEP OUTLET BOX WITHOUT AN ADAPTER. HUBBELL GF20XL OR EQUAL BY PASS & SEYMOUR OR COOPER.

C. WALL SWITCHES: SINGLE AND DOUBLE-POLE SWITCHES COMPLY WITH DSCC W-C-896F AND UL 20. HUBBELL WIRING DEVICE, KELLEMS 1220 SERIES OR EQUAL BY PASS & SEYMOUR, COOPER OR LEVITON.

D. LED LAMP DIMMER SWITCHES: LUTRON OR EQUAL, COMPATIBLE WITH LED DIMMING DRIVER SPECIFIED.

E. DIMMERS:
1. CONTROL: CONTINUOUSLY ADJUSTABLE SLIDER WITH PRE-SET; SINGLE-POLE OR THREE-WAY SWITCHING TO SUIT CONNECTIONS.
2. INSTALL WALL DIMMERS TO ACHIEVE FULL RATING SPECIFIED AND INDICATED AFTER DERATNG FOR GANGING ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS
3. INSTALL UNSHARED NEUTRAL CONDUCTORS ON LINE AND LOAD SIDE OF DIMMERS ACCORDING TO MANUFACTURERS' WRITTEN INSTRUCTIONS.

F. WALL PLATES:
1. PROVIDE STAINLESS STEEL WALL PLATES IN FINISHED AREAS.
2. PROVIDE GALVANIZED STEEL WALL PLATES IN UNFINISHED AREAS.
3. PROVIDE WEATHERPROOF WHILE-IN-USE COVERPLATES FOR WET LOCATIONS.

G. WIRING DEVICE/WALL PLATE COLOR AS SELECTED BY ARCHITECT UNLESS OTHERWISE INDICATED OR REQUIRED BY NFPA 70.

H. CONNECT WIRING DEVICE GROUNDING TERMINAL TO OUTLET BOX WITH BONDING JUMPER. USE OF QUICK GROUND STRAP OR SCREW IS NOT ACCEPTABLE.

GROUNDING AND BONDING

A. EQUIPMENT GROUNDING: COMPLY WITH NFPA 70, ARTICLE 250, FOR TYPES, SIZES, AND QUANTITIES OF EQUIPMENT GROUNDING CONDUCTORS, UNLESS SPECIFIC TYPES, LARGER SIZES, OR MORE CONDUCTORS THAN REQUIRED BY NFPA 70 ARE INDICATED.

B. PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN EACH RACEWAY.

CONDUCTORS AND CABLES

A. CONDUCTOR MATERIAL: COPPER COMPLYING WITH NEMA WC: 70; STRANDED CONDUCTOR.

B. CONDUCTOR INSULATION TYPES: TYPE THHN-THWN, SO, COMPLYING WITH NEMA WC 70.

C. CONCEAL CABLES IN FINISHED WALLS, CEILINGS, AND FLOORS, UNLESS OTHERWISE INDICATED.

D. USE CONDUCTOR NOT SMALLER THAN 12 AWG FOR POWER AND LIGHTING CIRCUITS. UNLESS INDICATED OTHERWISE, ALL 20A BRANCH CIRCUITS SHALL BE 2#12, 1#12G, 3/4"C.

E. USE CONDUCTOR NOT SMALLER THAN #14 AWG FOR CONTROL CIRCUITS PROVIDED BY ELECTRICAL CONTRACTOR.

F. SUPPORT COMMUNICATION CABLES ABOVE ACCESSIBLE CEILING, USING SPRING METAL CLIPS OR PLASTIC CABLE TIES TO SUPPORT CABLES FROM STRUCTURE DO NOT REST CABLE ON CEILING PANELS.

G. USE "STA-KON" CONNECTORS TO TERMINATE STRANDED CONDUCTORS #10 AWG AND SMALLER TO SCREW TERMINALS.

H. CONDUCTOR AND INSULATION APPLICATIONS:
1. FEEDERS: TYPE THHN-THWN, SINGLE CONDUCTORS IN RACEWAY
2. BRANCH CIRCUITS, INCLUDING IN CRAWLSPACES: TYPE THHN-THWN, SINGLE CONDUCTORS IN RACEWAY PROVIDE A DEDICATED NEUTRAL FOR EACH CIRCUIT.
3. CLASS I CONTROL CIRCUITS TYPE THHN -THWN IN RACEWAY
4. CLASS II CONTROL CIRCUITS: POWER LIMITED CABLE

PANELBOARDS

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY EXISTING PANELBOARD MANUFACTURER (GENERAL ELECTRIC).

B. SHORT-CIRCUIT RATING: FULLY RATED TO INTERRUPT SYMMETRICAL SHORT-CIRCUIT CURRENT AVAILABLE AT TERMINALS.

C. INSTALL PANELBOARDS AND ACCESSORIES ACCORDING TO NEMA PB 1.1.

D. CREATE A DIRECTORY TO INDICATE INSTALLED CIRCUIT LOADS CREATED BY RETROFITTING. OBTAIN APPROVAL BEFORE INSTALLING. CREATE A TYPED DIRECTORY; HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE. COORDINATE FINAL DIRECTORY ROOM NAMES AND NUMBERS WITH OWNER.

E. ON COMPLETION OF INSTALLATION, INSPECT INTERIOR AND EXTERIOR OF PANELBOARDS. REMOVE PAINT SPLATTERS AND OTHER SPOTS. VACUUM DIRT AND DEBRIS; DO NOT USE COMPRESSED AIR TO ASSIST IN CLEANING. REPAIR EXPOSED SURFACES TO MATCH ORIGINAL FINISH.

F. MOLDED-CASE CIRCUIT BREAKERS UL 489, WITH INTERRUPTING CAPACITY TO MEET AVAILABLE FAULT CURRENTS.
1. THERMAL-MAGNETIC CIRCUIT BREAKERS INVERSE TIME-CURRENT ELEMENT FOR LOW-LEVEL OVERLOADS, AND INSTANTANEOUS MAGNETIC TRIP ELEMENT FOR SHORT CIRCUITS. ADJUSTABLE ACCESS COVER.

MOLDED-CASE CIRCUIT-BREAKER FEATURES AND ACCESSORIES:
1. LUGS MECHANICAL STYLE, SUITABLE FOR NUMBER, SIZE, TRIP RATINGS, AND CONDUCTOR MATERIALS.
2. APPLICATION USING: APPROPRIATE FOR APPLICATION; TYPE SW) FOR SWITCHING FLUORESCENT LIGHTING LOADS; TYPE HACR FOR HEATING, AIR-CONDITIONING, AND REFRIGERATING EQUIPMENT.
3. GROUND-FAULT PROTECTION: INTEGRALLY MOUNTED RELAY AND TRIP UNIT WITH ADJUSTABLE PICKUP AND TIME-DELAY SETTINGS, PUSH-TO-TEST FEATURE, AND GROUND-FAULT INDICATOR.
4. SHUNT TRIP: 120-V TRIP COIL ENERGIZED FROM SEPARATE CIRCUIT, SET TO TRIP AT 75 PERCENT OF RATED VOLTAGE.
5. TANDEM CIRCUIT BREAKERS ARE NOT PERMITTED.
6. PROVIDE CIRCUIT BREAKERS U.L LISTED AS TYPE GFEPCI FOR ALL SELF REGULATING HEATING (SNOW MELTING AND HEAT TRACE) CABLES BRANCH CIRCUITS.
7. PROVIDE LOCK ON DEVICES FOR CIRCUIT BREAKERS WHEN CALLED OUT ON PANEL SCHEDULES WITH “LOD" DESIGNATION AND WHERE REQUIRED FOR FIRE ALARM BRANCH CIRCUITS.
8. PROVIDE GROUND FAULT INTERRUPT 5MA CIRCUIT BREAKER WHEN CALLED OUT ON PANEL SCHEDULES.
9. PROVIDE SHUNT TRIP BREAKERS WHEN CALLED OUT ON PANEL SCHEDULES.

LIGHTING

A. PROVIDE LIGHTING FIXTURES AS INDICATED ON DRAWINGS.

B. INSTALL DRIVERS/BALLASTS, AND SPECIFIED ACCESSORIES AT FACTORY. FOR FIXTURES CONTAINING LAMPS, INSTALL ON PROJECT SITE AFTER FIXTURE INSTALLATION.

C. FIXTURES SET LEVEL, PLUMB, AND SQUARE WITH CEILINGS AND WALLS. INSTALL LAMPS IN EACH FIXTURE WHERE REQUIRED.

D. SUPPORT LUMINARIES INDEPENDENT OF CEILING FRAMING. SUPPORT RECESSED GRID LUMINARIES FROM TWO OPPOSITE CORNERS DIRECTLY TO STRUCTURE. WIRE OR ROD SHALL HAVE BREAKING STRENGTH OF THE WEIGHT OF FIXTURE AT A SAFETY FACTOR OF 3.

E. INSTALL RECESSED LUMINARIES TO PERMIT REMOVAL FROM BELOW.

F. INSTALL RECESSED LUMINARIES USING ACCESSORIES AND FIRE STOPPING MATERIALS TO MEET REGULATORY REQUIREMENTS FOR FIRE RATING.

G. INSTALL SURFACE MOUNTED LUMINARIES AND EXIT SIGNS PLUMB AND ADJUST TO ALIGN WITH BUILDING LINES AND WITH EACH OTHER. SECURE TO PROHIBIT MOVEMENT.

H. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A AND UL 4868.

I. MAKE WIRING CONNECTIONS TO BRANCH CIRCUIT USING BUILDING WIRE WITH INSULATION SUITABLE FOR TEMPERATURE CONDITIONS WITHIN LUMINAIRE

J. BOND PRODUCTS AND METAL ACCESSORIES TO BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR.

K. CONNECT LUMINARIES TO BRANCH CIRCUIT OUTLET BOXES PROVIDED UNDER RACEWAYS AND BOXES SECTION USING 1/2" FLEXIBLE CONDUIT OF NO MORE THAN 6'-0" IN LENGTH.

L. CLEAN ELECTRICAL PARTS TO REMOVE CONDUCTIVE AND DELETERIOUS MATERIALS.

M. REMOVE DIRT AND DEBRIS FROM ENCLOSURES AND LENSES.

N. CLEAN PHOTOMETRIC CONTROL SURFACES AS RECOMMENDED BY MANUFACTURER.

O. CLEAN FINISHES AND TOUCH UP DAMAGE.

P. EACH LED LUMINAIRE TYPE SHALL BE BINNED WITHIN A THREE-STEP MACADAM ELLIPSE TO ENSURE COLOR CONSISTENCY AMONG LUMINAIRES AND CONTAIN INTERNAL DRIVER UNLESS NOTED OTHERWISE.

RACEWAYS AND BOXES

A. SURFACE METAL RACEWAYS: GALVANIZED STEEL WITH SNAP-ON COVERS. FINISH WITH MANUFACTURER'S STANDARD PRIME COATING. WIREMOLD OR EQUAL SIZE/TYPE AS SHOWN ON DRAWINGS.

B. MINIMUM RACEWAY SIZE 3/4-INCH TRADE SIZE

C. INSTALL CONDUIT IN ACCORDANCE WITH NECA "NATIONAL ELECTRICAL INSTALLATION STANDARDS".

D. ROUTE CONDUITS IN FINISHED AREAS WITH EXPOSED CEILINGS AT UNDERSIDE OF STRUCTURAL DECK OR AS HIGH AS POSSIBLE. WHERE STEEL METAL DECK ON STEEL JOIST CONSTRUCTION, ROUTE CONDUITS ABOVE JOISTS. DO NOT SECURE CONDUIT TO BOTTOM OF JOISTS.

E. [RACEWAY APPLICATIONS REFER TO RACEWAY APPLICATIONS SCHEDULE ON SHEET E0.2.]

F. FITTINGS FOR EMT: STEEL COMPRESSION TYPE.

FIRE ALARM

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE EXTENSION OF EXISTING SYSTEM.

B. PERFORMANCE REQUIREMENTS:
1. DESIGN AND INSTALLATION OF NEW DEVICES ONTO AN EXISTING FIRE ALARM SYSTEM. THE COMPLETE FUNCTIONAL SYSTEM SHALL MEET THE REQUIREMENTS OF THIS SPECIFICATION, APPLICABLE CODES, AND AUTHORITIES HAVING JURISDICTION (AHJ) REQUIREMENTS.
2. COMPLY WITH NFPA 72.
3. PROVIDE DEVICE LOCATIONS AND RATINGS AS REQUIRED TO MEET THE REQUIREMENTS OF THE AHJ AND ALL APPLICABLE CODES.
4. FIRE ALARM SYSTEM VENDOR SHALL PROVIDE SOUND PRESSURE LEVEL CALCULATIONS DEMONSTRATING COMPLIANCE WITH NFPA 72 AND ESTABLISH QUANTITIES AND TAP SETTINGS OF AUDIBLE DEVICES.
5. NO ADDITIONAL CHARGE FOR FIRE ALARM DEVICES WILL BE ALLOWED UNLESS SPACE DEFINITION, USE OR CONSTRUCTION IS SUBSTANTIALLY REVISED.

C. NOTIFICATION APPLIANCES: EQUIPPED FOR MOUNTING AS INDICATED AND WITH SCREW TERMINALS FOR SYSTEM CONNECTIONS
1. MATCH EXISTING DEVICES OF SAME TYPE.
8. AUDIBLE ALARM-INDICATING DEVICES INSTALL AT 96” AFF OR 6 INCHES (150 MM) BELOW THE CEILING, WHICHEVER IS LESS. INSTALL BELLS AND HORNS ON FLUSH-MOUNTED BACK BOXES WITH THE DEVICE-OPERATING MECHANISM CONCEALED BEHIND A GRILLE.
9. VISIBLE ALARM-INDICATING DEVICES: INSTALL AT 96" AFF OR 6 INCHES (150 MM) BELOW THE CEILING, WHICHEVER IS LESS.

D. ADDRESSABLE CONTROL MODULE PROVIDE FOR INTEGRATION OF AUXILIARY CONTROL FUNCTIONS INTO THE ANALOG SIGNALING CIRCUIT. INTELLIGENT ANALOG SIGNALING CIRCUIT CONTROL WITH COMMUNICATION INTERACTION WITH THE ANALOG SIGNALING CIRCUIT HAVING THE CAPABILITY OF INITIATING A CONTROL FUNCTION TO AN AUXILIARY DEVICE BASED ON A SPECIFIED EVENT AND NO/NC CONTACT PAIRS RATED AT 2 AMPS 120 VAC OR 24 VDC.

E. WIRE AND CABLE WIRE AND CABLE FOR FIRE ALARM SYSTEMS SHALL BE UL LISTED AND LABELED AS COMPLYING WITH NFPA 70, ARTICLE 760.
1. SIGNALING LINE CIRCUITS: TWISTED, SHIELDED PAIR, SIZE AS RECOMMENDED BY SYSTEM MANUFACTURER.
2. NON-POWER-LIMITED CIRCUITS: SOLID-COPPER CONDUCTORS WITH 600-V RATED, 75 DEG C, COLOR-CODED INSULATION. LOW-VOLTAGE CIRCUITS: NO. 16 AWG, MINIMUM. LINE-VOLTAGE CIRCUITS: NO. 12 AWG MINIMUM.
3. INSTALL WIRING ACCORDING TO NECA 1 AND TIA/EIA 568-A
4. FIRE ALARM CIRCUITS AND EQUIPMENT CONTROL WIRING ASSOCIATED WITH THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN A DEDICATED RACEWAY SYSTEM IN AREAS OF EXPOSED CONSTRUCTION.
5. [PLENUM RATED CABLE IS ALLOWED ABOVE CONCEALED, ACCESSIBLE CEILINGS.] (Not allowed in Phx)

F. SUBMIT FIRE ALARM DRAWINGS AND DOCUMENTATION TO THE AUTHORITIES HAVING JURISDICTION AND THE ARCHITECT/ENGINEER.

G. INSTALLER QUALIFICATIONS: PERSONNEL CERTIFIED BY NICET AS FIRE ALARM LEVEL II

H. INTERRUPTION OF EXISTING FIRE ALARM SERVICE: DO NOT INTERRUPT FIRE ALARM SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY GUARD SERVICE ACCORDING TO REQUIREMENTS INDICATED. NOTIFY ARCHITECT, OWNER OR CONSTRUCTION MANAGER NO FEWER THAN SEVEN DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF FIRE ALARM SERVICE DO NOT PROCEED WITH INTERRUPTION OF FIRE ALARM SERVICE WITHOUT OWNER'S WRITTEN PERMISSION.

I. EXISTING FIRE ALARM EQUIPMENT: MAINTAIN FULLY OPERATIONAL UNTIL NEW EQUIPMENT HAS BEEN TESTED AND ACCEPTED. AS NEW EQUIPMENT IS INSTALLED, LABEL IT "NOT IN SERVICE" UNTIL IT IS ACCEPTED. REMOVE LABELS FROM NEW EQUIPMENT WHEN PUT INTO SERVICE AND LABEL EXISTING FIRE ALARM EQUIPMENT "NOT IN SERVICE" UNTIL REMOVED FROM THE BUILDING.

J. FIRE ALARM SYSTEM AND COMPONENTS SHALL OPERATE AS AN EXTENSION OF AN EXISTING SYSTEM. ALL NEW DEVICES SHALL BE SUITABLE AND LISTED WITH EXISTING FIRE ALARM CONTROL PANEL.

K. CONNECTING TO EXISTING EQUIPMENT: VERIFY THAT EXISTING FIRE ALARM SYSTEM IS OPERATIONAL BEFORE MAKING CHANGES OR CONNECTIONS.

L. PERFORM BATTERY CALCULATIONS AND PROVIDE NECESSARY EQUIPMENT WHERE EXISTING BATTERIES WILL NOT SUPPORT ADDITION OF NEW DEVICES INDICATED ON DRAWINGS.

M. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT EST, AND ADJUST FIELD-ASSEMBLED COMPONENTS AND EQUIPMENT INSTALLATION, INCLUDING CONNECTIONS, AND TO ASSIST IN FIELD TESTING. REPORT RESULTS IN WRITING.

N. TEST AND INSPECTION RECORDS: PREPARE ACCORDING TO NFPA 72, INCLUDING DEMONSTRATION OF SEQUENCES OF OPERATION BY USING THE MATRIX-STYLE FORM IN APPENDIX A IN NFPA 7.

O. CERTIFY FIRE ALARM SYSTEM UPON COMPLETION OF INSTALLATION AND TESTING.

TELECOMMUNICATIONS

A. ALL INSTALLATIONS, EQUIPMENT AND MATERIALS SHALL BE PROVIDED IN COMPLIANCE WITH THE CURRENT LAWS AND REGULATIONS OF WSU CAMPUS, BUILDING INDUSTRY CONSULTING SERVICES INTERNATIONAL (BIOS), NEC, THE INTERNATIONAL BUILDING CODE (IBC), COMMUNICM1ONS STANDARDS PUBLISHED BY TIA/EIA, AND ALL OTHER APPLICABLE CODES.

B. THE CONTRACTOR SHALL INSURE THAT THE MANUFACTURER PULL TENSIONS AND MINIMUM BENDING RADIUS OF THE CABLES BEING INSTALLED ARE NOT EXCEEDED AT ANY TIME DURING INSTALLATION.

C. 1” CONDUIT SHALL BE RUN TO THE CLOSEST CABLE TRAY IN THE DIRECTION OF THE IDF ROOM.

D. ALL BENDS WILL BE LONG, SWEEPING BENDS WITH A RADIUS NOT LESS THAN:
1. SIX TIMES THE INTERNAL DIAMETER OF CONDUITS 2 INCHES OR SMALLER.
2. TEN TIES THE INTERNAL DIAMETER OF CONDUITS LARGER THAN 2 INCHES.

E. ENSURE THAT THE HORIZONTAL CABLE BEND RADIUS IS NO LESS THAN FOUR (4) TIMES THE CABLE DIAMETER.

F. THE AMOUNT OF UNTWISTING MUST NOT EXCEED 13mm (0.5 INCHES) FOR ALL CAT CABLES.

G. ENSURE THAT THERE IS A MINIMUM OF 10' OF SLACK AT THE IDF.

H. ENSURE THAT THERE IS A MINIMUM OF 12' OF SLACK AT THE WORK AREA OUTLET.

I. IDENTIFY CABLES AT EACH END WITH PERMANENT ALPHANUMERIC LABELS PER OWNER STANDARDS.

J. WHERE CABLE TRAY IS NOT ACCESSIBLE, SUPPORT NEW CABLING SYSTEM USING J-HOOKS.

K. TELECOMMUNICATIONS JACKS SHALL MEET OWNER'S STANDARDS.

L. CAT CABLING SHALL MEET OWNER STANDARDS.

M. COLOR CODING SHALL MEET OWNER'S STANDARDS.

N. DATA OUTLETS SHALL MEET OWNER'S STANDARDS.

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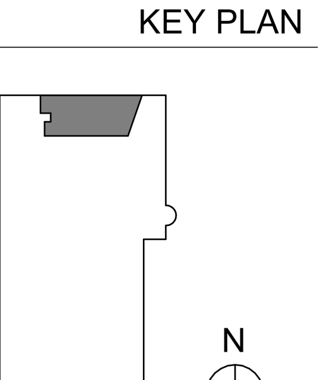
KEY PLAN



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JUSTIN LEE BUTTS
License No. 6201062021
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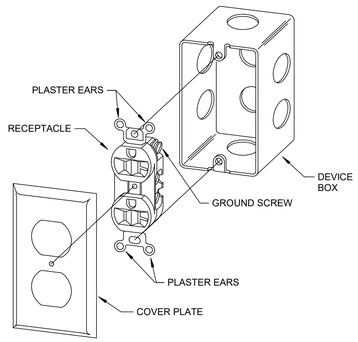
LICENSED PROFESSIONAL ENGINEER

ELECTRICAL SPECIFICATION

E-002

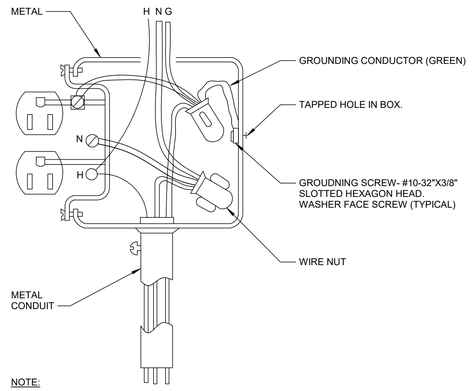


NOTE:

1. REFER TO ELECTRICAL SPECIFICATIONS FOR GROUND PIN ORIENTATION REQUIREMENTS.

RECEPTACLE INSTALLATION

SCALE: NOT TO SCALE

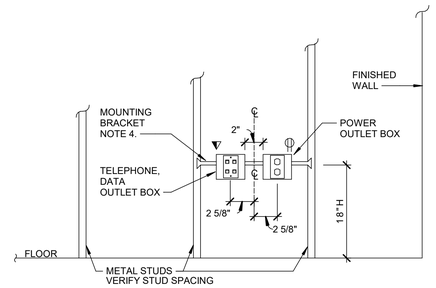


NOTE:

1. GROUNDING CONDUCTOR SHALL BE CONTINUOUS SO THAT REMOVAL OF DEVICE WILL NOT INTERFERE WITH CONDUCTOR CONTINUITY.
2. REFER TO ELECTRICAL SPECIFICATIONS FOR GROUND PIN ORIENTATION REQUIREMENTS.

RECEPTACLE GROUNDING

SCALE: NOT TO SCALE



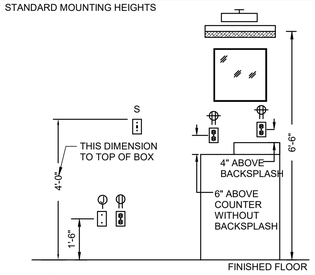
NOTES:

1. PROVIDE NUMBER OF MOUNTING BRACKETS AS REQUIRED TO MOUNT BOTH BOXES AT LOCATIONS SHOWN, REGARDLESS OF STUDS SPACING.
2. SET FLUSH OUTLET BOXES SO EDGE OF DEVICE FLANGE IS FLUSH WITH FINISHED SURFACE.
3. STAGGER BACK TO BACK BOXES 24" MINIMUM IN RATED WALLS USED APPROPRIATE UL SPACING AND FIRESTOPPING.
4. MOUNTING BRACKET SHALL SPAN BETWEEN TWO STUDS. SINGLE-SIDED BOX BRACKET WITH "FAR-SIDE" SUPPORT ARE NOT ACCEPTABLE.

TELECOM AND POWER OUTLET ROUGH-IN

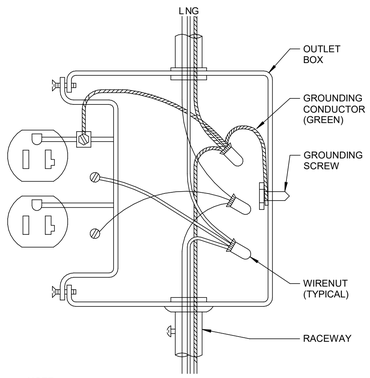
SCALE: NOT TO SCALE

STANDARD MOUNTING HEIGHTS



NOTES:

1. MOUNTING HEIGHTS SHOWN ARE FROM FINISHED FLOOR TO CENTERLINE OF DEVICE/OUTLET/FIXTURE, UNLESS OTHERWISE NOTED.
2. MOUNTING HEIGHTS, WHERE INDICATED, ON FLOOR PLANS, SHALL TAKE PRECEDENCE OVER THESE MOUNTING HEIGHTS. LOCATIONS OF OUTLETS SHOWN ON ARCHITECTURAL ELEVATIONS SHALL TAKE PRECEDENCE OVER THESE MOUNTING HEIGHTS. FIELD LOCATE OUTLETS WITH ARCHITECT DURING ROUGH-IN.
3. INSTALL OUTLETS THAT ARE IN CLOSE PROXIMITY ON THE SAME CENTERLINE. OUTLETS THAT ARE WITHIN 2'-0" HORIZONTALLY AND WITHIN 1'-0" VERTICALLY SHALL BE INSTALLED ON THE SAME HORIZONTAL CENTERLINE LOCATED HALF WAY BETWEEN THE HEIGHTS SHOWN. OUTLETS THAT ARE MORE THAN 1'-0" APART VERTICALLY SHALL BE INSTALLED ON THE SAME VERTICAL CENTERLINE.
4. MAXIMUM MOUNTING HEIGHT FOR SWITCHES ABOVE A COUNTER TOP 20" DEEP OR LESS IS 48" AFF TO TOP OF BOX. SWITCHES MOUNTED ABOVE COUNTER TOPS DEEPER THAN 20" SHALL BE INSTALLED AT NO MORE THAN 44" ABOVE FINISHED FLOOR TO TOP OF BOX. NOTIFY ARCHITECT WHERE COUNTERTOP PROHIBITS SWITCH INSTALLTION.

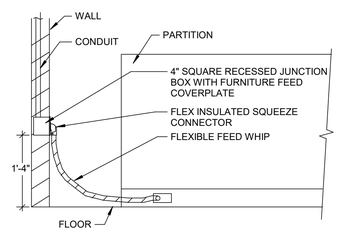


NOTE:

1. REFER TO ELECTRICAL SPECIFICATIONS FOR GROUND PIN ORIENTATION REQUIREMENTS.

RECEPTACLE WIRING

SCALE: NOT TO SCALE



NOTES:

1. PROVIDE CIRCUIT IDENTIFICATION LABEL ON COVERPLATE PER ELECTRICAL SPECIRFICATION.

FURNITURE PARTITION POWER FEED

SCALE: NOT TO SCALE

ELECTRICAL/COMMUNICATION BACKBOX

SCALE: NOT TO SCALE

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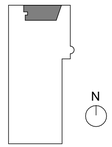
KEY PLAN



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ELECTRICAL DETAILS

E-003

PLAN NOTES

ED01 REMOVE EXISTING LIGHT FIXTURE. PREPARE EXISTING CIRCUIT FOR WORK INDICATED ON LIGHTING PLAN.

ED02 REMOVE EXISTING LIGHITNG CONTROL. REUSE EXISTING JUNCTION BOX, WIRING, AND CONDUIT TO FEED NEW LIGHTING IN REVISED SPACE AS INDICATED ON LIGHTING PLAN. REVISE CIRCUIT AS NEEDED FOR NEW WORK.

ED03 REMOVE EXISTING LIGHT FIXTURE AND ASSOCIATED LIGHTING CONTROL. REMOVE CONDUIT AND WIRING BACK TO SOURCE OR NEAREST UPSTREAM TO REMAIN DEVICE.

ED04 REMOVE EXISTING UNDERCABINET LIGHT. REVISE CONDUIT AND WIRING TO ACCOMMODATE EXISTING TO REMAIN UNDERCABINET LIGHT AND REVISED LIGHTING CONTROLS INDICATED ON LIGHTING PLAN.

ED05 REMOVE EXISTING REFRIGERATOR RECEPTACLE AND CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE. PREPARE CIRCUIT FOR EXTENSION TO NEW REFRIGERATOR LOCATION INDICATED ON POWER AND SPECIAL SYSTEMS PLAN.

ED06 PER ARCHITECTURAL PLANS, FURNITURE VENDOR SHALL DISCONNECT SYSTEMS FURNITURE POWER AND DATA. REMOVE EXISTING POWERED FURNITURE FEED JUNCTION BOX AND ASSOCIATED CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE. PREPARE CIRCUITS FOR EXTENSION TO NEW LOCATION FEEDING REVISED FURNITURE LAYOUT AS INDICATED ON POWER AND SPECIAL SYSTEMS PLAN WITH AND '(R)'.

ED07 DATA OUTLET CONSISTS OF GROMMETED FACEPLATE TO ALLOW DATA CABLES TO PASS THROUGH TO SYSTEMS FURNITURE. PER ARCHITECTURAL PLANS, FURNITURE VENDOR SHALL DISCONNECT SYSTEMS FURNITURE POWER AND DATA. REMOVE EXISTING DATA FURNITURE FEED JUNCTION BOX AND ASSOCIATED CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE. REUSING DATA WIRING OF REQUIRED LENGTH IS ACCEPTABLE. OTHERWISE, REMOVE WIRING BACK TO SOURCE AND PROVIDE NEW. SPLICED DATA WIRING IS PROHIBITED. PREPARE WIRING FOR EXTENSION TO NEW LOCATION FEEDING REVISED FURNITURE LAYOUT AS INDICATED ON POWER AND SPECIAL SYSTEMS PLAN WITH AN '(R)'.

ED08 ALL EXISTING LIGHT FIXTURES/CONTROLS AND WIRING DEVICES ARE NOT INDICATED ON PLAN. NOTIFY ARCHITECT WHERE EXISTING ITEMS INHIBIT DEMOLITION AND/OR NEW WORK.

ED09 PER ARCHITECTURAL PLANS, FURNITURE VENDOR SHALL DISCONNECT SYSTEMS FURNITURE POWER AND DATA. PREPARE WIRING FOR RECONNECTION TO FURNITURE INDICATED ON NEW POWER AND SPECIAL SYSTEMS PLAN.

ED10 REMOVE EXISTING ABOVE COUNTER RECEPTACLE AND CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE. PREPARE CIRCUIT FOR EXTENSION TO NEW DUPLEX RECEPTACLE ON SOUTH WALL OF OPEN OFFICE AS INDICATED ON POWER AND SPECIAL SYSTEMS PLAN.

ED12 INVESTIGATE FUNCTION OF EXISTING LIGHTING CONTROLS. REMOVE CONTROLS WHERE THEY ARE ASSOCIATED WITH LIGHT FIXTURES BEING REMOVED AS PART OF PROJECT OR WHERE CONTROLS NO LONGER SERVE ANY FUNCTION.

ED13 REMOVE AND RELOCATE EXISTING ABOVE COUNTER WALL BOX OCCUPANCY SENSOR CONTROLLING UNDERCABINET LIGHTING. REFER TO LIGHTING PLAN FOR NEW LOCATION NOTED WITH '(R)'.

ED14 REMOVE AND RELOCATE EXISTING ABOVE COUNTER TOGGLE SWITCH CONTROLLING SINK GARBAGE DISPOSAL. REFER TO POWER PLAN FOR NEW LOCATION NOTED WITH '(R)'.

GENERAL NOTES - DEMOLITION

A. DEMOLITION, WHERE INDICATED ON PLAN, IS BASED ON EXISTING DRAWINGS AND LIMITED FIELD INVESTIGATION OF EXISTING CONDITIONS. SELECT DEMOLITION MAY BE REQUIRED FOR NEW CONSTRUCTION AND MAY NOT BE DELINEATED ON THIS DRAWING. CAREFULLY COORDINATE DEMOLITION WITH NEW CONSTRUCTION PLANS OF ALL DISCIPLINES TO VERIFY ACTUAL EXTENT OF DEMOLITION. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND FULLY UNDERSTAND THE EXTENT OF DEMOLITION WORK.

B. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.

C. QUANTITY AND LOCATION OF EXISTING DEVICES SHOWN ON PLANS ARE APPROXIMATE. FIELD VERIFY DEVICES AND LOCATIONS.

D. ITEMS SHOWN HEAVY LINE WEIGHT DASHED LINES, HATCHED AND/OR NOTED SHALL BE DEMOLISHED AND ALL ASSOCIATED DEVICES, CONDUIT, AND WIRING SHALL BE REMOVED BACK TO THE NEAREST ACTIVE JUNCTION BOX OR SOURCE UNLESS NOTED OTHERWISE. SEE DEMOLITION LEGEND FOR ADDITIONAL INFORMATION.

E. ALL EXISTING EQUIPMENT MAY NOT BE INDICATED. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. EXISTING ITEMS NOT SHOWN HATCHED SHALL REMAIN IN OPERATION. REVISE THE EXISTING CIRCUITRY TO MAINTAIN OPERATION OF ITEMS TO REMAIN.

F. PROVIDE PROPER SUPPORT FOR EXISTING TO REMAIN CONDUITS AND BOXES WHERE EXISTING SUPPORT IS TO BE REMOVED. RE-ROUTE BRANCH CIRCUIT CONDUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.

G. COORDINATE WITH NEW WORK PLANS, ONE LINE DIAGRAMS AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.

H. CIRCUITING SHOWN IS BASED ON CASUAL FIELD OBSERVATIONS AND/OR AS-BUILT DRAWINGS. CONTRACTOR SHALL FIELD VERIFY CIRCUITING.

I. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES AND EQUIPMENT THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.

J. RECYCLE OR DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL ASSOCIATED COSTS IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING LEED REQUIREMENTS, TCLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.

K. PROVIDE BLANK COVER PLATES WHERE DEVICES ARE REMOVED BUT EXISTING WALLS/CEILINGS REMAIN INTACT.

L. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS. MARK ALL UNUSED CIRCUIT BREAKERS "SPARE" AND PLACE IN THE "OFF" POSITION.

M. VERIFY ALL UNDERGROUND AND IN SLAB UTILITY LOCATIONS PRIOR TO SAW-CUTTING OR PENETRATING ANY FLOOR SLAB.

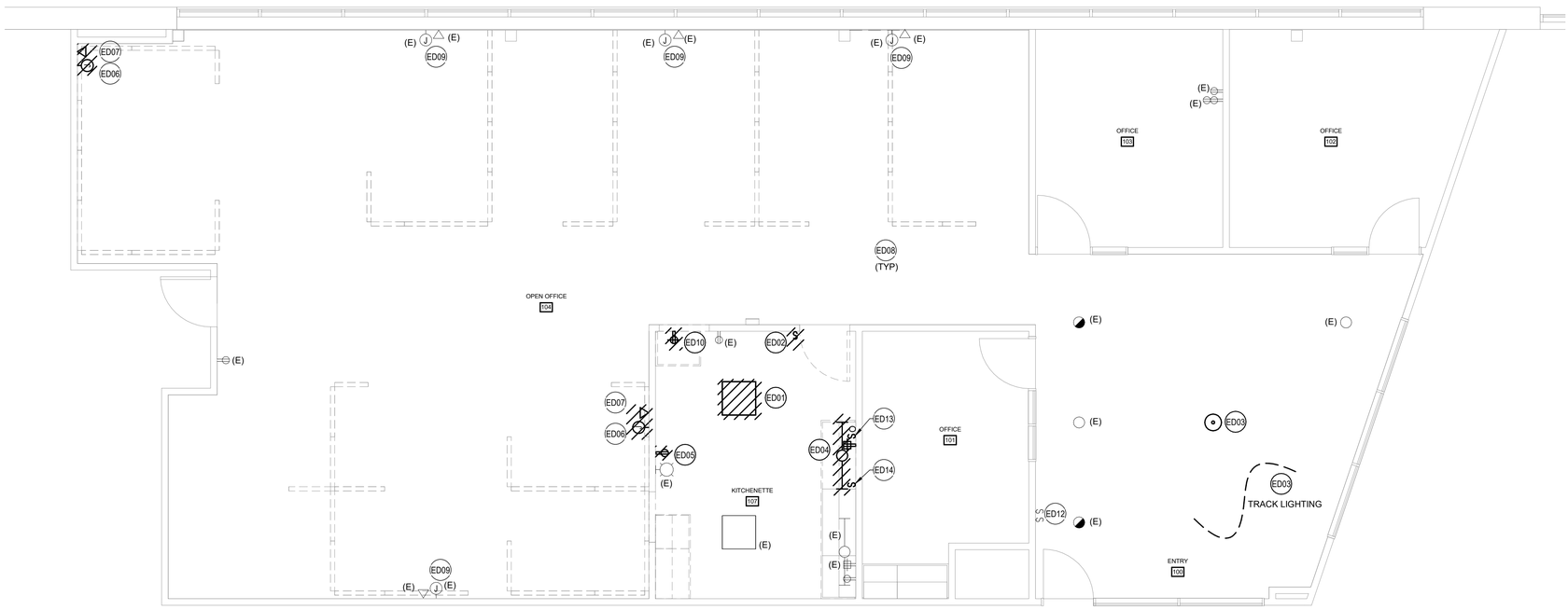
N. OFFER OWNERS REPRESENTATIVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED FROM SPACE.

O. PROVIDE CODE-COMPLIANT SUPPORT TO EXISTING-TO-REMAIN UNSUPPORTED CONDUITS AND BOXES WHERE CEILINGS ARE TO BE REMOVED. RE-ROUTE BRANCH CIRCUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.

P. EXISTING 120V POWER CIRCUITS IN AREA OF RENOVATION ARE ASSUMED TO BE FED FROM PANELBOARD 'RP-2' LOCATED IN ELECTRICAL ROOM 114 APPROXIMATED 20' SOUTH OF THE NEW KITCHENETTE SOUTH WALL.

Q. EXISTING 277V LIGHTING CIRCUITS IN AREA OF RENOVATION ARE ASSUMED TO BE FED FROM PANELBOARD 'LP-1' LOCATED ON THE UPPER MEZZANINE APPROXIMATELY 200' SOUTH OF THE NEW KITCHENETTE SOUTH WALL.

R. EXISTING TELE/DATA OUTLETS IN AREA OF RENOVATION ARE ASSUMED TO BE FED FROM I/T EQUIPMENT LOCATED IN STORAGE CLOSET 122 APPROXIMATELY 40' SOUTH OF THE NEW KITCHENETTE SOUTH WALL.



ELECTRICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

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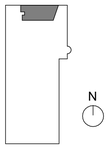
KEY PLAN



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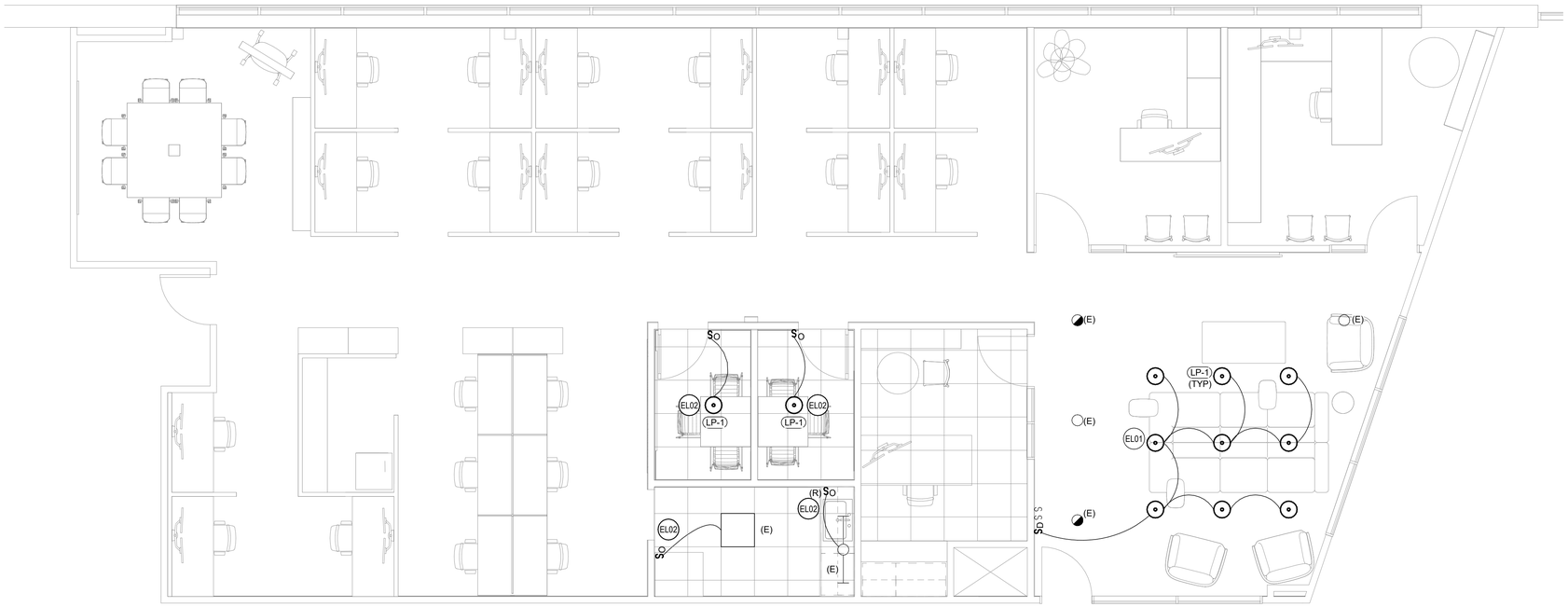
FIRST FLOOR PLAN + ELECT DEMOLITION

E-101

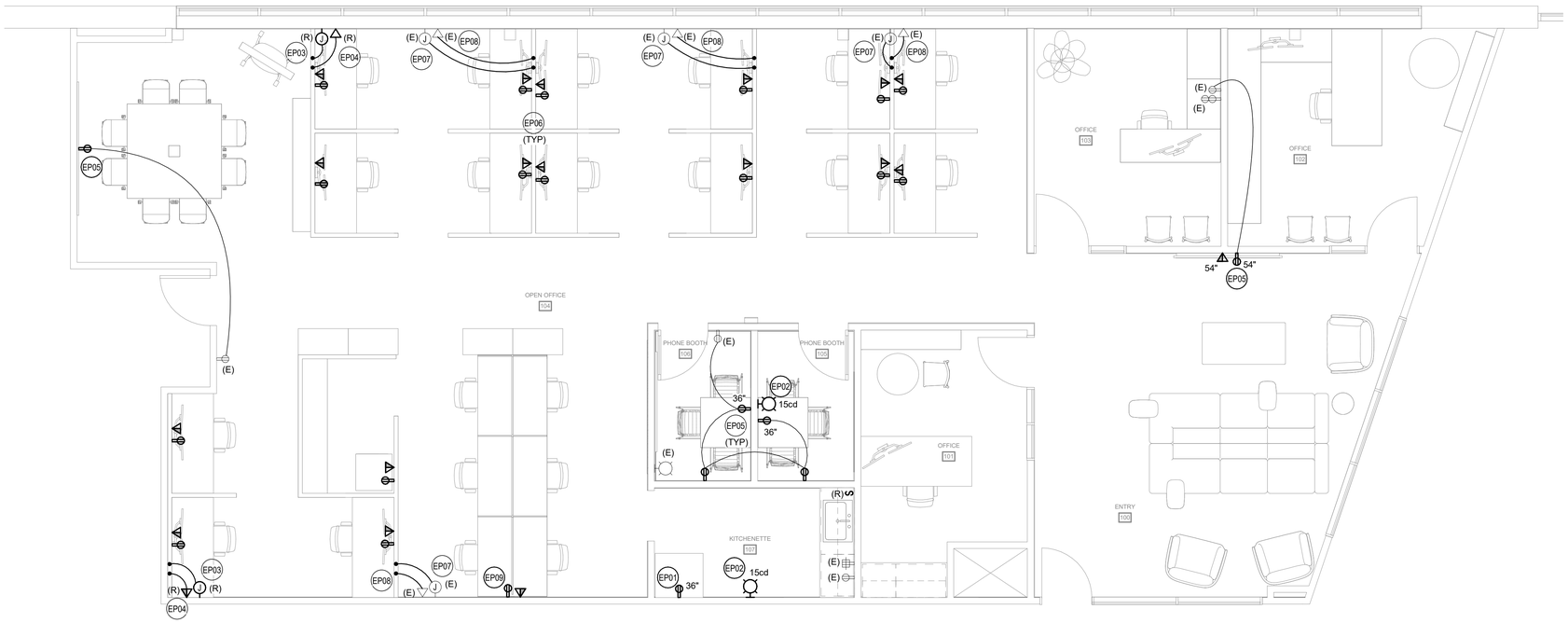


LIGHTING PLAN

SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TYPE	LAMPS	LUMENS	VOLTAGE	MAX VA	DESCRIPTION	BOD MANUFACTURER	BOD MODEL	MANUFACTURER EQUAL #1	COMMENTS
LP-1	LED, 3000K	1000 lm	120 V	14 VA	12" CIRCULAR PENDANT, 0-10V, 10% DIMMABLE DRIVER.	LUMENS	LEO HANGING GLOBE	ARCHITECT APPROVED EQUAL	COORDINATE INSTALLATION WITH ARCHITECT PRIOR TO INSTALL.



POWER AND SPECIAL SYSTEMS PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES - LIGHTING

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS NOTED OTHERWISE.

B. REFER TO THE LIGHT FIXTURE SCHEDULE ON THIS SHEET.

C. ELECTRICAL DEVICES INDICATED ON THIS PLAN SHALL BE NEW UNLESS NOTED OTHERWISE.

D. LIGHT SWITCHES SHALL BE GROUPED UNDER ONE COMMON FACEPLATE WHERE MORE THAN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION.

E. EXISTING LIGHTING INDICATED TO REMAIN SHALL BE RELAMPED AND CLEANED. REPAIR EXISTING FIXTURES THAT ARE MALFUNCTIONING WHERE FEASIBLE. OTHERWISE REPLACE WITH NEW. REVISE CIRCUITING AS INDICATED.

F. LIGHTING BRANCH CIRCUIT WIRING ASSOCIATED WITH NEW LIGHTING SHALL BE 2#12, 1#12GND IN 3/4"C UNLESS NOTED OTHERWISE.

G. EXISTING EQUIPMENT/DEVICES NOT SPECIFICALLY INDICATED TO BE DEMOLISHED SHALL REMAIN OPERATIONAL. REVISE EXISTING CIRCUITING TO MAINTAIN OPERATION TO SUCH EQUIPMENT/DEVICES AS REQUIRED.

H. REUSE THE EXISTING BRANCH CIRCUIT CONDUIT AND WIRING ASSOCIATED WITH THE LIGHTING FIXTURES REMOVED DURING DEMOLITION THAT IS LEFT IN PLACE TO REFEED NEW LIGHTING FIXTURES UNLESS NOTED OTHERWISE. REWORK THE EXISTING CIRCUIT TO PROVIDE LIGHTING CONTROL AS INDICATED ON THIS DRAWING, UNLESS NOTED OTHERWISE. REMOVED CONDUIT AND WIRING SHALL BE DISPOSED.

I. EXISTING LIGHTING INDICATED AS TO REMAIN AND LOCATED IN AREAS WHERE THE CEILING IS BEING MODIFIED SHALL BE TEMPORARILY SUPPORTED AND REINSTALLED UPON COMPLETION OF CEILING REVISIONS. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS AND ARCHITECTURAL TRADE.

K. CONDUITS INSTALLED IN FINISHED AREAS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.

GENERAL NOTES - POWER

A. REFER TO ARCHITECTURAL FLOOR PLAN AND ELEVATIONS FOR EXACT LOCATION OF DEVICES WHERE INDICATED.

B. RECEPTACLE OUTLETS SHALL BE RATED 20A U.O.N..

C. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE U.O.N..

D. PROVIDE GFCI PROTECTION WHERE REQUIRED BY THE NEC WHETHER INDICATED OR NOT.

E. BRANCH CIRCUIT JUNCTION BOXES SHALL BE LABELED WITH THE CIRCUITS ENCLOSED.

F. SINGLE PHASE 20A BRANCH CIRCUIT WIRING SHALL BE 2#12, 1#12GND IN 3/4"C UNLESS NOTED OTHERWISE.

G. EXISTING EQUIPMENT/DEVICES NOT SPECIFICALLY INDICATED TO BE DEMOLISHED SHALL REMAIN OPERATIONAL. REVISE EXISTING CIRCUITING TO MAINTAIN OPERATION TO SUCH EQUIPMENT/DEVICES AS REQUIRED.

H. CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.

PLAN NOTES

EL01 CONNECT NEW PENDANT LIGHTS TO EXISTING 120V GENERAL RECEPTACLE CIRCUIT SERVING AREA VIA NEW DIMMER LIGHTING CONTROL INDICATED.

EL02 UTILIZE EXISTING LIGHTING CIRCUIT IN ROOM TO CONNECT NEW LIGHT FIXTURE TO NEW/RELOCATED CONTROLS AS INDICATED. NEW WALLBOX OCCUPANCY SENSOR TO MATCH EXISTING RELOCATED DEVICE CONTROLLING UNDERCABINET LIGHTS.

EP01 CONNECT NEW REFRIGERATOR RECEPTACLE TO DEDICATED REFRIGERATOR CIRCUIT LEFT OVER FROM DEMOLITION.

EP02 CONNECT NEW FIRE ALARM NOTIFICATION APPLIANCE TO EXISTING FIRE ALARM SYSTEM. NEW DEVICE SHALL MATCH EXISTING DEVICES IN SPACE. EXISTING FIRE ALARM CONTROL PANEL IS LOCATED APPROXIMATELY 200' AWAY IN EAST LOBBY ENTRANCE.

EP03 CONNECT RELOCATED CIRCUITS LEFT OVER FROM DEMOLITION TO POWERED FURNITURE. VERIFY EXACT CIRCUITS IN FIELD. MULTIPOLE CIRCUIT BREAKERS ARE REQUIRED WHERE CIRCUITS SHARE A NEUTRAL CONDUCTOR. COORDINATE FINAL FURNITURE LAYOUT WITH OWNER/ARCHITECT PRIOR TO ROUGHING IN THE FURNITURE FEED BOX LOCATION. NEW POWER INSTALLATION MATERIALS, MEANS, AND METHODS SHALL MATCH EXISTING.

EP04 CONNECT DATA CABLING TO SYSTEMS FURNITURE. COORDINATE FINAL FURNITURE LAYOUT WITH OWNER/ARCHITECT PRIOR TO ROUGHING IN THE FURNITURE FEED BOX LOCATION. NEW DATA INSTALLATION MATERIALS, MEANS, AND METHODS SHALL MATCH EXISTING.

EP05 CONNECT NEW RECEPTACLE TO EXISTING TO REMAIN RECEPTACLE CIRCUIT AS INDICATED.

EP06 POWER AND DATA OUTLES INDICATED AT SYSTEMS FURNITURE ARE INTEGRAL TO FURNITURE SYSTEM. PROVIDE POWER VIA NEW FURNITURE FEED WHIP AND DATA CABLES/CONNECTIONS TO SYSTEMS FURNITURE PER SYSTEMS FURNITURE MANUFACTURER INSTRUCTIONS. NEW POWER AND DATA INSTALLATION MATERIALS, MEANS, AND METHODS SHALL MATCH EXISTING.

EP07 CONNECT CIRCUITS LEFT OVER FROM DEMOLITION TO POWERED FURNITURE. VERIFY EXACT CIRCUIT IN FIELD. MULTIPOLE CIRCUIT BREAKERS ARE REQUIRED WHERE CIRCUITS SHARE A NEUTRAL CONDUCTOR. NEW POWER INSTALLATION MATERIALS, MEANS, AND METHODS SHALL MATCH EXISTING.

EP08 CONNECT DATA CABLING TO SYSTEMS FURNITURE. NEW DATA INSTALLATION MATERIALS, MEANS, AND METHODS SHALL MATCH EXISTING.

EP09 CONNECT NEW RECEPTACLE TO REMOVED, ABOVE COUNTER RECEPTACLE CIRCUIT LEFT OVER FROM DEMOLITION IN OLD KITCHENETTE.

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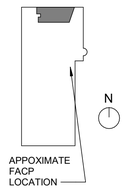
KEY PLAN



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FIRST FLOOR PLAN + ELECTRICAL

E-201