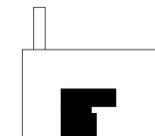


**GENERAL NOTES**

**KEY NOTES**

**KEY PLAN**



Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
**12491.000**

Description  
**ELECTRICAL COVER SHEET**

Scale  
**AS NOTED**

**E-001.00**

**LIGHTING SYMBOLS**

THE FOLLOWING ABBREVIATIONS ARE APPLICABLE TO ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL DRAWING A-200.00 FOR TYPE, MANUFACTURER, MODEL NUMBER, AND REMARKS FOR ARCHITECTURAL / FRONT-OF-HOUSE LIGHTING FIXTURES AND EXIT SIGNS.

A = FIXTURE TYPE  
# = SWITCH DESIGNATION; FIXTURES CONTROLLED BY SWITCH 'W'  
EM = DENOTES LIGHTING FIXTURE CONNECTED TO EMERGENCY BACKUP GENERATOR (THE CIRCUIT TAG SHOWING THE PANEL NAME MAY ALSO BE USED TO INDICATE LIGHT FIXTURES CONNECTED TO THE EMERGENCY BACKUP GENERATOR.)  
NL = UNSWITCHED LIGHT FIXTURE

	WALL-MOUNTED LED LIGHT FIXTURE
	2' x 4' RECESSED CEILING-MOUNTED LED LIGHT FIXTURE
	2' x 2' RECESSED CEILING-MOUNTED LED LIGHT FIXTURE
	LINEAR RECESSED CEILING-MOUNTED LED LIGHT FIXTURE
	RECESSED CEILING-MOUNTED DOWNLIGHT LED LIGHT FIXTURE
	RECESSED CEILING-MOUNTED WALL WASHER / ACCENT LIGHT LED LIGHT FIXTURE
	LED STRIP LIGHT FIXTURE
	CEILING MOUNTED EXIT SIGN, TYPE 'X' - DIRECTIONAL ARROWS WHERE INDICATED - SHADED AREAS INDICATE ILLUMINATED FACE(S) UPON WHICH 'EXIT' APPEARS
	WALL MOUNTED EXIT SIGN, TYPE 'X' - DIRECTIONAL ARROWS WHERE INDICATED - SHADED AREAS INDICATE ILLUMINATED FACE(S) UPON WHICH 'EXIT' APPEARS
	EMERGENCY BATTERY PACK LIGHT UNIT

**LIGHTING CONTROLS SYMBOLS**

THE FOLLOWING ABBREVIATIONS ARE APPLICABLE TO ALL LIGHTING CONTROL DEVICES UNLESS OTHERWISE NOTED. ARCHITECT TO SELECT COLOR FOR ALL WALL SWITCHES.

# = SWITCH DESIGNATION; CONTROLS LIGHT FIXTURES ON ZONE 'W'  
#a = SWITCH DESIGNATION; CONTROLS LIGHT FIXTURES ON ZONES 'W' AND 'Y'

	SINGLE POLE WALL SWITCH: 2 = TWO POLE 3 = THREE-WAY 4 = FOUR-WAY K = KEY OPERATED T = TIME SWITCH P = PILOT LIGHT MC = MOMENTARY CONTACT SWITCH
	DECORATOR MANUAL 'ON' / AUTOMATIC 'OFF' WALL SWITCH. LUTRON CATALOG #
	WALL-MOUNTED DECORATOR DIMMER SWITCH. LUTRON CATALOG #
	WALL-MOUNTED DECORATOR DIMMER SWITCH FOR THREE-WAY DIMMING. LUTRON CATALOG #MA-PRO-XX (DIMMER), #MA-R-XX (COMPANION DIMMER)
	1-BUTTON WALL STATION WITH MANUAL 'ON' / MANUAL 'OFF'. LUTRON CATALOG #
	WALL-MOUNTED DUAL TECHNOLOGY VACANCY SENSOR, MANUAL 'ON' / AUTOMATIC 'OFF', WITH BUILT-IN MOMENTARY CONTACT SWITCH. LUTRON CATALOG #
	WALL-MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, AUTOMATIC 'ON' / AUTOMATIC 'OFF', WITH BUILT-IN OVERRIDE SWITCH. LUTRON CATALOG #
	CEILING-MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR. LUTRON CATALOG #
	CEILING-MOUNTED DUAL TECHNOLOGY OCCUPANCY AND DAYLIGHT SENSOR. LUTRON CATALOG #
	CEILING-MOUNTED DUAL TECHNOLOGY VACANCY SENSOR. LUTRON CATALOG #
	SURFACE-MOUNTED DAYLIGHT SENSOR FOR CONTROL OF EXTERIOR LIGHTING.
	WALL-MOUNTED DUAL TECHNOLOGY VACANCY SENSOR, MANUAL 'ON' / AUTOMATIC 'OFF', WITH BUILT-IN DECORATOR DIMMER SWITCH. LUTRON CATALOG #
	WALL-MOUNTED 0-10V CORRELATED COLOR TEMPERATURE SLIDE CONTROLLER. LUTRON CATALOG #
	PRESET WALL STATION ASSOCIATED WITH LUTRON ROOM CONTROLLER. REFER TO DETAILS ON DRAWING E-702.00 FOR BUTTON CONFIGURATION AND ADDITIONAL INFORMATION.

**NURSE CALL SYMBOLS**

FOR NURSE CALL SYSTEM DEVICES: UNLESS OTHERWISE NOTED, PROVIDE BACKBOX WITH 1" CONDUIT TERMINATED IN A 90 DEG. BEND 6" INTO NEAREST ACCESSIBLE CEILING. PROVIDE DRAG WIRE AND BUSHING.

	EMERGENCY STAFF ASSISTANCE STATION AND (EMERGENCY) CALL STATION. INSTALL 1-1/4" EMPTY CONDUIT STUB-UP ABOVE HUNG CEILING.
	NURSE CALL STAFF ASSISTANCE STATION
	NURSE CALL LAVATORY PULL CORD STATION WITH AUDIO
	NURSE CALL DUTY STATION
	NURSE CALL DOMELESS CORRIDOR CONTROLLER
	NURSE CALL CORRIDOR DOME LIGHT a = ZONE ANNUNCIATED c = CEILING-MOUNTED
	NURSE CALL CORRIDOR ZONE LIGHT a, b = ZONES ANNUNCIATED c = CEILING-MOUNTED
	NURSE CALL MASTER STATION
	NURSE CALL PILLOW SPEAKER CONNECTION RECEPTACLE (FURNISHED BY LUTRON CONTROLS AS PART OF THE HOT STRETCHER HOLDING LIGHTING CONTROLS PACKAGE. REFER TO DETAILS ON DRAWING E-702.00 FOR ADDITIONAL INFORMATION.)
	NURSE CALL PATIENT BED CONNECTION RECEPTACLE
	NURSE CALL HEAD END EQUIPMENT CABINET
	CODE CALL CODE BLUE. INSTALL 1-1/4" EMPTY CONDUIT STUB-UP ABOVE HUNG CEILING.

**VOICE/DATA SYMBOLS**

FOR ALL LOW-VOLTAGE SYSTEMS DEVICES: UNLESS OTHERWISE NOTED, PROVIDE BACKBOX WITH 1" CONDUIT TERMINATED IN A 90 DEG. BEND 6" INTO NEAREST ACCESSIBLE CEILING. PROVIDE DRAG WIRE AND BUSHING.

	WALL-MOUNTED VOICE & DATA OUTLET
	WALL-MOUNTED DATA OUTLET
	CEILING-MOUNTED DATA OUTLET
	WIRELESS ACCESS POINT
	TELEVISION OUTLET
	AUDIOVISUAL OUTLET

**PANELBOARD SYMBOLS**

	RECESSED (FLUSH) MOUNTED PANELBOARD
	SURFACE MOUNTED PANELBOARD
	DISTRIBUTION PANELBOARD

**CONDUIT SYSTEM SYMBOLS**

	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	POWER CIRCUIT HOMERUN TO PANELBOARD - DESIGNATION CONDUIT PANELBOARD, CIRCUIT NUMBERS, NUMBER OF WIRES, WIRE SIZE, AND CONDUIT SIZE
	BRANCH CIRCUIT HOMERUN TO PANELBOARD - ARROWS DENOTE NUMBER OF CIRCUITS. DESIGNATION DENOTES PANELBOARD AND CIRCUIT NUMBERS.
	WIRING TROUGH

**WIRING DEVICES SYMBOLS**

	WALL-MOUNTED DUPLEX RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R. GFI = GROUND FAULT CIRCUIT INTERRUPTER TYPE D = COMBINATION DUPLEX RECEPTACLE WITH (2) TYPE 'A' USB CHARGING PORTS
	WALL-MOUNTED QUADRUPLX (TWO DUPLEX) RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R.
	WALL-MOUNTED SINGLE RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R.
	WALL-MOUNTED SINGLE RECEPTACLE, HOSPITAL GRADE, SPECIAL PURPOSE A = 20A, 250V, 2P, 3W, SELF-GROUNDING, NEMA CONFIGURATION 6-20R.
	FLOOR MOUNTED QUADRUPLX (TWO DUPLEX) RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R.
	CEILING MOUNTED DUPLEX RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R.
	SUMP PUMP. CONTRACTOR SHALL PROVIDE GFI RECEPTACLE. COORDINATE WITH PLUMBING CONTRACTOR.
	WALL-MOUNTED DUPLEX RECEPTACLE, HOSPITAL GRADE, 20A, 125V, 2P, 3W, GROUNDED. NEMA CONFIGURATION 5-20R. ROUTED THROUGH RF FILTER.

**POWER SYMBOLS**

	MOTOR WITH JUNCTION BOX AND LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH) NUMERAL DENOTES HORSEPOWER F' - DENOTES FRACTIONAL HORSEPOWER LESS THAN 1/2 HP. M' - DENOTES MOTOR OF UNSPECIFIED HORSEPOWER
	FUSED DISCONNECT SWITCH, VOLTAGE RATINGS AS REQUIRED 60A - FUSE AMPS 100A/3P - SWITCH AMPS / # OF POLES
	UNFUSED DISCONNECT SWITCH, VOLTAGE RATINGS AS REQUIRED. RATING SAME AS UPSTREAM BRANCH CIRCUIT PROTECTIVE DEVICE. 100A/3P - SWITCH AMPS / # OF POLES
	STARTER / MOTOR CONTROLLER 1 - NEMA STARTER SIZE
	COMBINATION STARTER / MOTOR CONTROLLER AND UNFUSED DISCONNECT SWITCH 30A/3P - SWITCH AMPS / # OF POLES 1 - NEMA STARTER SIZE
	COMBINATION STARTER / MOTOR CONTROLLER AND FUSED DISCONNECT SWITCH 30A/3P - SWITCH AMPS / # OF POLES 20A - FUSE AMPS 1 - NEMA STARTER SIZE
	ENCLOSED CIRCUIT BREAKER 100A/3P - FRAME AMPS / # OF POLES 60A, 225AT - TRIP AMPS
	WALL-MOUNTED GROUND BAR. (SEE E-602 FOR DETAIL)
	CEILING-MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH)
	WALL-MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH)
	FLOOR-MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH)
	WALL-MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH) FOR WAVE PLATE.
	DISCONNECT SWITCH - TOGGLE TYPE, MOTOR RATED WITH THERMAL OVERLOAD PROTECTION - 20A, SINGLE POLE, U.O.N. 2P = TWO POLE 3P = THREE POLE K = KEY OPERATED P = PILOT LIGHT
	EMERGENCY EXHAUST FAN SWITCH.
	SYSTEM EMERGENCY OFF.
	SHUNT TRIP (EMERGENCY POWER OFF) - LARGE MUSHROOM-HEAD BUTTON ON REMOTE CONTROL STATION WITH CONTACTS TO OPERATE SHUNT TRIP FEATURE OF ENCLOSED CIRCUIT BREAKER. IF UPS IS UTILIZED, EPO SWITCH WILL RUN 2 SETS OF COMMUNICATION WIRES TO THE INPUT BREAKER FOR THE UPS AND TO THE UPS ITSELF.
	TRANSIENT VOLTAGE SURGE SUPPRESSOR / SURGE PROTECTION DEVICE
	ELECTRICITY METER
	POWER TRANSFORMER VOLTAGES, WINDINGS, AND SIZE AS INDICATED

**AUXILIARY SYSTEMS**

	WALL-MOUNTED TELEVISION CABLE OUTLET IN A DOUBLE GANG BOX WITH A SINGLE GANG REDUCER PLATE AND 1" EMPTY CONDUIT WITH DRAG WIRE STUBBED 6" ABOVE THE NEAREST ACCESSIBLE HUNG CEILING AND TERMINATED WITH BUSHING.
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**ELECTRICAL ABBREVIATIONS**

ABBREVIATION	DESCRIPTION
1P	SINGLE POLE
2P	TWO POLE
3P	THREE POLE
A	AMPERES
AC	ABOVE CENTER
AFF	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CAB	CABINET
CAV	CONSTANT AIR VOLUME
CL	CLOSET
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT(S)	CIRCUIT(S)
CM	CONSTRUCTION MANAGER
COMM	COMMUNICATION
CONN	CONNECTED
CONT	CONTINUATION
CP	CONDENSATE PUMP
CT	CURRENT TRANSFORMER
CU	COPPER
CUM	CABINET UNIT HEATER
D	DEMOLISH
DB	DECIBEL
DEG	DEGREE
DI	DIAMETER
DIA	DISTRIBUTION PANEL
DISC, DS	DISCONNECT SWITCH
DWS	DRAWING
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
(E), EX, E	EXISTING TO REMAIN
EA	EACH
EC	EMPTY CONDUIT, ELECTRICAL CONTRACTOR
ELEV	ELEVATOR
EM, EMER	EMERGENCY
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
ER	EXISTING TO BE REMOVED
ER(R)	EXISTING TO BE REMOVED AND RELOCATED
ERC	ELECTRIC REHEAT COIL
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHER DIVISION OF WORK
FCC	FIRE COMMAND CENTER
FCU	FAN COIL UNIT
FL	FLOOR
FLA	FULL LOAD AMPERES
FLUOR	FLUORESCENT
FSD	FIRE-SMOKE DAMPER
FT	FEET / FOOT
G, GRDNG	GROUND
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HC	HUNG CEILING
HD	HAND DRYER
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HV	HIGH VOLTAGE
HZ	HERTZ
ID	INSIDE DIAMETER
IG	ISOLATED GROUND
JB	JUNCTION BOX
KMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATTS
KWH	KILOWATT HOURS
LAN	LOCAL AREA NETWORK
LIM	LINE ISOLATION MONITOR
LITG	LIGHTING
MAP	MEDICAL GAS MASTER ALARM PANEL
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MC, MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MESH	MECHANICAL
MER	MECHANICAL EQUIPMENT ROOM
MFS	MAIN FUSED SWITCH
MH	MANHOLE
MIN	MINIMUM
ML, MLO	MAIN LUGS ONLY
MOPD, MOCP	MAXIMUM OVERCURRENT PROTECTION DEVICE
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN

NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
P	POLES
PA	PUBLIC ADDRESS SYSTEM
PB	PULL BOX
PC	PERSONAL COMPUTER
PH	PHASE
PM	POWER MONITOR
PNL	PANEL
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PWR	POWER
ø	PHASE
(RE)	RELOCATED EXISTING (RELOCATED EXISTING DEVICE AT NEW LOCATION)
RECEPT, RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
(RRO)	REMOVE AND RETURN TO OWNER
SD	SMOKE DAMPER, SMOKE DETECTOR
SO	SOUTH
SP	SPARE
SPD	SURGE PROTECTIVE DEVICE
SPST	SINGLE POLE SINGLE THROW
STD	STANDARD
SW	SWITCH
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
SYS	SYSTEM
TBD	TO BE DETERMINED
TEL	TELEPHONE
TEMP	TEMPERATURE
TP	TAMPER-RESISTANT
TRANS, XFMR	TRANSFORMER
TS, VS	TAMPER SWITCH (VALVE SUPERVISORY SWITCH)
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UH	UNIT HEATER
UNF	UNFUSED
U.O.N.	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED-PAIR
V	VOLT, VOLTAGE
VA	VOLT AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLTMETER
VP	VAPORPROOF
W	WAIT, WIRE
WP	WEATHER-RESISTANT (NEMA 3R ENCLOSURE, U.O.N.)
WT	WATERTIGHT
XP	EXPLOSION-RESISTANT

## ELECTRICAL GENERAL NOTES

### FIRE-RATED WIRING

- SOME WIRES AND CABLE PROVISIONS INSIDE OF THE BUILDING SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS TO ACHIEVE A 2-HOUR FIRE RATING:
  - BE PROTECTED BY AN ENCLOSURE WITH 2-HOUR FIRE-RATED CONSTRUCTION
    - FEEDERS OF THE LIFE SAFETY BRANCH SHALL BE PROVIDED WITH DEDICATED ENCLOSURES
  - BE ENCASED IN A MINIMUM OF 2 INCHES OF CONCRETE
  - BE A 2-HOUR RATED LISTED CABLE SYSTEM (FOR EXAMPLE, RHW-2 CABLE, MI CABLE) INSTALLED PER MANUFACTURER REQUIREMENTS
- THE WIRES AND CABLES THAT SHALL MEET THE REQUIREMENTS IDENTIFIED IN FIRE-RATED WIRING NOTE 1 ABOVE ARE AS FOLLOWS:
  - LIFE SAFETY BRANCH FEEDERS THAT ARE NOT INSTALLED IN SPACES OR AREAS THAT ARE FULLY PROTECTED BY A SPRINKLER SYSTEM OR DRY-TYPE SYSTEM, E.G. FEEDERS THAT ARE INSTALLED ABOVE A HUNG CEILING
  - FIRE PUMP NORMAL AND EMERGENCY FEEDERS AND CONTROL WIRING
    - EXCEPTION: SUPPLY CONDUCTORS LOCATED IN THE ELECTRICAL EQUIPMENT ROOM WHERE THEY ORIGINATE, OR LOCATED IN THE FIRE PUMP ROOM
    - EXCEPTION: SUPPLY CONDUCTORS LOCATED OUTDOORS
  - SMOKEPROOF ENCLOSURE VENTILATION SYSTEM (FARNELL PRESSURIZATION SYSTEM) NORMAL AND EMERGENCY FEEDERS AND CONTROL WIRING
    - EXCEPTION: CONDUCTORS LOCATED IN ROOMS OR ENCLOSURES THAT ARE 2-HOUR FIRE-RATED
    - EXCEPTION: CONDUCTORS LOCATED OUTDOORS
  - GENERATOR CONTROL WIRING (INSTALLED ENTIRELY INDEPENDENT OF ALL OTHER WIRING)
    - EXCEPTION: CONDUCTORS LOCATED IN ROOMS OR ENCLOSURES THAT ARE 2-HOUR FIRE-RATED
    - EXCEPTION: CONDUCTORS LOCATED OUTDOORS
- THE FINAL PROVISIONS OF 2-HOUR RATED WIRES AND CABLES SHALL BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF APPLICABLE ELECTRICAL AND BUILDING CODES AND AUTHORITIES HAVING JURISDICTION. SEE FIRE-RATED WIRING NOTES 1 AND 2 ABOVE.

### ELECTRICAL BRANCH CIRCUITING NOTES

- ALL BRANCH CIRCUIT HOME RUNS SHALL BE 2#12 & 1#12 GROUND IN 3/4" CONDUIT, UNLESS OTHERWISE NOTED. TO PANEL ON CIRCUIT INDICATED. MAXIMUM OF THREE HOMERUNS PER CONDUIT. PROVIDE A SEPARATE NEUTRAL WIRE AND A SEPARATE GROUND WIRE FOR EACH 120V AND 277V CIRCUIT SHOWN ON THE DRAWINGS (APPLICABLE FOR WIRING OF LIGHTING FIXTURES, RECEPTACLES, MEDICAL EQUIPMENT, MECHANICAL EQUIPMENT, ETC.)
- WHERE EQUIPMENT, LIGHTING FIXTURES AND WIRING DEVICES ARE SHOWN WITH CIRCUIT NUMBERS ONLY, THE MINIMUM BRANCH CIRCUITTING REQUIREMENTS SHALL BE AS FOLLOWS:
  - LIGHTING FIXTURES - 2 #12, #12 GRD - 3/4" C.
  - RECEPTACLES - 2#12, #12 GRD - 3/4" C.
  - BRANCH CIRCUIT BREAKERS (277 VOLT) - 1P, 20A
  - BRANCH CIRCUIT BREAKERS (120 VOLT) - 1P, 20A
  - HOMERUNS TO PANELBOARDS SHALL CONTAIN NO MORE THAN (3) CIRCUITS.
  - 200/120 VOLT 480/277 VOLT WIRING SHALL BE RUN IN SEPARATE RACEWAY SYSTEMS
  - EMERGENCY SERVICES SHALL BE RUN IN SEPARATE RACEWAYS FROM ALL OTHER SYSTEMSWHERE LIGHTING SWITCH INDICATIONS ARE NOT SHOWN, SWITCHES SHALL BE CONNECTED TO CONTROL ALL SWITCHED FIXTURES WITHIN THE CORRESPONDING SPACE.
- WHERE CONDUIT AND WIRING CONNECTIONS ARE NOT SHOWN ON THE PLANS, BRANCH CIRCUIT SIZES AND MAXIMUM LENGTHS SHALL BE AS FOLLOWS, TO LIMIT VOLTAGE DROP TO LESS THAN 2.0% ON THE BRANCH CIRCUIT.
  - 120V, 20A CIRCUIT
    - 12 AWG - 35 FEET
    - 10 AWG - 60 FEET
    - 8 AWG - 95 FEET
    - 6 AWG - 145 FEET
    - 4 AWG - 230 FEET
  - 277V, 20A CIRCUIT
    - 12 AWG - 85 FEET
    - 10 AWG - 140 FEET
    - 8 AWG - 215 FEET
    - 6 AWG - 340 FEET
  - 208Y/120V-PHASE, 20A CIRCUIT
    - 12 AWG - 65 FEET
    - 10 AWG - 105 FEET
    - 8 AWG - 155 FEET
    - 6 AWG - 255 FEET
  - 480Y/1-PHASE, 20A CIRCUIT
    - 12 AWG - 150 FEET
    - 10 AWG - 250 FEET
- SPlice WIRES WHICH ARE 8 AWG AND LARGER WITH 10 AWG WIRE TO PERMIT MAKING FINAL TERMINATIONS AT LOADS. SPlice SHALL BE AS CLOSE AS POSSIBLE TO THE LOADS. PROVIDE A SEPARATE JUNCTION BOX IF REQUIRED TO PERFORM THE SPlices.
- PROVIDE CIRCUITRY FOR ALL "NON-STANDARD" WIRING DEVICES (OTHER THAN 20A, 120V OUTLETS) ON THE BASIS OF ONE RECEPTACLE PER CIRCUIT, OVERCURRENT DEVICE IN PANEL, SIZED TO MATCH AMPERE RATING OF "NON-STANDARD" WIRING DEVICE WIRED TO THE PANEL AS REQUIRED.
- FOR ALL NEW CIRCUIT BREAKERS BEING INSTALLED IN AN EXISTING PANEL: NEW CIRCUIT BREAKERS TYPE, MANUFACTURER, AND AMPERE INTERRUPTING CAPACITY SHALL MATCH EXISTING CIRCUIT BREAKERS TYPE, MANUFACTURER, AND AMPERE INTERRUPTING CAPACITY.
- CIRCUIT NUMBERS SHOWN ON THE DRAWINGS ARE FOR REFERENCE PURPOSES ONLY. SPARES AND SPACES SHALL BE UTILIZED BY THE CONTRACTOR AS REQUIRED. EXISTING FIELD CONDITIONS SHALL PREVAIL. REUSE CIRCUITS MADE SPARE BY THE DEMOLITION WORK IN CONJUNCTION WITH THE NEW WORK.
- REFER TO MECHANICAL DRAWINGS FOR VAV BOX LOCATIONS. CONNECT UP TO (8) VAV BOXES PER SPARE 20A/1P CIRCUIT BREAKER IN THE NEAREST EQUIPMENT BRANCH PANEL. PROVIDE MINIMUM 2#10-#16/30-3/4". AT EACH VAV BOX PROVIDE A TOGGLE-TYPE DISCONNECT SWITCH. AT EACH VAV BOX PROVIDE A CEILING MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH).
- REFER TO MECHANICAL DRAWINGS FOR FIRE/SMOKE DAMPER LOCATIONS. CONNECT UP TO (8) FIRE/SMOKE DAMPERS PER SPARE 20A/1P CIRCUIT BREAKER IN THE NEAREST LIFE SAFETY BRANCH PANEL. PROVIDE MINIMUM 2#10-#16/30-3/4". DO NOT PROVIDE TOGGLE-TYPE DISCONNECT SWITCHES AT FIRE/SMOKE DAMPERS. AT EACH FIRE/SMOKE DAMPER PROVIDE A CEILING-MOUNTED JUNCTION BOX WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR FINAL EQUIPMENT CONNECTION (5 FOOT MAXIMUM LENGTH).
- REFER TO FIRE ALARM DRAWINGS AND ARCHITECTURAL DRAWINGS FOR LOCATIONS AND QUANTITIES OF MAGNETIC DOOR HOLDERS. CONNECT UP TO (8) UNITS PER SPARE 20A/1P CIRCUIT BREAKER IN THE NEAREST LIFE SAFETY BRANCH PANEL. PROVIDE MINIMUM 2#10-#16/30-3/4".
- LIGHTING CIRCUITRY GROUND RULES:
  - BRANCH CIRCUITING SHALL BE IN ACCORDANCE WITH CONTROL SCHEMES SHOWN ON PLANS
  - RELAY CONTROLLED AND DIMMER SYSTEM BRANCH CIRCUITS SHALL RUN VIA LIGHTING CONTROL EQUIPMENT AS REQUIRED
  - EACH ZONE SHALL BE PROVIDED WITH AN OVERRIDE SWITCH
  - IN GENERAL, 120V LIGHTING CONNECTED LOAD SHALL NOT EXCEED 1600 WATTS
  - IN GENERAL, 277V LIGHTING CONNECTED LOAD SHALL NOT EXCEED 3300 WATTS
  - MINIMUM SIZE OF BRANCH CIRCUIT CONDUIT SHALL BE 3/4"
  - MINIMUM SIZE OF BRANCH CIRCUIT WIRE SHALL BE #12 AWG
  - PROVIDE 20% SPARE LIGHTING RELAYS / DIMMER MODULES
  - COORDINATE FINAL LOCATIONS, QUANTITIES, MOUNTING, AND TYPES OF CONTROL DEVICES (SWITCHES, SENSORS, ETC.) WITH ARCHITECT AND LIGHTING CONSULTANT. OCCUPANCY AND VACANCY SENSORS FINAL LOCATIONS AND QUANTITIES SHALL BE PROVIDED AS REQUIRED TO MEET THE DEVICE MANUFACTURER'S RECOMMENDATIONS
  - FINAL DIMMING AND LIGHTING CONTROL REQUIREMENTS SHALL BE COORDINATED WITH LIGHTING CONSULTANT, ARCHITECT, AND EQUIPMENT VENDOR
  - EACH LIGHTING CIRCUIT SHALL BE PROVIDED WITH A 20A OVERCURRENT PROTECTION DEVICE LOCATED IN PANEL OR LIGHTING SYSTEM EQUIPMENT.

## ELECTRICAL DEMOLITION NOTES

- THE CONTRACTOR SHALL INCLUDE IN BID ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF ELECTRICAL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS WITH ALLOWANCES FOR UNEXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO ADDITIONAL ALLOWANCE WILL BE MADE TO THE CONTRACTOR DUE TO NEGLIGENCE OR FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- REFER TO ARCHITECTURAL DRAWINGS FOR THE ENTIRE SCOPE OF WORK, THE EXTENT OF THE DEMOLITION WORK IN PARTICULAR, AND ADDITIONAL INFORMATION.
- NOTES AND GRAPHIC REPRESENTATIONS SHALL NOT LIMIT THE EXTENT OF DEMOLITION REQUIRED. CONTRACTOR SHALL VISIT THE SITE, CAREFULLY EXAMINE EXISTING CONDITIONS AND SHALL PERFORM ALL DEMOLITION REQUIRED TO ACHIEVE THE FINAL DESIGN INTENT AS REQUIRED BY THE CONTRACT DOCUMENTS. EXTENT OF ALL DEMOLITION WORK SHALL BE COORDINATED WITH THE ARCHITECT.
- ALL WORK REQUIRED TO REMAIN IN SERVICE BUT INTERFERING WITH THE ALTERATIONS SHALL BE RELOCATED AND RECONNECTED USING MATERIALS AND STANDARDS OF THIS CONTRACT.
- EQUIPMENT AND WIRING TO BE REMOVED SHALL BE DE-ENERGIZED PRIOR TO ANY DEMOLITION WORK. TEMPORARY LIGHTING SHALL BE PROVIDED ON THE ENTIRE FLOOR BEING DEMOLISHED UNTIL THE WORK IS COMPLETE.
- EQUIPMENT INDICATED TO BE REMOVED SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS. EQUIPMENT REQUIRED TO BE TURNED OVER TO THE OWNER SHALL BE PLACED IN A MUTUALLY ACCEPTABLE LOCATION.
- THE WORK SHALL INCLUDE THE REMOVAL OF MATERIALS AS DIRECTED. PRIOR TO REMOVING EQUIPMENT AND MATERIALS FROM THE PROJECT SITE, THE OWNER'S MANAGER SHALL INSPECT AND ADVISE WHICH ITEMS WILL BE RESTORED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL FROM THE PREMISES ALL DEBRIS RESULTING FROM REMOVAL OF ELECTRICAL WORK.
- DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR, FIREPROOF, OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACES (INCLUDING FLOORS OR WALLS CREATED BY REMOVAL OF CONDUITS OR WIRE) TO THEIR ORIGINAL CONDITION.
- THIS CONTRACTOR SHALL MAINTAIN CONTINUITY OF SERVICE TO EXISTING BUILDING FIRE ALARM SYSTEM. COORDINATE WITH BUILDING MANAGER.
- THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING ELECTRICAL SYSTEMS THAT ARE TO REMAIN. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- OUTSIDE THE SCOPE OF WORK AREAS, MAINTAIN CONTINUITY OF ALL EXISTING SERVICES (LIGHTING, POWER, DATA/TELEPHONE SYSTEMS, AUDIO-VISUAL SYSTEMS, SECURITY SYSTEMS, FIRE ALARM SYSTEM, ETC.) WHERE DEMOLITION WORK DISRUPTS EXISTING WIRING THAT IS TO REMAIN. THE CONTRACTOR SHALL INSTALL JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION. OTHERWISE, WIRING AND CONDUIT SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO PANELBOARD.
- THE CONTRACTOR SHALL NOT DISCONNECT OR REMOVE ANY EXIT LIGHTS, PULL STATIONS AND/OR FIRE ALARM SPEAKERS LOCATED AT STAIR ENTRANCES UNLESS OTHERWISE NOTED.
- THE REMOVAL OF ALL FIRE ALARM, COMMUNICATIONS, DATA AND SECURITY EQUIPMENT AND ASSOCIATED CABLING SHALL BE COORDINATED WITH BUILDING OPERATING PERSONNEL. EXISTING BASE BUILDING FIRE ALARM SYSTEMS SHALL REMAIN IN OPERATION DURING BOTH DEMOLITION AND CONSTRUCTION STAGES OF THIS PROJECT.
- DEMOLITION WORK SHALL INCLUDE THE FURNISHING OF ALL MATERIAL, CUTTINGS, EXTENSIONS, CONNECTIONS, REPAIRING, ADAPTING AND OTHER WORK INCIDENTAL THEREON, TOGETHER WITH SUCH TEMPORARY CONNECTIONS AS MAY BE REQUIRED.
- THIS CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY LIGHT AND POWER TO ENSURE THE SAFETY OF PERSONNEL AND POWER REQUIREMENTS OF THE VARIOUS TRADES.
- WHERE PRESENT WORK IS DAMAGED IN THE EXECUTION OF THIS CONTRACT, OR WHERE OPENINGS ARE LEFT DUE TO THE REMOVAL OF PIPES, EQUIPMENT OR APPARATUS, THE SAME SHALL BE REPAIRED TO CORRESPOND IN MATERIALS, QUALITY, SHAPE AND FINISH WITH THAT OF SIMILAR AND ADJOINING WORK, UNLESS OTHERWISE CALLED FOR.
- CONTRACTOR SHALL ASSURE THAT THE LIGHTING AND POWER TO TOILETS REMAIN IN WORKING CONDITION.
- WHERE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT WILL RESULT IN OUTAGES IN AREAS NOT TO BE DEMOLISHED, THE CONTRACTOR SHALL COORDINATE IN ADVANCE AND OBTAIN THE APPROVAL OF THE BUILDING MANAGER.
- COORDINATE WITH OWNER WHICH FIXTURES, DEVICES AND EQUIPMENT, IF ANY, ARE TO BE REMOVED, KEPT INTACT AND RETURNED TO THE OWNER. IN GENERAL, ALL DEVICES, WIRING, RACEWAYS, BOXES, SUPPORTS AND OTHER APPURTENANCES WHICH ARE TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE CONTRACTOR, AS DIRECTED BY THE OWNER.
- CONTRACTOR IS TO DISCONNECT AND REMOVE ONLY WIRING AND RACEWAY SERVING FLOOR AREAS OF DEMOLITION. DO NOT REMOVE ANY BASE BUILDING HOMERUN CONDUITS.
- FOR FEEDERS AND BRANCH CIRCUITS TO BE REMOVED, CONDUIT, SUPPORTS, AND WIRING SHALL BE REMOVED TO THE PANEL OF ORIGIN. WHERE EMPTY CONDUITS REMAIN, INSTALL A PULL STRING AND IDENTIFY AT BOTH ENDS.
- FOR FEEDERS AND BRANCH CIRCUITS TO BE RE-USED, REMOVE CONDUIT AND WIRING TO LOCATIONS WHICH AVOID CONFLICTS WITH NEW WORK. INSTALL JUNCTION BOXES, TAPE OFF CONDUITORS, AND IDENTIFY WITH PANEL AND CIRCUIT NUMBER.
- PROVIDE ADDITIONAL SUPPORT FOR ALL EXISTING CONDUITS, LOW VOLTAGE CABLING, AND DEVICES TO REMAIN WHICH ARE AFFECTED BY DEMOLITION OF EXISTING CEILINGS AND PARTITIONS.
- ALL EXISTING UNUSED CONDUIT AND WIRING SHALL BE DROPPED TO THE FLOOR BY THE ELECTRICIAN FOR REMOVAL FROM THE BUILDING BY THE DEMOLITION OR CONTRACTOR.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ASCERTAINING THE FOLLOWING:
  - WHICH EXISTING CIRCUITS ARE CONNECTED TO CONSTANT CIRCUITS (NIGHT LIGHT, EXIT LIGHTS, ETC.)
  - WHICH EXISTING CIRCUITS ARE CONNECTED TO EXISTING EQUIPMENT TO REMAIN (TOILETS, JANITORS CLOSET, SERVICE ELEVATOR, LOBBY AND RECEPTACLES IN CORE CORRIDORS) AND SHALL MAINTAIN CONTINUITY OF SERVICE TO SUCH EQUIPMENT BY EITHER NEW CIRCUITRY OR EXTENSION OF EXISTING CIRCUITRY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO TRACE AND RELOCATE ALL EXISTING FEEDERS AND BRANCH CIRCUIT WIRING WHICH PASS THROUGH THE DEMOLITION AREA THAT SERVE EXISTING OCCUPIED SPACES TO REMAIN. COORDINATE WITH BUILDING MANAGEMENT PRIOR TO ANY SHUTDOWNS OR DISRUPTIONS THAT MAY BE REQUIRED TO ACCOMPLISH THIS WORK.
- THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL OUTLETS, SWITCHES AND OTHER DEVICES, COMPLETE WITH ASSOCIATED WIRING, CONDUITS, ETC. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING WIRING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL JUNCTION BOXES & OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION. OTHERWISE, WIRING SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO PANELBOARD.
- UNLESS OTHERWISE INDICATED ON THE DRAWINGS, CONTRACTOR SHALL DISCONNECT AND REMOVE THE FOLLOWING EXISTING EQUIPMENT AND DEVICES:
  - ELECTRICAL PANELS SHOWN AS BEING REMOVED WITH ASSOCIATED WIRING TROUGHS, INCOMING FEEDERS (WIRING AND CONDUIT), AND BRANCH CIRCUITS (WIRING AND CONDUIT)
  - ALL WALL, COLUMN, CEILING, AND FLOOR MOUNTED OR RAISED FLOOR MOUNTED BELOW RAISED FLOOR OR INSIDE RAISED FLOOR POWER, DATA, AND TELEPHONE OUTLETS
  - WIREMOLS WITH BUILT IN POWER, DATA AND TELEPHONE UTILITY
  - DATA/TELEPHONE STRIP CABINETS AND ASSOCIATED TERMINAL BLOCKS
  - DATA/TELEPHONE CABLES, AUDIO VISUAL OUTLETS, AUDIO VISUAL CABLES, TV OUTLETS, TV CABLES, CLOCK OUTLETS
  - LIGHTING FIXTURES, LIGHTING CONTROL SWITCHES, OCCUPANCY SENSORS, LIGHTING CONTROL TIMERS, LIGHTING CONTROL CONTACTORS, TOGGLE SWITCHES WITH PULL LIGHT, CARD READERS, ELECTRIC DOOR LOCKS, SECURITY SYSTEMS CONTROL PANELS, CCTV CAMERAS, DOOR CONTACTS, DOOR RELEASE PUSH BUTTONS, PAGING SPEAKERS
  - LOCAL CIRCUIT BREAKERS, LOCAL DISCONNECT SWITCHES (INCLUDING SWITCHES SERVING HVAC, KITCHEN OR PLUMBING EQUIPMENT)
  - WATER DETECTION CONTROL PANELS WITH ASSOCIATED WATER DETECTORS AND WIRING
  - ALL POWER SUPPLIES TO EXISTING CONTROL PANELS (WIRING AND CONDUIT)
  - LOCAL CONTROL PANELS AND STARTERS ASSOCIATED WITH HVAC, KITCHEN AND PLUMBING EQUIPMENT
  - EMERGENCY POWER OFF SWITCHES (EPOS, BREAK GLASS SWITCHES)
  - KITCHEN ANSUL FIRE SUPPRESSION CONTROL PANELS AND ASSOCIATED MANUAL RELEASE PULL STATIONS
  - ALL FIRE ALARM RELATED DEVICES SUCH AS MANUAL PULL STATIONS, SPEAKER/STROBES, SMOKE DETECTORS, WARDEN STATIONS, FIRE/SMOKE DAMPERS, INTERFACE RELAYS, ETC.

- DISCONNECT AND COMPLETELY REMOVE ALL ELECTRICAL WORK ASSOCIATED WITH THE MECHANICAL, PLUMBING, AND FIRE PROTECTION EQUIPMENT BEING REMOVED BY OTHER TRADES (EXAMPLE: AC UNITS, EXHAUST FANS, PUMPS, MOTORIZED DAMPERS, VAV BOXES, HOT WATER HEATERS, DUCT HEATERS, ETC.). DISCONNECT AND REMOVE EQUIPMENT ASSOCIATED LOCAL DISCONNECT SWITCHES, LOCAL CONTROL PANELS, REMOTE CONTROL SWITCHES (AS APPLICABLE), VAV BOXES, ETC. WITH ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE (EACAT POWER SOURCE TO BE DETERMINED IN THE FIELD BY THIS CONTRACTOR). FOR HVAC UNITS BEING REMOVED (LARGE AC UNITS, EXHAUST FANS) ALSO DISCONNECT AND REMOVE ASSOCIATED PLENUM LIGHTING FIXTURES AND LIGHTING CONTROL SWITCHES. PLENUM RECEPTACLES, FIRE ALARM RELATED WORK SUCH AS DUCT MOUNTED SMOKE DETECTORS, COMBINATION FIRE/SMOKE DAMPERS, INTERFACE RELAYS, FIRE ALARM POWER SUPPLIES, ETC. AS APPLICABLE, WITH ALL ASSOCIATED WIRING AND CONDUIT. COORDINATE ALL FIRE ALARM RELATED DEMOLITION WORK ALSO WITH BUILDING FIRE ALARM MAINTENANCE CONTRACTOR.
- COORDINATE THE ENTIRE DEMOLITION WORK ASSOCIATED WITH MECHANICAL, PLUMBING, AND FIRE PROTECTION EQUIPMENT WITH THE RESPECTIVE TRADES. DURING THE BIDDING PROCESS, REFER TO THE OTHER TRADES' CONTRACT DRAWINGS FOR THE FULL EXTENT OF THEIR DEMOLITION WORK AND RELATED ELECTRICAL DEMOLITION WORK. INCLUDE ALL ASSOCIATED ELECTRICAL DEMOLITION COSTS IN THE BID PRICE.
- ALL RACEWAYS WHICH BECAME EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- IN THE PROCESS OF REMOVING WIRING DEVICES, LIGHTING FIXTURES AND OTHER ELECTRICAL EQUIPMENT AND MATERIALS, THIS CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PREVENT DAMAGE TO ARCHITECTURAL SURFACES WHICH ARE TO REMAIN. THE COST TO REPAIR OR REPLACE ANY MATERIAL DEEMED BY THE ARCHITECT TO HAVE BEEN UNDOLEFULLY DAMAGED BY THIS CONTRACTOR DURING DEMOLITION OR CONSTRUCTION SHALL BE PAID BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE BLANK COVER PLATES AT OPEN BOXES WHERE EXISTING RECEPTACLES OR ELECTRICAL DEVICES ARE REMOVED FROM ENCLOSURES, EQUIPMENT, OR SURFACES NOT INDICATED TO BE REPAIRED OR REFINISHED. ALL UNUSED OUTLET BOXES OR RAISED FLOOR OUTLETS SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
- ALL WORK SHALL BE PROPERLY IDENTIFIED AFTER DEMOLITION. UPDATE ALL PANEL SCHEDULES TO REFLECT EQUIPMENT AND CIRCUIT REMOVALS.
- CONTRACTOR SHALL RECYCLE ALL LIGHTING FIXTURE LAMPS AND BALLASTS TO BE REMOVED. COORDINATE WITH BUILDING MANAGEMENT.
- THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL AND ELECTRICAL LAYOUTS IN FULL COORDINATION WITH THE ARCHITECT'S DEMOLITION PLANS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
- PROVIDE REVISED, TYPED-UP DIRECTORIES FOR ALL PANELBOARDS AFFECTED BY THE DEMOLITION AND NEW WORK, TO REFLECT ALL EXISTING CONDITIONS AND BRANCH CIRCUIT WIRING CHANGES. REMOVE THE ENTIRE EXISTING PANEL DIRECTORIES AND REPLACE WITH TYPED-UP NEW PANEL DIRECTORIES AS INDICATED ABOVE.
- PORTIONS OF FEEDER RUNS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN EXTENDED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CABLE TYPE, CONDUCTOR QUANTITIES AND SIZES, CONDUIT SIZES, ETC.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT AND OWNER'S SPECIFIC REQUIREMENTS. THE CONTRACTOR SHALL FOLLOW CLOSELY THE ARCHITECT'S OR CONSTRUCTION MANAGER'S DEMOLITION AND CONSTRUCTION PHASING SCHEDULE AND PROCEED IN THE SPECIFIED SEQUENCE. EXISTING PANELS SHOWN AS BEING REMOVED, ASSOCIATED INCOMING FEEDERS (WIRING AND CONDUIT), BRANCH CIRCUITS (WIRING AND CONDUIT), ASSOCIATED LOADS SERVED, LIGHTING FIXTURES, RECEPTACLES, VENTILATION EQUIPMENT, ETC.) AND ANY OTHER EXISTING ELECTRICAL DEVICES OR EQUIPMENT BEING REMOVED, SHALL BE DE-ENERGIZED, DISCONNECTED AND REMOVED ONLY AT THE DATES AND TIMES INDICATED BY THE DEMOLITION AND CONSTRUCTION PHASING SCHEDULE APPROVED BY THE OWNER.
- ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVERTIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY FINAL CONNECTIONS TO THE EXISTING SYSTEMS.
- THE SHUTDOWN OF EXISTING BUILDING ELECTRICAL SERVICES SHALL BE COORDINATED WITH THE OWNER. SUBMIT PROPOSED POWER SHUTDOWN SCHEDULE (DATE, TIME, SHUTDOWN DURATION) FOR APPROVAL BY THE OWNER. MAKE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN. IN ORDER TO MINIMIZE THE POWER SHUTDOWN DURATION, INSTALL ALL NEW ELECTRICAL EQUIPMENT AND ASSOCIATED FEEDERS AND REMOVE CERTAIN EXISTING SERVICE EQUIPMENT AS INDICATED ON THE DRAWINGS. PRIOR TO REQUIRING THE POWER SHUTDOWN, THE ACTUAL POWER SHUTDOWNS WILL BE REQUIRED TO TEST THE FINAL CONNECTIONS TO NEW ELECTRICAL EQUIPMENT. COORDINATE WORK ALSO WITH UTILITY COMPANY IF POWER SHUTDOWN OF EXISTING INCOMING ELECTRICAL SERVICES IS REQUIRED, IN WHICH CASE PAY ALL FEES REQUIRED BY UTILITY COMPANY.
- TYPICAL FOR EACH EXISTING PANEL LOCATED WITHIN THE SCOPE OF DEMOLITION WORK AREAS SHOWN AS BEING REMOVED UNLESS OTHERWISE NOTED:
  - REMOVE EXISTING PANEL
  - REMOVE EXISTING ASSOCIATED INCOMING FEEDER (WIRING AND CONDUIT) PER RISER DIAGRAMS
  - REMOVE ALL EXISTING ASSOCIATED BRANCH CIRCUITS (WIRING AND CONDUIT) UP TO THE NEAREST CEILING LOCATED WITHIN THE NOT IN SCOPE OF DEMOLITION WORK AREAS IF THE BRANCH CIRCUIT DOES NOT TERMINATE WITHIN THE SCOPE OF DEMOLITION WORK. CUT AND CAP CONDUIT INSIDE THE NOT IN SCOPE OF DEMOLITION WORK AREAS.
  - THE INTENT IS TO COMPLETELY REMOVE ALL EXISTING INCOMING FEEDERS (WIRING AND CONDUIT) AND ALL EXISTING BRANCH CIRCUITS (WIRING AND CONDUITS) LOCATED WITHIN THE SCOPE OF WORK AREAS
  - MAINTAIN CONTINUITY OF ALL EXISTING FEEDERS AND EXISTING BRANCH CIRCUITS LOCATED OUTSIDE THE SCOPE OF WORK AREAS. THE CONTRACTOR SHALL INSTALL JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION.
- TYPICAL FOR EACH EXISTING PANEL LOCATED OUTSIDE THE SCOPE OF DEMOLITION WORK AREAS (WIRING AND CONDUIT) SERVED LOADS LOCATED WITHIN THE SCOPE OF DEMOLITION WORK AREAS, ONLY REMOVE INSIDE BRANCH CIRCUIT SECTIONS LOCATED WITHIN THE SCOPE OF DEMOLITION WORK AREAS. CUT AND CAP CONDUITS INSIDE THE NOT IN SCOPE OF DEMOLITION WORK AREAS. MAINTAIN CONTINUITY OF ALL EXISTING FEEDERS AND EXISTING BRANCH CIRCUITS LOCATED OUTSIDE THE SCOPE OF WORK AREAS. THE CONTRACTOR SHALL INSTALL JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION.
- FOR EXISTING DEVICES SHOWN AS BEING REMOVED AND RELOCATED (NOTATION (ERR) NEXT TO DEVICE), DISCONNECT EXISTING DEVICES FROM THEIR ASSOCIATED WIRING AND CONDUIT, RELOCATE EXISTING DEVICES AT THEIR NEW RELOCATED POSITION AND EXTEND EXISTING ASSOCIATED WIRING AND CONDUIT FROM THEIR PRESENT LOCATION WITH NEW WIRING AND CONDUIT AS REQUIRED, UP TO THE EXISTING DEVICE NEW RELOCATED POSITION. NEW WIRING AND CONDUIT EXTENSION SIZES SHALL MATCH EXISTING WIRING AND CONDUIT SIZES (SAME NUMBER OF WIRES, SAME WIRE SIZES, SAME CONDUIT SIZE).
- TEMPORARILY DISCONNECT AND REMOVE ALL EXISTING CEILING-MOUNTED LIGHTING FIXTURES, LIGHTING CONTROL DEVICES, FIRE ALARM INTIATION DEVICES AND NOTIFICATION APPLIANCES, NURSE CALL DEVICES, POWER RECEPTACLES, AND IT/AV/SECURITY DEVICES AS REQUIRED FOR ABOVE-CEILING WORK ASSOCIATED WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND FIRE PROTECTION WORK. DE-ENERGIZE POWER CIRCUITS ASSOCIATED WITH CEILING-MOUNTED EQUIPMENT FROM ASSOCIATED PANELS PRIOR TO REMOVAL OF EQUIPMENT. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR ABOVE-CEILING SCOPE OF WORK AREAS. RETAIN EXISTING WIRING AND CONDUIT ABOVE THE CEILING FOR REUSE. STORE REMOVED EQUIPMENT IN AN AREA AS DIRECTED BY THE OWNER FOR THE DURATION OF THE ABOVE-CEILING WORK. COVERS ALL REMOVED EQUIPMENT TO PROTECT FROM DAMAGE AND DEBRIS. REINSTALL ALL REMOVED EQUIPMENT IN THEIR ORIGINAL LOCATIONS UPON COMPLETION OF THE ABOVE-CEILING WORK. EXTEND EXISTING WIRING AND CONDUIT AS REQUIRED TO THE EQUIPMENT'S INSTALLED LOCATIONS. NEW WIRING AND CONDUIT SHALL MATCH EXISTING WIRING AND CONDUIT. RE-ENERGIZE ASSOCIATED POWER CIRCUITS AT ASSOCIATED PANELS FOLLOWING REINSTALLATION OF CEILING-MOUNTED EQUIPMENT.
- PRIOR TO THE START OF DEMOLITION WORK, WHITE PLAINS ENGINEERING SHALL TRACE ALL BRANCH CIRCUITS IN ALL ELECTRICAL PANELS IN THE SCOPE OF WORK AREAS ON THE 3RD FLOOR. ALL PANELS IN ELECTRICAL CLOSET 3047 AND ELECTRICAL CLOSET 3050. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A REPORT WITH ACCOMPANYING FLOOR PLANS AND REFLECTED CEILING PLANS INDICATING THE EXACT NUMBER OF WIRES, WIRE SIZE, AND CONDUIT SIZE AND THE LOADS SERVED (RECEPTACLES, LIGHTING FIXTURES, ETC.) AND ASSOCIATED LOCATIONS ON THE PLANS, INSIDE AND OUTSIDE OF THE PROJECT SCOPE OF WORK FOR EACH BRANCH CIRCUIT. FINAL CIRCUITING ON THE PROJECT SHALL BE PERFORMED AFTER THE ENGINEER'S REVIEW OF THE CIRCUITING REPORT SUBMITTED BY THE CONTRACTOR PRIOR TO THE DEMOLITION WORK. THIS FINAL CIRCUITING WORK WILL INCLUDE RELOCATION OF EXISTING BRANCH CIRCUITS AS REQUIRED TO FACILITATE THE APPROPRIATE SEPARATION OF THE NORMAL AND EMERGENCY BRANCHES OF POWER.

## COMMUNICATIONS SYSTEMS NOTES

- COMMUNICATIONS SYSTEMS INCLUDE SYSTEMS SUCH AS:
  - TELECOMMUNICATIONS
  - SECURITY
  - AUDIO/VISUAL
  - NURSE CALL
  - PUBLIC ADDRESS
  - LIGHTING CONTROLS
  - OTHER SYSTEMS AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL OF THE FOLLOWING AS REQUIRED FOR A COMPLETE INSTALLATION OF THE COMMUNICATIONS SYSTEMS. ALL THE BELOW LISTED DEVICES, MATERIALS, ETC. AND ASSOCIATED LABOR REQUIRED FOR THEIR COMPLETE INSTALLATION SHALL BE INCLUDED IN THE ELECTRICAL BID PRICE. DURING THE BIDDING PROCESS AND DURING CONSTRUCTION COORDINATE ELECTRICAL SCOPE OF WORK AND RESPONSIBILITIES WITH THE RESPECTIVE SYSTEM TRADE CONTRACTOR.
  - CABLES & WIRING
  - CONDUITS
  - CABLE TRAYS
  - RECEPTACLES
  - FLOOR BOXES, JUNCTION BOXES, PULL BOXES, POKE-THROUGHS
  - CORE DRILLS
  - CABLE TRAYS, TROUGHS
  - GROUNDING BARS, GROUNDING WIRING AND CONDUIT
  - GROUNDING OF COMMUNICATIONS EQUIPMENT RACKS, CABLE TRAYS, AND CONDUITS
  - FIRE RETARDANT PLYWOOD
  - ADDITIONAL POWER OUTLETS, DATA AND COMMUNICATIONS OUTLETS, ETC. NOT SHOWN ON ELECTRICAL DRAWINGS AND ASSOCIATED WITH COMMUNICATIONS SYSTEMS REQUIRED FOR THIS PROJECT.
- SPECIFIC REQUIREMENTS OF EACH SYSTEM SHALL BE AS OUTLINED IN RELEVANT COMMUNICATIONS SYSTEM CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND INTEGRATE ALL LOW-VOLTAGE SYSTEMS ON THE PROJECT, PROVIDE ALL REQUIRED POWER CIRCUITRY AS REQUIRED FOR THE COMMUNICATIONS SYSTEMS, CENTRAL EQUIPMENT, AND DEVICES. FINAL LOCATIONS AND POWER REQUIREMENTS FOR THESE ITEMS SHALL BE COORDINATED WITH RESPECTIVE CONSULTANTS, OWNER, AND ARCHITECT.
- WHERE FLOOR-MOUNTED POWER OUTLET AND LOW-VOLTAGE SYSTEM OUTLET (E, AUDIO, VIDEO, ETC.) OCCUR AT THE SAME LOCATION, POWER AND LOW-VOLTAGE SYSTEM DEVICES SHALL EXIST WITH A MULTIPLE GANG BOX UNDER A SINGLE COVER PLATE AS REQUIRED. FINAL LOCATIONS, COLORS, AND FINISHES OF FLOOR BOXES SHALL BE BY THE ARCHITECT.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS SHOWING FINAL DETAILED AND FULLY COORDINATED POWER AND LOW-VOLTAGE RACEWAY SYSTEM FOR ENGINEERS REVIEW AND APPROVAL. IN ADDITION, THE SHOP DRAWINGS SHALL INCLUDE INSTALLATION DETAILS OF FLOOR RACEWAY SYSTEMS AND ALL FLOOR OUTLETS AND BOXES.
- COORDINATE WITH OWNER'S COMMUNICATIONS VENDORS FOR EXACT LOCATION AND ROUTING OF WIRE MANAGEMENT PATHWAY SYSTEM, OUTLETS, AND LAYOUTS THROUGHOUT THE BUILDING TO TELECOM CLOSETS.
- ALL EMPTY CONDUITS FOR COMMUNICATIONS SYSTEMS SHALL BE PROVIDED WITH (3) DRAG WIRES INSIDE. ALL DRAG LINES SHALL BE TAGGED AND LABELED AT BOTH ENDS, TERMINATE CONDUITS WITH INSULATED BUSHINGS AT BOTH ENDS, PROVIDE CAP AT EACH END. FROM UNDER FLOOR CONDUIT RUNS STUB-UP IN COLUMN OR BRACKET PARTITION TO HUNG CEILING. PROVIDE ANTI-SHORT BUSHING ON CONDUIT TERMINATION ABOVE THE CEILING.
- EMPTY COMMUNICATIONS RACEWAY RUNS: PROVIDE PULL BOXES EVERY 100 FEET FOR STRAIGHT RUNS, AND AT EVERY 90-DEGREE BENDS. BENDING RADII SHALL NOT BE LESS THAN 10 TIMES INTERNAL CONDUIT DIAMETER. COORDINATE LOCATIONS WITH OTHER TRADES.
- CONTRACTOR SHALL REFER TO THE COMMUNICATIONS DRAWINGS AND SPECIFICATIONS ON THIS PROJECT FOR ADDITIONAL WORK AND SCOPE INFORMATION NOT SHOWN ON THE ELECTRICAL DRAWINGS AND SPECIFICATIONS, INCLUDING LOCATIONS, QUANTITIES, INSTALLATION DETAILS, AND THE FULL EXTENT OF ELECTRICAL WORK AND RESPONSIBILITIES ASSOCIATED WITH EACH SEPARATE COMMUNICATIONS SYSTEM.

## GENERAL NOTES

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## KEY NOTES

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
**12491.000**

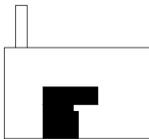
Description  
**ELECTRICAL NOTES**

Scale  
**AS NOTED**

**E-002.00**

THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB NOW JOB#

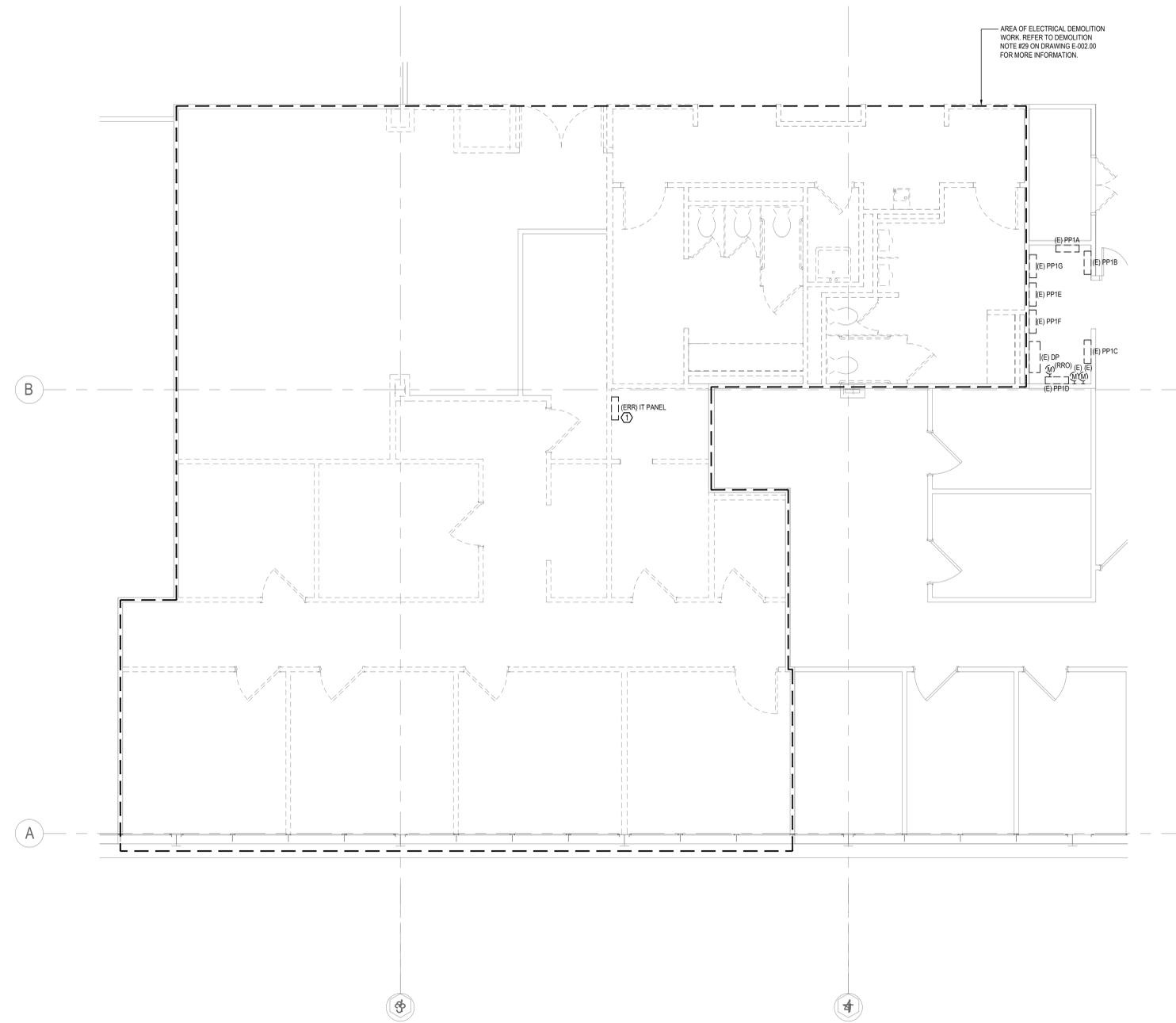


**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.
- CONTRACTOR SHALL MAINTAIN CONTINUITY TO ALL EXISTING CIRCUITRY THAT EXTEND BEYOND THEIR CURRENT PHASE OR BEYOND THE AREA OF WORK. SERVING EQUIPMENT IN AREAS NOT IN CONTRACT. CONTRACTOR SHALL PROVIDE ALL NECESSARY WIRES, CONDUIT AND JUNCTION BOXES REQUIRED TO MAINTAIN CONTINUITY.
- CONTRACTOR IS RESPONSIBLE FOR TRACING ALL CIRCUITS, LINES IN AREA OF WORK AND LINES RUNNING TO AND FROM THE AREA OF WORK TO ADJACENT SPACES IN ORDER TO CONFIRM LOADS AND SOURCES. ONCE CONFIRMED, SUBMIT TO ENGINEER FOR REVIEW AND COORDINATION. ALL SHUTDOWNS SHALL BE ON OVERTIME AT TIMES PERMITTED BY THE OWNER. COORDINATE WITH OWNER AT LEAST TWO (2) WEEKS IN ADVANCE.

**KEY NOTES**

- CONTRACTOR SHALL DISCONNECT, REMOVE, AND RELOCATE EXISTING PANEL. EXISTING FEEDER SHALL REMAIN AND BE REUSED TO FEED PANEL LOCATED IN NEW IT ROOM. ALL EXISTING LOADS TO REMAIN SHALL BE RELOCATED TO THE NEW PANEL LOCATION IN NEW IT ROOM.



Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

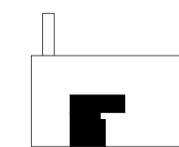
Project Number  
**12491.000**

Description  
**ELECTRICAL LEVEL 01 DEMOLITION PLAN**

Scale  
AS NOTED

**E-101.00**

**KEY PLAN**



**1 LEVEL 01 DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"  
0 4 8 FEET

THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB NOW JOB#

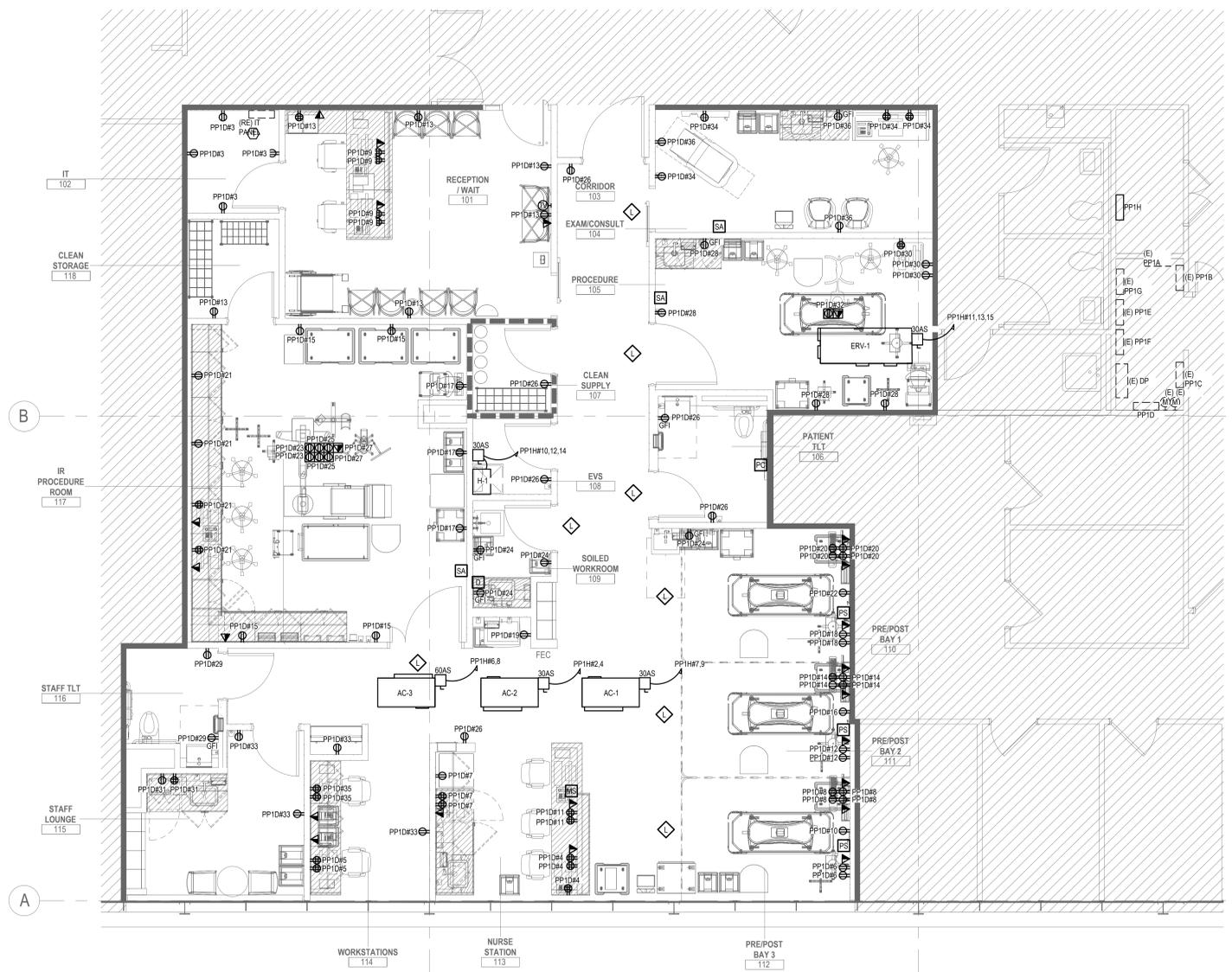
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**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.
- CONTRACTOR SHALL MAINTAIN CONTINUITY TO ALL EXISTING CIRCUITRY THAT EXTENDS BEYOND THEIR CURRENT PHASE OR BEYOND THE AREA OF WORK SERVING EQUIPMENT IN AREAS NOT IN CONTRACT. CONTRACTOR SHALL PROVIDE ALL NECESSARY WIRES, CONDUIT AND JUNCTION BOXES REQUIRED TO MAINTAIN CONTINUITY.
- CONTRACTOR IS RESPONSIBLE FOR TRACING ALL CIRCUITS, LINES IN AREA OF WORK AND LINES RUNNING TO AND FROM THE AREA OF WORK TO ADJACENT SPACES IN ORDER TO CONFIRM LOADS AND SOURCES. ONCE CONFIRMED, SUBMIT TO ENGINEER FOR REVIEW AND COORDINATION. ALL SHUTDOWNS SHALL BE ON OVERTIME AT TIMES PERMITTED BY THE OWNER. COORDINATE WITH OWNER AT LEAST TWO (2) WEEKS IN ADVANCE.
- CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT. CONTRACTOR SHALL CONNECT ALL MOTORIZED DAMPERS TO 1P-20A CIRCUIT BREAKER IN NEW PANEL PPH.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTED HEIGHTS OF ALL POWER RECEPTACLES, TELEDATA RECEPTACLES, AND NURSE CALL DEVICES.

**KEY NOTES**

- CONTRACTOR SHALL EXTEND EXISTING FEEDER, WIRING AND CONDUIT, PREVIOUSLY SERVING IT PANEL, BEING RELOCATED TO THE NEW PANEL LOCATION IN NEW IT ROOM. RELOCATE EXISTING LOADS TO REMAIN TO THE NEW PANEL LOCATION. EXTEND ALL WIRING AND CONDUIT AS REQUIRED.



Date	Description
10.04.21	ISSUE FOR BID

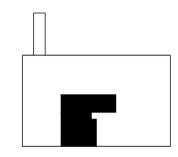
Seal / Signature

Project Name	INTERVENTIONAL RADIOLOGY - TARRYTOWN
Project Number	12491.000
Description	ELECTRICAL LEVEL 01 POWER PLAN

Scale  
AS NOTED

**E-201.00**

**KEY PLAN**



**1 LEVEL 01 POWER PLAN**  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

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DOB NOW JOB#

**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.
- EXACT ROUTING OF ALL CONDUIT SHALL BE DETERMINE AND COORDINATED IN THE FIELD.
- CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT. CONTRACTOR SHALL CONNECT ALL MOTORIZED DAMPERS TO 1P-20A CIRCUIT BREAKER IN NEW PANEL PPH.

**KEY NOTES**

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

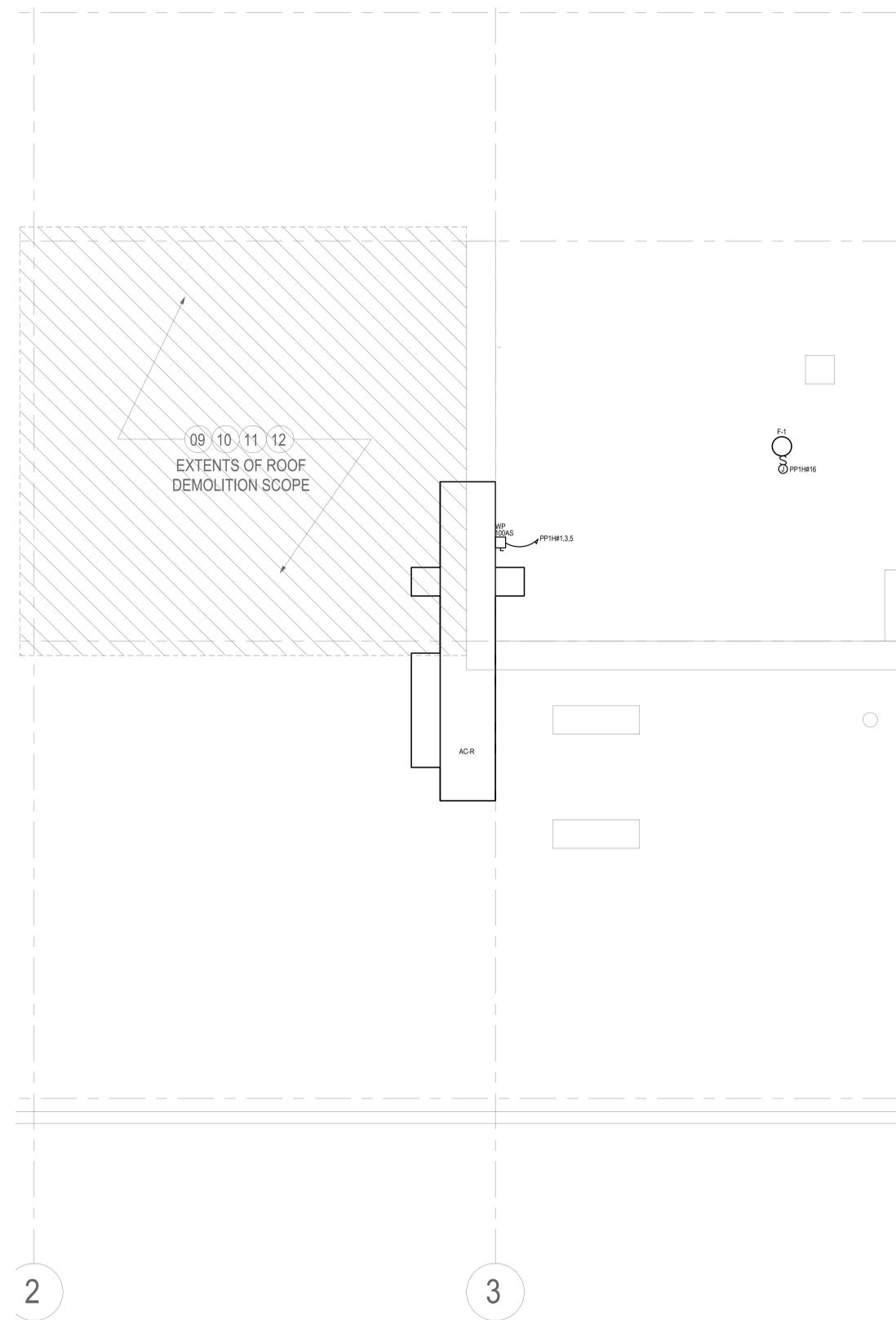
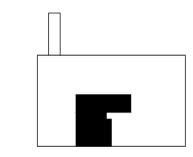
Project Number  
**12491.000**

Description  
**ELECTRICAL PARTIAL ROOF POWER PLAN**

Scale  
**AS NOTED**

**E-202.00**

**KEY PLAN**



**1 LEVEL 01 HVAC PIPING PLAN**  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

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DOB NOW JOB#

**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.
- CONTRACTOR SHALL MAINTAIN CONTINUITY TO ALL EXISTING CIRCUITRY THAT EXTENDS BEYOND THEIR CURRENT PHASE OR BEYOND THE AREA OF WORK SERVING EQUIPMENT IN AREAS NOT IN CONTRACT. CONTRACTOR SHALL PROVIDE ALL NECESSARY WIRES, CONDUIT AND JUNCTION BOXES REQUIRED TO MAINTAIN CONTINUITY.
- CONTRACTOR IS RESPONSIBLE FOR TRACING ALL CIRCUITS, LINES IN AREA OF WORK AND LINES RUNNING TO AND FROM THE AREA OF WORK TO ADJACENT SPACES IN ORDER TO CONFIRM LOADS AND SOURCES. ONCE CONFIRMED, SUBMIT TO ENGINEER FOR REVIEW AND COORDINATION. ALL SHUTDOWNS SHALL BE ON OVERTIME AT TIMES PERMITTED BY THE OWNER. COORDINATE WITH OWNER AT LEAST TWO (2) WEEKS IN ADVANCE.
- ALL EMERGENCY LIGHTING SHALL BE PROVIDED WITH INTEGRATED BATTERY BACKUP.

**KEY NOTES**

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

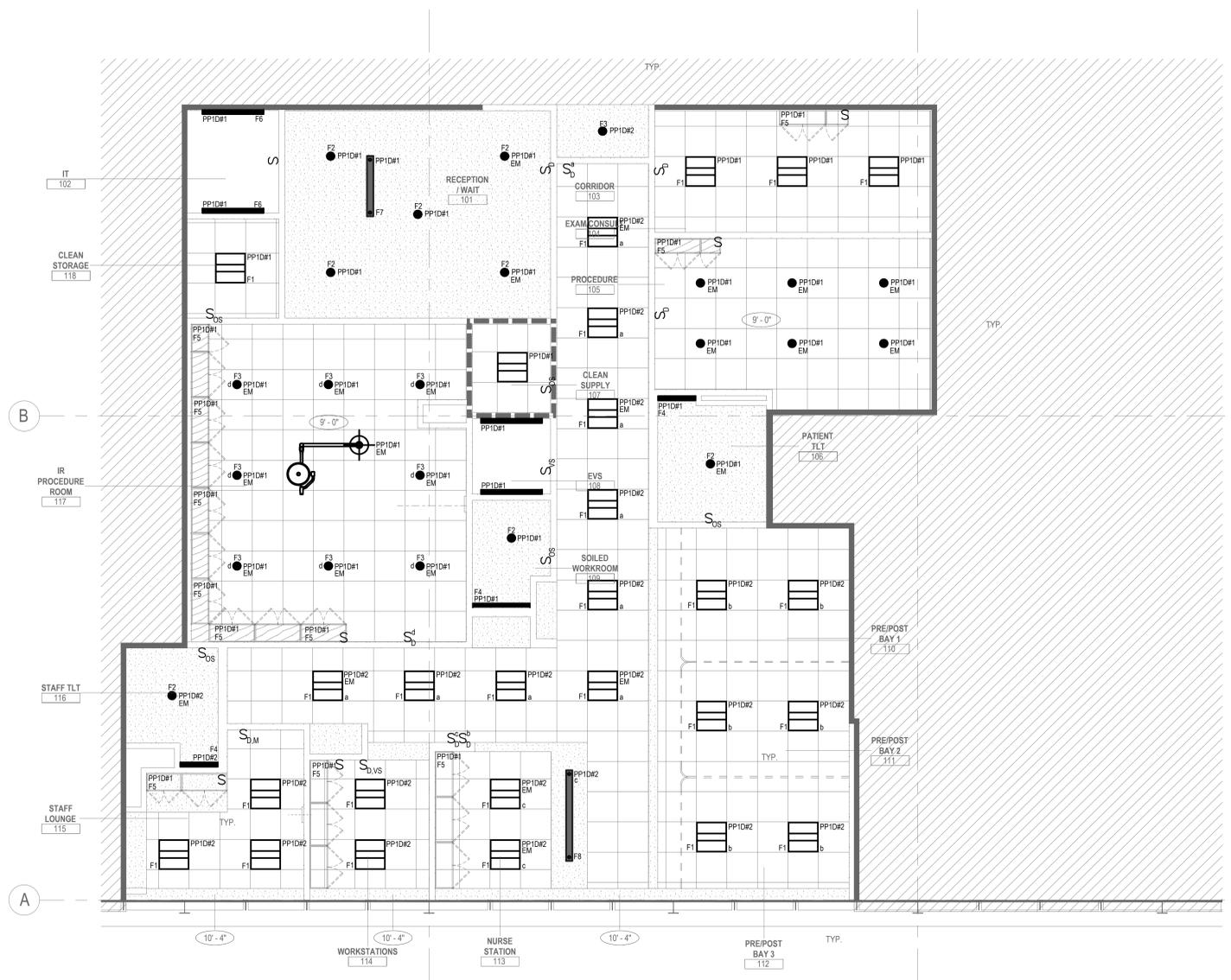
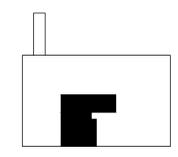
Project Number  
**12491.000**

Description  
**ELECTRICAL LEVEL 01 LIGHTING PLAN**

Scale  
**AS NOTED**

**E-301.00**

**KEY PLAN**



**1 LEVEL 01 LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

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DOB NOW JOB#

# Gensler

1700 Broadway  
Suite 400  
New York, NY 10019  
United States  
Tel: 212.492.1400  
Fax: 212.492.1472

# LORING

21 Pennsylvania Plaza  
New York, NY 10001  
United States  
Tel: 212.563.7400

# THE HARMAN GROUP

450 7th Avenue  
#1008  
New York, NY 10123  
United States  
Tel: 212.433.2326

# MER

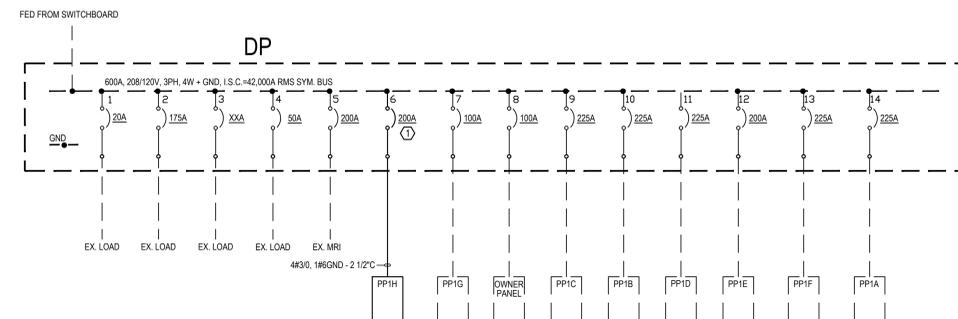
901 Manchester Avenue  
Moyland, PA 19065  
United States  
Tel: 610.565.4607

## GENERAL NOTES

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.

## KEY NOTES

- CONTRACTOR SHALL FURNISH AND INSTALL ONE(1) 3-POLE, 200A CIRCUIT BREAKER IN PLACE OF THE EXISTING 175A SPARE CIRCUIT BREAKER. PREVIOUSLY SERVING THE MRI. THE EXISTING CIRCUIT BREAKER SHALL BE REMOVED AND TURNED OVER TO THE OWNER. NEW CIRCUIT BREAKER SHALL MATCH THE EXISTING KAIC RATING.



PARTIAL SINGLE-LINE DIAGRAM

## SINGLE-LINE DIAGRAM LEGEND

- EXISTING TO REMAIN
- NEW

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DOB NOW JOB#

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
**12491.000**

Description  
**ELECTRICAL PARTIAL SINGLE-LINE DIAGRAM**

Scale  
AS NOTED

**E-401.00**

**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.

**KEY NOTES**

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
**12491.000**

Description  
**ELECTRICAL SCHEDULES**

Scale  
AS NOTED

**E-501.00**

EXISTING PANEL															
PANEL: PP1D															
LOCATION: ELEC CLOSET															
MOUNTING: SURFACE															
MAIN: <b>MLO</b>															
AMP: 225 VOLT: 208/120															
PHASE: 3 4 WIRE + GND															
AIC: 42k AMPS RMS SYM															
Branch Circuit Load Description	KVA Load			Trip Poles	Ckt No.	Phase	Ckt No.	Trip Poles	KVA Load			Branch Circuit Load Description			
LIGHTING	1.20			20/1	1	A	2	20/1	1.20			LIGHTING			
IT RECEPTACLES		1.20		20/1	3	B	4	20/1		1.20		NURSE RECEPTACLES			
WORKSTATIONS RECEPTACLES			1.20	20/1	5	C	6	20/1			1.20	PRE/POST RECEPTACLES			
NURSE RECEPTACLES	1.20			20/1	7	A	8	20/1	1.20			PRE/POST RECEPTACLES			
RECEPTION RECEPTACLES		1.20		20/1	9	B	10	20/1		1.20		PRE/POST RECEPTACLES			
NURSE RECEPTACLES			1.20	20/1	11	C	12	20/1			1.20	PRE/POST RECEPTACLES			
RECEPTION RECEPTACLES	1.20			20/1	13	A	14	20/1	1.20			PRE/POST RECEPTACLES			
IR RECEPTACLES		1.20		20/1	15	B	16	20/1		1.20		PRE/POST RECEPTACLES			
IR RECEPTACLES			1.20	20/1	17	C	18	20/1			1.20	PRE/POST RECEPTACLES			
PRINTER	1.20			20/1	19	A	20	20/1	1.20			PRE/POST RECEPTACLES			
IR RECEPTACLES		1.20		20/1	21	B	22	20/1		1.20		PRE/POST RECEPTACLES			
IR RECEPTACLES			1.20	20/1	23	C	24	20/1			1.20	PRE/POST RECEPTACLES			
IR RECEPTACLES	1.20			20/1	25	A	26	20/1	1.20			EV/TL/CLEAN RECEPTACLES			
IR RECEPTACLES		1.20		20/1	27	B	28	20/1		1.20		PROCEDURE RECEPTACLES			
STAFF TLT RECEPTACLES			1.20	20/1	29	C	30	20/1			1.20	PROCEDURE RECEPTACLES			
LOUNGE RECEPTACLES	1.20			20/1	31	A	32	20/1	1.20			PROCEDURE RECEPTACLES			
LOUNGE RECEPTACLES		1.20		20/1	33	B	34	20/1		1.20		EXAM RECEPTACLES			
WORKSTATIONS RECEPTACLES			1.20	20/1	35	C	36	20/1			1.20	EXAM RECEPTACLES			
SPARE	0.00			20/1	37	A	38	20/1		0.10		(E) METER			
SPARE		0.00		20/1	39	B	40	20/1			0.10				
SPARE			0.00	20/1	41	C	42	20/1							
									7.20	7.20	7.20	<< PHASE SUB-TOTALS >>	7.30	7.30	7.30
									PHASE TOTALS:			14.50	14.50	14.50	kVA

LOAD SUMMARY (KVA)		
LOAD TYPE	CONNECTED	DEMAND
Lighting	2.40	2.40
Receptacles	40.80	25.40
Equip: Continuous	0.00	0.00
Equip: Non-Continuous	0.30	0.30
Kitchen	0.00	0.00
Mech: Concurrent	0.00	0.00
Mech: Non-Concurrent	0.00	0.00
<b>TOTAL KVA</b>	<b>43.50</b>	<b>28.10</b>

43.50 kVA CONNECTED LOAD  
28.10 kVA TOTAL DEMAND LOAD  
78.00 DEMAND AMPS

PROVIDE THE FOLLOWING:  
CONTRACTOR SHALL REPLACE ALL EXISTING CIRCUIT BREAKERS WITH NEW.

NEW PANEL															
PANEL: PP1H															
LOCATION: ELEC CLOSET															
MOUNTING: SURFACE															
MAIN: <b>200</b> MCB															
AMP: 225 VOLT: 208/120															
PHASE: 3 4 WIRE + GND															
AIC: 42k AMPS RMS SYM															
Branch Circuit Load Description	KVA Load			Trip Poles	Ckt No.	Phase	Ckt No.	Trip Poles	KVA Load			Branch Circuit Load Description			
AC-R 3#2, 1#8GND - 1 1/2"C	8.40			80/3	1	A	2	30/2	2.17			AC-2 3#10, 1#10GND - 3/4"C			
		8.40			3	B	4			2.17		AC-3 3#8, 1#10GND - 1"C			
			8.40		5	C	6	40/2			2.66	AC-3 3#8, 1#10GND - 1"C			
AC-1 3#10, 1#10GND - 3/4"C	2.17			30/2	7	A	8	10		2.66		H-1			
ERV-1 3#12, 1#12GND - 3/4"C		2.17			9	B	10	30/3		3.00		3#10, 1#10GND - 3/4"C			
			1.08		11	C	12				3.00				
	1.08			20/3	13	A	14		3.00						
		1.08			15	B	16	20/1		0.50		F-1			
			0.30	20/1	17	C	18	20/1			0.00	SPARE			
MOTORIZED DAMPERS	0.00			20/1	19	A	20	20/1	0.00			SPARE			
SPARE		0.00		20/1	21	B	22	20/1		0.00		SPARE			
SPARE			0.00	20/1	23	C	24	20/1			0.00	SPARE			
SPARE	0.00			20/1	25	A	26	20/1	0.00			SPARE			
SPARE		0.00		20/1	27	B	28	20/1		0.00		SPARE			
SPARE			0.00	20/1	29	C	30	20/1			0.00	SPARE			
SPARE	0.00			20/1	31	A	32	20/1	0.00			SPARE			
SPARE		0.00		20/1	33	B	34	20/1		0.00		SPARE			
SPARE			0.00	20/1	35	C	36	20/1			0.00	SPARE			
SPARE	0.00			20/1	37	A	38	20/1	0.00			SPARE			
SPARE		0.00		20/1	39	B	40	20/1		0.00		SPARE			
SPARE			0.00	20/1	41	C	42	20/1			0.00	SPARE			
									11.65	11.65	9.78	<< PHASE SUB-TOTALS >>	7.83	5.67	5.66
									PHASE TOTALS:			19.48	17.32	15.44	kVA

LOAD SUMMARY (KVA)		
LOAD TYPE	CONNECTED	DEMAND
Lighting	0.00	0.00
Receptacles	0.00	0.00
Equip: Continuous	0.00	0.00
Equip: Non-Continuous	52.24	52.24
Kitchen	0.00	0.00
Mech: Concurrent	0.00	0.00
Mech: Non-Concurrent	0.00	0.00
<b>TOTAL KVA</b>	<b>52.24</b>	<b>52.24</b>

52.24 kVA CONNECTED LOAD  
52.24 kVA TOTAL DEMAND LOAD  
145.00 DEMAND AMPS

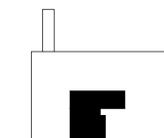
PROVIDE THE FOLLOWING:

LIGHTING FIXTURE SCHEDULE									
FIXTURE TYPE	DESCRIPTION	MANUFACTURER	BALLAST / DRIVER	VOLTAGE	LAMPS			REMARKS	
					QUANTITY	TYPE	WATTAGE		
F1	RECESSED 2X2 WITH CENTER ACRYLIC SMOOTH OPAL OPTIC INTEGRAL LED DRIVER	FIXTURE BY: AXIS CAT. No.: AULED-22-XXX-80-35-SO-W-UNV-DP-1-B(1)	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	42	LUMEN AS SPECIFIED BY ARCHITECT.	
F2	RECESSED 4-1/2" ROUND APERTURE FLANGED LED DOWNLIGHT	FIXTURE BY: USAI CAT. No.: 84RD-12G1-35K-90-5WH-WH-NCSMAJUNV-DEE	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	12	LUMEN AS SPECIFIED BY ARCHITECT.	
F3	RECESSED 4" ROUND NON-FERROUS FLANGED LED DOWNLIGHT	FIXTURE BY: KIRLIN CAT. No.: MRR-0416-2500-MFL-30F	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	34	LUMEN AS SPECIFIED BY ARCHITECT.	
F4	RECESSED 4" WIDE LINEAR CONTINUOUS LED	FIXTURE BY: AXIS CAT. No.: BMRLED-600-80-35-FL-2-W-UNV-DP-1-XX	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	7.1' FT	LUMEN AS SPECIFIED BY ARCHITECT.	
F5	UNDERCABINET LINEAR LED TASK LIGHT INTEGRAL LED DRIVERS	FIXTURE BY: PICASSO CAT. No.: TASK-X-D3-35-80-FW-SM-ZT2	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	5	LUMEN AS SPECIFIED BY ARCHITECT.	
F6	SURFACE MOUNTED LINEAR LED STRIP	FIXTURE BY: LITHONIA CAT. No.: ZL10A-48-3000LM-FST-MVOLT-35K-80CRH-WH-ZAVCH	0-10V DIMMING LED DRIVER	UNIV. 120/277	1	LED	41	LUMEN AS SPECIFIED BY ARCHITECT.	
F7	TBD	TBD	TBD	120V	1	TBD	TBD		
F8	TBD	TBD	TBD	120V	1	TBD	TBD		
	EXIT SIGN	FIXTURE BY: TBD CAT. No.: TBD	TBD		1				

NOTES:  
1. COORDINATE QUANTITY, COLOR, AND FINISH OF LIGHT FIXTURES WITH ARCHITECT.

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DOB NOW JOB#



**GENERAL NOTES**

- REFER TO DRAWING E-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING E-002.00 FOR GENERAL ELECTRICAL NOTES.

**KEY NOTES**

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

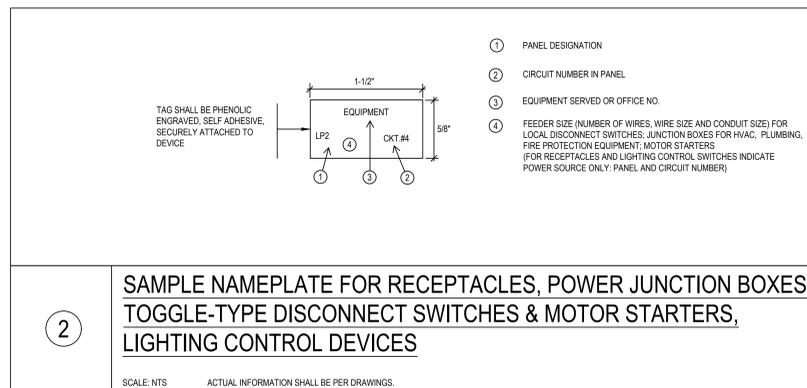
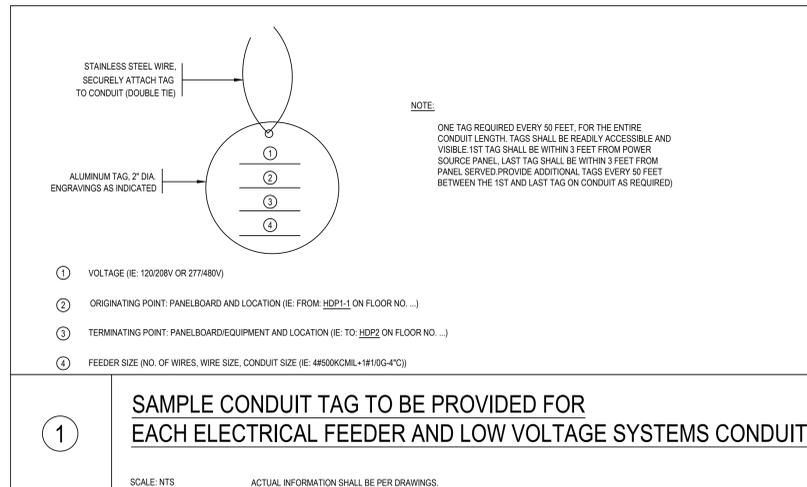
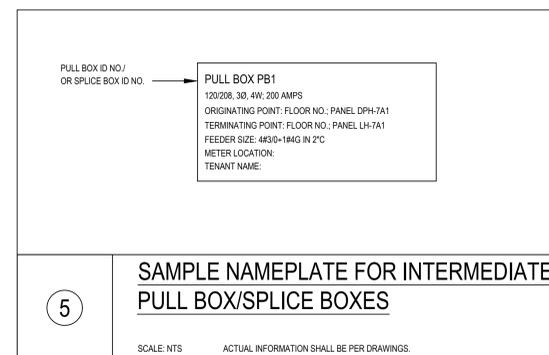
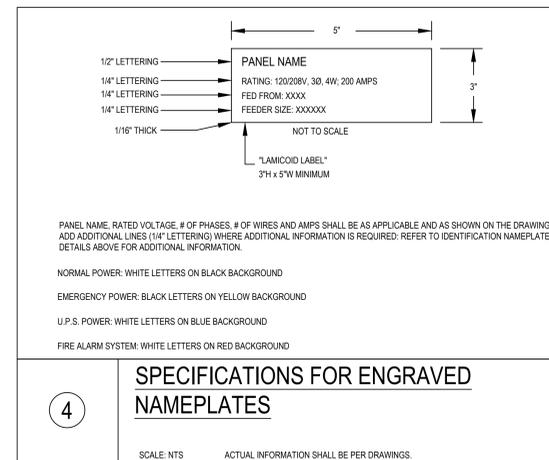
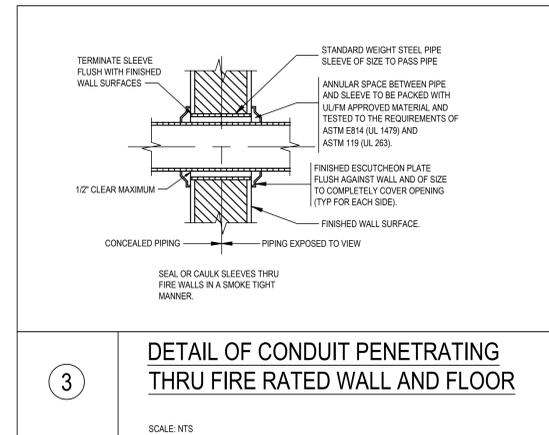
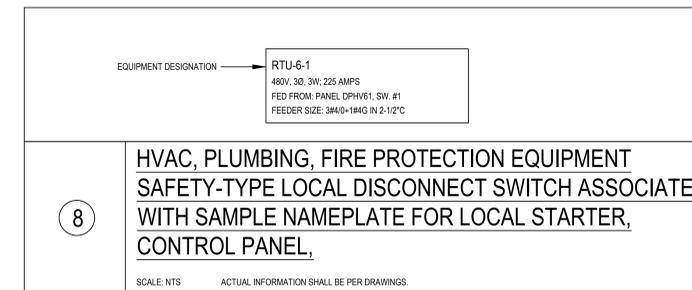
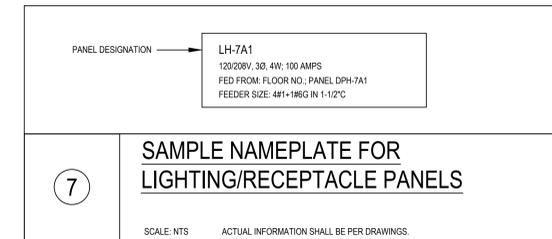
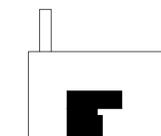
Project Number  
**12491.000**

Description  
**ELECTRICAL DETAILS**

Scale  
**AS NOTED**

**E-601.00**

**KEY PLAN**

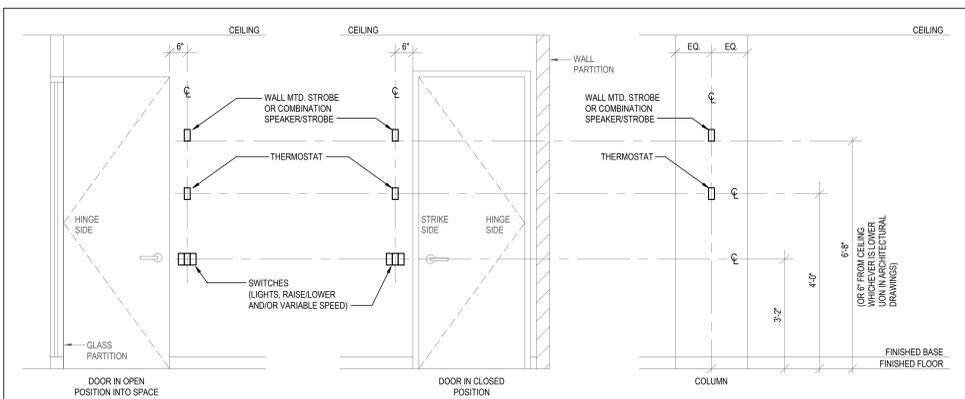


FIRE ALARM SYMBOL LIST	
	COMBINATION WALL-MOUNTED BUILDING STANDARD BELL/STROBE FIRE ALARM DEVICE FIELD SELECTABLE CANDELA LEVELS 15/30/75/110 CD = CANDELA RATING/SETTING C = CANDELA RATING/SETTING
	WALL-MOUNTED BUILDING STANDARD STROBE FIRE ALARM DEVICE FIELD SELECTABLE CANDELA LEVELS 15/30/75/110 CD = CANDELA RATING/SETTING
	CEILING-MOUNTED BUILDING STANDARD STROBE FIRE ALARM DEVICE FIELD SELECTABLE CANDELA LEVELS 15/30/75/110 CD = CANDELA RATING/SETTING
	WALL-MOUNTED GONG
	AREA SMOKE DETECTOR EL = ELEVATOR RECALL
	DUCT-MOUNTED SMOKE DETECTOR
	MANUAL PULL STATION
	INTERFACE MODULE
	CONTROL MODULE (ADDRESSABLE OUTPUT MODULE)
	MONITOR MODULE (ADDRESSABLE INPUT MODULE)
	INTERPOSING RELAY (NON-ADDRESSABLE OUTPUT RELAY)
	ELECTRIC LOCK
	MAGNETIC DOOR HOLD OPEN DEVICE
	FIRE/SMOKE DAMPER
	MOTOR CONTROLLER (SHOWN TO ILLUSTRATE FAN SHUTDOWN)
	WARDEN STATION
	WATERFLOW SWITCH
	VALVE SUPERVISORY / TAMPER SWITCH
	END-OF-LINE RESISTOR
	FIRE ALARM CONTROL PANEL
	FIRE ALARM DATA GATHERING PANEL
	NEW WIRING AND CONDUIT
	EXISTING WIRING AND CONDUIT

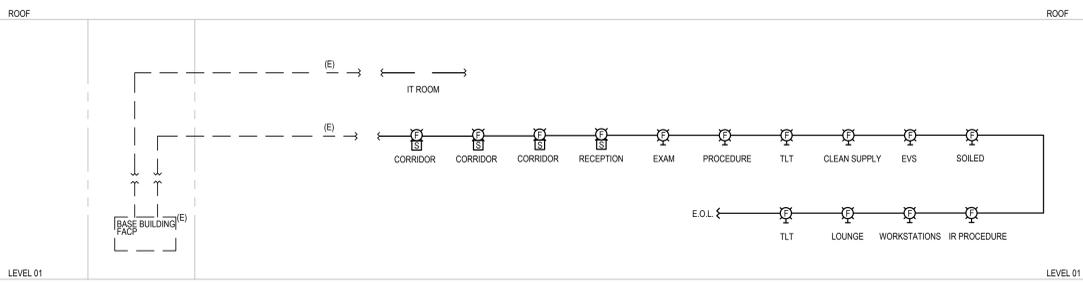
FIRE ALARM ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
1P	SINGLE POLE
2P	TWO POLE
3P	THREE POLE
A	AMPERES
AC	ABOVE CENTER
AFE	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV, AVY	AUDIO-VISUAL
AWG	AMERICAN WIRE GAUGE
BIDS	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CAS	CABINET
CAV	CONSTANT AIR VOLUME
CL	CLOSED
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKTS	CIRCUITS
CM	CONSTRUCTION MANAGER
COMM	COMMUNICATION
CONN	CONNECTED
CONT	CONTINUATION
CP	CONDENSATE PUMP
CT	CURRENT TRANSFORMER
CU	COPPER
CUH	CABINET UNIT HEATER
DB	DEGREE
DEG	DEGREE
DIA	DIAMETER
DP	DISTRIBUTION PANEL
DISC, DIS	DISCONNECT SWITCH
DWG	DRAWING
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
EL, EX, E	EXISTING TO REMAIN
EA	EACH
EC	EMPTY CONDUIT, ELECTRICAL CONTRACTOR
ELEV	ELEVATOR
EM, EMER	EMERGENCY
EQUIP	EQUIPMENT
ERR	EXISTING TO BE REMOVED
ERRR	EXISTING TO BE REMOVED AND RELOCATED
ERC	ELECTRIC REHEAT COIL
EW	ELECTRIC WATER COOLER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHER DIVISION OF WORK
FCC	FIRE COMMAND CENTER
FCU	FAN COIL UNIT
FL	FLOOR
FLA	FULL LOAD AMPERES
FLUOR	FLUORESCENT
FSD	FIRE SMOKE DAMPER
FT	FEET / FOOT
G, GND, GND	GROUND
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HC	HUNG CEILING
HD	HAND DRYER
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HV	HIGH VOLTAGE
HZ	HERTZ
ID	INSIDE DIAMETER
IG	ISOLATED GROUND
JB	JUNCTION BOX
KOHM	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATTS
KWH	KILOWATT HOURS
LAN	LOCAL AREA NETWORK
LIM	LINE ISOLATION MOTOR
LTG	LIGHTING
MAP	MEDICAL GAS MASTER ALARM PANEL

MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MC, MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MER	MECHANICAL EQUIPMENT ROOM
MFS	MAIN FUSED SWITCH
MH	MARKER
MIN	MINIMUM
MULO	MAIN LOSS ONLY
MOPD, MOCP	MAXIMUM OVERCURRENT PROTECTION DEVICE
MTD	MOUNTED
MTO	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
NCI	NOT IN CONTACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
POLE(S)	POLE(S)
PA	PUBLIC ADDRESS SYSTEM
PB	PULL BOX
PC	PERSONAL COMPUTER
PH	PHASE
PHM	POWER MONITOR
PNL	PANEL
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PHWR	POWER
Ø	PHASE
(RE)	RELOCATED EXISTING (RELOCATED EXISTING DEVICE AT NEW LOCATION)
RECEPT, RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
(RRO)	REMOVE AND RETURN TO OWNER
SD	SMOKE DAMPER, SMOKE DETECTOR
SO	SOUTH
SP	SPARE
SPD	SURGE PROTECTIVE DEVICE
SPST	SINGLE POLE SINGLE THROW
STD	STANDARD
SW	SWITCH
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
SYSTEM	SYSTEM
TBD	TO BE DETERMINED
TEL	TELEPHONE
TEMP	TEMPERATURE
TP	TAMPER-RESISTANT
TRANS, XPR	TRANSFER
TS, VS	TAMPER SWITCH (VALVE SUPERVISORY SWITCH)
TV	TELEVISION
TSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UH	UNIT HEATER
UNF	UNFINISHED
UNO	UNLESS OTHERWISE NOTED
LTP	UNSHIELDED TWISTED-PAIR
V	VOLT, VOLT FACE
VA	VOLT AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VIM	VOLTMETER
VP	VAPORPROOF
W	WATT, WIRE
WRP	WEATHER-RESISTANT
WT	WATER TIGHT
XP	EXPLOSION-RESISTANT

SYSTEM FUNCTIONS	SYSTEM DEVICES														STATUS					
	MANUAL INITIATION AT MAIN FACP	MANUAL PULL STATION	WATERFLOW DETECTOR	SMOKE DETECTOR, DUCT-MOUNTED	SMOKE DETECTOR, AREA (MULTICRITERIA)	SMOKE DETECTOR, TOP OF SHAFT	SMOKE DETECTOR, ELEVATOR LOBBY	SMOKE DETECTOR, ELEVATOR MASHWAY	SMOKE DETECTOR, ELEVATOR MACHINE ROOM	HEAT DETECTOR	SUB-SYSTEM ALARM CONTACT	TEMPERATURE SWITCH <math>\le 40^{\circ}F</math>	DBP OR FACP CABINET TAMPER SWITCH	CENTRAL STATION TRIP AT FACP	FIRE PUMP STATUS	FAN STATUS (ON/OFF)	SUPERVISORY SIGNAL	TROUBLE SIGNAL	SUB-SYSTEM TROUBLE	SUB-SYSTEM SUPERVISORY
ALERT SIGNALING, AUTOMATIC, INITIATE A CODED GENERAL ALARM FOR THE FLOOR WHERE SMOKE HAS BEEN DETECTED AND INITIATE OPERATION OF ALL STROBE LIGHTS FOR THE FLOOR WHERE SMOKE HAS BEEN DETECTED.	X	X	X	X	X	X	X	X	X	X										
AUTOMATICALLY RELEASE ALL ELECTRICALLY OPERATED DOORS (PUSH PLATES REQUIRED TO OPERATE DOORS) LOCATED ON THE FLOOR UNDER ANY ALARM SIGNALS ORIGINATING FROM THAT FLOOR.	X	X	X	X	X	X	X	X	X	X										
SUPERVISORY SIGNALING.														X	X	X	X			X
TROUBLE SIGNALING.																			X	X
STATUS MONITORING OF CENTRAL STATION TRANSMITTER.																			X	
TRANSMIT THE APPROPRIATE ALARM SIGNAL(S) TO THE CENTRAL STATION: MANUAL, AUTOMATIC, WATER FLOW.			X	X	X	X	X	X	X	X			X							
TRANSMIT A COMMON SUPERVISORY SIGNAL TO THE CENTRAL STATION.												X	X	X	X	X		X		X
TRANSMIT A COMMON TROUBLE SIGNAL TO THE CENTRAL STATION.																		X	X	
INITIATE AUTOMATIC SMOKE EXHAUSTING OF SHAFTS.	X				X															
MANUAL INITIATION OF SYSTEM RESET.	X																			
SHUT DOWN FANS OVER 2,000 CFM.	X	X	X	X	X	X	X	X	X	X					X					



1 TYPICAL DEVICE LOCATION AND ELEVATION  
SCALE: NTS



LEVEL 01 PARTIAL FIRE ALARM WIRING DIAGRAM  
NOT TO SCALE

LEGEND

- NEW
- - - EXISTING TO REMAIN

GENERAL NOTES

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Tarrytown, NY 10591

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**MER**

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KEY NOTES

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

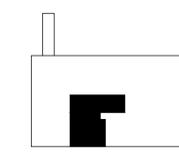
Project Number  
**12491.000**

Description  
**ELECTRICAL COVER SHEET**

Scale  
AS NOTED

**E-001.00**

KEY PLAN



THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB NOW JOB#

## SCOPE OF WORK

- ALL WORK SHOWN IS NEW UNLESS OTHERWISE INDICATED ON THE DRAWING.
- CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE FURNISHING AND INSTALLATION OF ALL NEW FIRE ALARM DEVICES SHOWN ON THE DRAWINGS: SMOKE DETECTORS, STROBE LIGHTS, AUDIOVISUAL (SPEAKERS/RELAYS) UNITS, ETC. COORDINATE ALL WORK WITH BUILDING MANAGEMENT, BASE BUILDING FIRE ALARM SYSTEM VENDOR, AND OTHER TRADES.
- WHERE DISCREPANCIES OCCUR AND/OR WHERE THERE ARE CONFLICTS OR OMISSIONS IN THE DRAWINGS AND APPLICATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF SUCH DISCREPANCIES FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK. IF THE NUMBER OF DEVICES VARY BETWEEN THE RISER DIAGRAM AND THE FLOOR PLANS THE GREATER NUMBER SHALL PREVAIL.
- NOTES APPEAR ON VARIOUS SHEETS FOR VARIOUS SYSTEMS AND MATERIALS. SHEETS ARE TO BE REVIEWED AND NOTES ON ANY ONE SHEET ARE TO BE APPLIED TO RELATED SYSTEMS AND MATERIALS DEPICTED ON OTHER DRAWINGS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING WORK AND SHALL REPORT TO THE ARCHITECT ANY CONDITION OR DISCREPANCY BETWEEN DRAWINGS AND FIELD CONDITIONS REQUIRING MODIFICATIONS BEFORE PROCEEDING WITH THE WORK.
- MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED ON THE DRAWINGS.

## CODES

- SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRIC CODE, 2016 EDITION OF NFPA 72, AMERICANS WITH DISABILITIES ACT (ADA), O.S.H.A. PERTINENT WITH NFPA CODES, 2020 NYS BUILDING CODE, 2020 NYS FIRE CODE, 2020 NYS EXISTING BUILDING CODE, CITY OF WHITE PLAINS FIRE DEPARTMENT REQUIREMENTS, AND THE RULES AND REGULATIONS OF ALL LOCAL, STATE AND FEDERAL AUTHORITIES HAVING JURISDICTION. PROVIDE OWNER WITH CERTIFICATES OF INSPECTION.
- CONTRACTOR SHALL BE LICENSED BY THE BUILDING DEPARTMENT OFFICE TO PERFORM FIRE ALARM WORK IN THE CITY OF WHITE PLAINS.
- SPACING OF ALL DEVICES SHALL BE PER NFPA 72, NYS CITY OF WHITE PLAINS CODES, AND ALL AUTHORITIES HAVING JURISDICTION.

## PERFORMANCE OF WORK & VENDOR COORDINATION

- PERFORM X-RAY SCANS AT ALL LOCATIONS THAT REQUIRE PENETRATING THROUGH CONCRETE WALL OR SLAB. CONFIRM LOCATIONS OF ALL MECHANICAL, ELECTRICAL, FIRE ALARM, PLUMBING, AND FIRE PROTECTION RISERS PRIOR TO THE START OF WORK.
- CONTRACTOR TO REMOVE ANY EXISTING FIRE ALARM DEVICES, WIRING, CONDUITS ETC. FOR THE AREA THAT IS UNDER CONSTRUCTION. PER ELECTRICAL DEMOLITION DRAWINGS, ALL AREAS AFTER REMOVALS ARE TO BE RESTORED TO MATCH THEIR ORIGINAL CONDITION. THIS INCLUDES ALL CUTTING & PATCHING. ONLY CIRCUITS THAT ARE AFFECTED BY THIS RENOVATION WILL BE UPDATED ON THE PANELBOARD DIRECTORY.
- COORDINATE THE ENTIRE FIRE ALARM WORK WITH BUILDING FIRE ALARM MAINTENANCE CONTRACTOR AND FIRE ALARM VENDOR.
- CONTRACTOR SHALL CONTACT THE BUILDING FIRE ALARM SYSTEM VENDOR AND OBTAIN PRICING FOR THE EQUIPMENT AND SERVICES LISTED ON THIS DRAWING. ITEMS WHICH MUST BE INCLUDED IN HIS BID, CONTRACT WITH THE BUILDING FIRE ALARM SYSTEM VENDOR TO PROVIDE ALL NECESSARY EQUIPMENT, WIRING DIAGRAMS, SHOP DRAWINGS, SYSTEM RE-PROGRAMMING, TESTS, MODIFICATIONS AND ADDITIONS TO THE FIRE ALARM SYSTEM (FIRE ALARM CONTROL PANEL / FIRE COMMAND STATION), ETC. TO ENSURE PROPER SYSTEM OPERATION.
- CONNECT NEW FIRE ALARM DEVICES SHOWN TO BUILDING EXISTING FIRE ALARM SYSTEM EXISTING FACP / FOC) VIA NEW FIRE ALARM WIRING (NEW FIRE ALARM CABLES) AND CONDUITS. CONNECT NEW FIRE ALARM DEVICES VIA NEAREST EXISTING FIRE ALARM DATA GATHERING PANEL (DGP) IN THE BUILDING OR VIA NEAREST EXISTING SIMILAR FIRE ALARM SYSTEM IN THE BUILDING, PER WIRING DIAGRAMS PREPARED BY THE FIRE ALARM MAINTENANCE CONTRACTOR (FIRE ALARM VENDOR, NEW FIRE ALARM WIRING (FIRE ALARM CABLES TYPE) SHALL MATCH BUILDING EXISTING FIRE ALARM WIRING TYPE FOR SIMILAR FIRE ALARM DEVICES. EXACT LOCATION OF EXISTING DGPS SHALL BE FIELD VERIFIED AND COORDINATED WITH THE BUILDING FIRE ALARM VENDOR.
- THE CONTRACTOR SHALL OBTAIN THE SERVICES OF THE BASE BUILDING FIRE ALARM SYSTEM CONTRACTOR TO PROVIDE BASE BUILDING FIRE ALARM SYSTEM INTERFACES, SAME CONNECTIONS AND MODIFY BASE BUILDING SYSTEM PROGRAMMING AS REQUIRED. PROVIDE ALL POWER FOR ELECTRICALLY OPERATED DEVICES REQUIRED TO BE INTERFACED TO THE FIRE ALARM SYSTEM FROM THE SAME SOURCE AS THE FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL INCLUDE THESE COSTS IN HIS BID.
- PROVIDE THE FIRE ALARM VENDOR WITH A FULL SET OF THE FIRE ALARM DESIGN DRAWINGS, SPECIFICATIONS, AND SEQUENCE OF OPERATION FOR HIS REVIEW AND PRICING PURPOSES. FURNISH, INSTALL, AND WIRE COMPLETE ALL ADDITIONAL FIRE ALARM EQUIPMENT EXISTING CABINETS, STROBE LIGHT CONTROL PANELS, 24V REMOTE BOOSTER POWER SUPPLY PANELS WITH BUILT-IN BATTERIES, RELAY PANELS (TO MONITOR, CONTROL, AND SIGNAL, ETC.) NOT SHOWN ON FIRE ALARM PLANS OR RISER DIAGRAM, BUT DEEMED AS NECESSARY BY THE FIRE ALARM VENDOR (BASED ON HIS DRAWING REVIEW PROCESS AND CURRENT CALCULATIONS) AS NECESSARY IN ORDER TO ACCOMMODATE ALL NEW FIRE ALARM DEVICES AND MEET THE SEQUENCE OF OPERATION REQUIREMENTS. LOCATE SUCH ADDITIONAL FIRE ALARM EQUIPMENT AS DIRECTED BY THE FIRE ALARM VENDOR, PRIOR TO SUBMITTING A BID PRICE. OBTAIN FROM THE FIRE ALARM VENDOR A COMPLETE LIST OF MATERIALS, WITH ALL ASSOCIATED COSTS AND WIRING METHODS RELATED TO SUCH ADDITIONAL FIRE ALARM EQUIPMENT AND INCLUDE ALL ASSOCIATED MATERIALS AND LABOR COSTS INTO THE BID PRICE.
- NEW FIRE ALARM DEVICES ASSOCIATED WIRING (NEW FIRE ALARM CABLES) AND SEQUENCE OF OPERATION SHALL MATCH EXISTING FIRE ALARM DEVICES WIRING METHOD FOR SIMILAR FIRE ALARM DEVICES AND BUILDING STANDARD SEQUENCE OF OPERATION FOR SIMILAR FIRE ALARM DEVICES. FOR ALL NEW FIRE ALARM RELATED DEVICES SHOWN, VERIFY THEIR PROPER SEQUENCE OF OPERATION PER BUILDING STANDARD FIRE ALARM SEQUENCE OF OPERATION AFTER COMPLETION.
- COORDINATE NEW FIRE ALARM DEVICES EXACT WIRING, THE EXTENT OF NEW FIRE ALARM WIRING AND CONDUITS, AND EXACT TERMINATING POINTS WITH THE FIRE ALARM VENDOR DURING THE BIDDING PROCESS. INCLUDE IN THE BID PRICE ALL ASSOCIATED COSTS.
- EXISTING FIRE ALARM SYSTEM EXACT SEQUENCE OF OPERATION SHALL BE VERIFIED WITH THE FIRE ALARM SYSTEM VENDOR. NEW FIRE ALARM DEVICES SEQUENCE OF OPERATION SHALL MATCH EXISTING FIRE ALARM SYSTEM SEQUENCE OF OPERATION FOR SIMILAR DEVICES. COORDINATE ENTIRE WORK WITH FIRE ALARM SYSTEM VENDOR.
- MODIFY, UPGRADE, AND RE-PROGRAM BUILDING EXISTING FIRE ALARM SYSTEM (FIRE ALARM CONTROL PANEL / FIRE COMMAND STATION) AS REQUIRED IN ORDER TO ACCOMMODATE ALL NEW FIRE ALARM DEVICES SHOWN. PROVIDE ALL REQUIRED EXPANSION PANELS, PC BOARDS, POWER SUPPLIES, BATTERIES, FUSE CUTOUTS, RELAYS, WIRING AND CONDUIT, ETC. FOR THE PROPER OPERATION OF THE NEW FIRE ALARM DEVICES PER BUILDING STANDARD SEQUENCE OF OPERATION. THE CONTRACTOR SHALL VERIFY THAT ANY ADDITIONS OR MODIFICATIONS TO BUILDING EXISTING FIRE ALARM SYSTEM ARE COMPLETED AND IN WORKING ORDER. ENGAGE THE SERVICES OF THE BASE BUILDING FIRE ALARM VENDOR TO PREPARE ALL REQUIRED SHOP DRAWINGS, WIRING DIAGRAMS, MAKE FINAL SYSTEM CONNECTIONS, RE-PROGRAM AND TEST ALL MODIFICATIONS AND ADDITIONS TO THE BUILDING EXISTING FIRE ALARM SYSTEM (FACP). COORDINATE RESPONSIBILITIES AND FINAL CONNECTIONS TO THE FIRE ALARM CONTROL PANEL WITH THE FIRE ALARM VENDOR.
- OBTAIN PERMISSION FROM BUILDING MANAGEMENT FOR CONNECTIONS OF NEW FIRE ALARM DEVICES TO BUILDING EXISTING FIRE ALARM SYSTEM. ALL ROUTINGS AND TERMINATIONS OF CABLES (INCLUDING ROUTING AND TERMINATIONS OF CABLES TO FIRE COMMAND STATION AND DATA GATHERING PANELS) SHALL BE AS DIRECTED AND APPROVED BY BUILDING MANAGEMENT AND FIRE ALARM MAINTENANCE CONTRACTOR. NO TERMINATIONS SHALL BE MADE WITHOUT PRIOR APPROVAL OF BUILDING MANAGEMENT AND BUILDING FIRE ALARM MAINTENANCE CONTRACTOR.
- FIRE ALARM EQUIPMENT SHALL BEAR ALL REQUIRED LABELS EVIDENCING APPROVAL FOR USE IN THE STATE OF NEW YORK. PROVIDE ALL REQUIRED EQUIPMENT AND APPURTENANCES (I.E. END-OF-LINE DEVICES AND FUSED CUTOUTS) REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. FIRE ALARM EQUIPMENT SHALL BE BUILDING STANDARD. ALL FIRE ALARM EQUIPMENT AND ASSOCIATED DEVICES SHALL MATCH BUILDING EXISTING FIRE ALARM STANDARDS (SAME MANUFACTURER, SAME CATALOG NUMBER, ETC.) EQUIPMENT SHALL BE COMPATIBLE WITH BASE BUILDING SYSTEM MANUFACTURERS LATEST SYSTEM COMPATIBLE MODELS, UL LISTED, AND IN COMPLIANCE WITH ADA REQUIREMENTS. SUBMIT ALL DOCUMENTATION TO THE OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF ANY WORK.
- CONTRACTOR SHALL VERIFY ALL WIRING WITH BASE BUILDING FIRE ALARM VENDOR AND OBTAIN FROM HIM ALL REQUIRED FIRE ALARM SHOP DRAWINGS AND ASSOCIATED POWER AND CONTROL WIRING DIAGRAMS BEFORE PROCEEDING WITH THE START OF ANY WORK AS DESCRIBED BELOW. NEW FIRE ALARM DEVICES WIRING DIAGRAMS SHALL CLEARLY INDICATE THE NUMBER OF WIRES, WIRE SIZE AND TYPE AND EXACT TERMINATING POINTS. CONTRACTOR SHALL SUBMIT FIVE COPIES OF EXACT POINT-TO-POINT INTERCONNECTING WIRING DIAGRAMS FOR EACH NEW FIRE ALARM DEVICE TYPE SHOWN. FIRE ALARM FLOOR PLANS TO SHOW ALL:
  - FIRE ALARM DEVICE LOCATIONS.
  - CABLE ROUTINGS ASSOCIATED WITH THE FIRE ALARM DEVICES FOR THE SCOPE OF WORK AREAS.
  - CONTROL MODULE LOCATIONS.
  - COMPLETE FIRE ALARM RISER DIAGRAM FOR THE ENTIRE BUILDING OR PARTIAL FIRE ALARM RISER DIAGRAM TO SHOW ALL NEW FIRE ALARM RELATED DEVICES WITH ALL ASSOCIATED WIRING AND CONDUIT INCLUDING TERMINATING POINTS, NUMBER OF WIRES, WIRE SIZE, ETC.
- SUBMIT THE FOLLOWING FIRE ALARM SHOP DRAWINGS FOR REVIEW AND APPROVAL (ONE COMPLETE PACKAGE FOR ONE COMMON REVIEW):
  - FIRE ALARM SEQUENCE OF OPERATION.
  - FIRE ALARM OPERATION AND MAINTENANCE MANUALS.
  - FIRE ALARM TEST REPORTS.
  - BATTERY SIZING CALCULATIONS AND POWER CALCULATIONS.
  - FIRE ALARM DEVICES, PANELS, AND ASSOCIATED EQUIPMENT CATALOG CUTS (HIGHLIGHT CATALOG NUMBER, ACCESSORIES, OPTIONS, ETC.)
  - FIRE ALARM DEVICES AND ASSOCIATED EQUIPMENT TYPICAL WIRING DIAGRAMS.
  - FLOOR PLAN TO SHOW ALL FIRE ALARM EQUIPMENT AND ASSOCIATED FIRE ALARM DEVICES, CONTROL, RELAYS, INTERFACE RELAYS, MONITOR MODULES, ETC., CLEARLY INDICATE ON THE FLOOR PLAN ALL ASSOCIATED FIRE ALARM WIRING AND INTERCONNECTIONS (CABLE ROUTINGS BETWEEN DEVICES AND EQUIPMENT, ALARM LOOPS, AUDIOVISUAL (STROBE) LOOPS, NUMBER OF WIRES, WIRE SIZE AND WIRE/CABLE TYPE FOR EACH CONNECTION, ETC.)
  - COMPLETE FIRE ALARM RISER DIAGRAM DRAWING TO SHOW ALARM POINTS LIST, ALL NEW FIRE ALARM DEVICES AND ASSOCIATED EQUIPMENT, POINTS CONTROL, RELAYS, MONITOR MODULES, INTERFACE RELAYS AND ASSOCIATED EQUIPMENT CONTROLLED, AND ASSOCIATED WIRING (ALARM LOOPS, AUDIOVISUAL (STROBE) CIRCUITS, ETC. CLEARLY INDICATE ALL ASSOCIATED INTERCONNECTING WIRING (NUMBER OF WIRES, WIRE SIZE AND WIRE/CABLE TYPE FOR EACH CONNECTION) AND INTERFACE WITH BUILDING EXISTING FIRE ALARM SYSTEM. NEXT TO EACH FIRE ALARM INITIATING DEVICE AND FIRE ALARM INTERFACE RELAY INDICATE ASSOCIATED ADDRESS (POINT #) AT THE FIRE ALARM CONTROL PANEL (FACP), FIRE ALARM EQUIPMENT AND DEVICES ASSOCIATED QUANTITIES SHOWN ON FIRE ALARM RISER DIAGRAM SHALL MATCH QUANTITIES SHOWN ON FIRE ALARM FLOOR PLANS.

## WIRING, CONDUIT, TESTING

- ALL FIRE ALARM CABLE SHALL BE OF TEFLO, OR THE EQUIVALENT CONFORMING TO THE

REQUIREMENTS FOR TYPE FPLP POWER-LIMITED FIRE PROTECTIVE-SIGNALING CIRCUITS, HAVING A TEMPERATURE RATING OF 150°C OR HIGHER, SOLID CONDUCTOR INSULATION WITH A MINIMUM AVERAGE THICKNESS OF 19MILS, PROTECTED BY A SHEATH AND AN OUTER JACKET OF 25MILS MINIMUM, COLORED RED ITS ENTIRE LENGTH AND BEAR THE ADDITIONAL DESCRIPTION: "UL-CLASSIFIED NYS CERT. FIRE ALARM CABLE." WITH THE TEMPERATURE RATING AND ADDITIONALLY LABELED AS HAVING MET THE REQUIREMENTS OF UL TEST 1424 AND UL TUNNEL TEST #10 AND SHALL BE APPROVED FOR USE IN NEW YORK STATE. SPEAKER WIRING SHALL BE SHIELDED.

- WIRING SHALL BE RUN IN RIGID STEEL GALVANIZED CONDUIT WHERE SUBJECT TO PHYSICAL DAMAGE BY NORMAL BUILDING USE. WHERE EXPOSED IN FINISHED SPACES, IN UNFINISHED AREAS AND HUNG CEILING AND NO DRYWALL PARTITION IS AVAILABLE, IN MECHANICAL ROOMS, IN ELECTRICAL ROOMS, IN ELEVATOR HOISTWAYS, IN ELEVATOR MACHINE ROOMS, OUTDOORS, WHERE PASSING THROUGH A FLOOR OR WALL, IN ALL OTHER LOCATIONS AS INDICATED ON NFPA 70 AND 72, AND WHERE REQUIRED BY CODES AND THE AUTHORITIES HAVING JURISDICTION, ALL WIRING AND CONDUIT SHALL BE LISTED AND APPROVED FOR THE APPLICATION. ALL JUNCTION BOXES AND PULL BOXES SHALL BE PAINTED FIRE DEPARTMENT RED.
- FIRE ALARM SERVICE SHALL NOT BE WORKED ON WHILE ENERGIZED. ANY INTERRUPTION OF LIFE SAFETY SYSTEMS SHALL BE COORDINATED WITH THE OWNER AND BUILDING OPERATING PERSONNEL. WHEN THE FIRE ALARM SYSTEM IS NOT OPERATIONAL, A CERTIFIED FIRE WATCH MUST BE PROVIDED BY THE CONTRACTOR. CONTRACTOR TO NOTIFY THE OWNER PRIOR TO COMMENCING ANY POWER SHUTDOWN OR ANY FIRE ALARM TEST AT LEAST 5 BUSINESS DAYS IN ADVANCE. COORDINATE WITH GENERAL CONTRACTOR.
- PATCH AND SEAL PENETRATIONS FROM ALL CONDUITS PASSING THROUGH WALLS, FIRE RATED CONSTRUCTION AND PLenums WITH RATED MATERIALS REQUIRED. ALL FIRE RATED MATERIALS USED SHALL BE APPROVED BY THE FIRE MARSHAL.
- AFTER ALL FIRE ALARM DEVICES ARE INSTALLED, CONTRACTOR TO TEST THE ENTIRE FIRE ALARM SYSTEM (EXISTING AND NEW DEVICES) IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, FIRE ALARM SYSTEM MANUFACTURER'S REPRESENTATIVE, THE FIRE MANAGER, CONTRACTOR SHALL PROVIDE (5) FIVE BUSINESS DAYS' NOTIFICATION FOR EACH TEST. THE GENERAL CONTRACTOR SHALL BE NOTIFIED PRIOR TO THE COMMENCING OF ANY TEST. THE TEST SHALL DESCRIBE AS TO WHICH CIRCUITS ARE TO BE TESTED, AND SHALL BE FORWARDED TO THE GENERAL CONTRACTOR FOR REVIEW.
- ALL FIRE ALARM CABLES SHALL BE TESTED, LABELED, AND SHAPED AS PER MANUFACTURER REQUIREMENTS.
- COLOR OF CABLE SHALL BE "RED." CABLE SHALL BE LABELED AS FIRE ALARM SYSTEM CABLE.
- THE CABLE SHALL BE VISIBLY MARKED EXTERNALLY THAT IT MEETS ALL THE REQUIREMENTS IN THE NOTES ON THIS DRAWING AND IS LISTED BY UL.
- ALL WIRING TO BE CLASS "A".
- MINIMUM POWER WIRING (120V AND ABOVE) SIZE IS #12 AWG THRU 2, 90°C, 600V INSULATION, AS A MINIMUM. PROVIDE NO. 16 AWG TWISTED, SHIELDED MULTI-CONDUCTOR CABLE FOR SPEAKER CIRCUIT AND NO. 14 AWG MULTI-CONDUCTOR CABLE FOR STROBE LIGHT CIRCUIT. EXTEND SYSTEM ZONE OR ADDRESSABLE CIRCUITS WITH TYPE AND SIZE MATCHING THE EXISTING SYSTEM IN GENERAL. CABLE SIZE AND CONFIGURATION (SHIELDED/NON-SHIELDED) SHALL MATCH EXISTING WIRE SIZE AND CONFIGURATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
- DO NOT SPLICE FIRE ALARM CONDUCTORS. IF EXISTING WIRING IS NOT LONG ENOUGH TO REACH NEW LOCATION, PULL NEW WIRE OR PROVIDE NEW CONDUIT AND WIRING TO SUIT FIELD CONDITIONS. T-TAPS SHALL NOT BE PERMITTED.
- WHEN LOCAL AUTHORITY HAVING JURISDICTION APPROVED FIRE ALARM CABLES ARE RUNNING EXPOSED ABOVE THE HUNG CEILING, THEY SHALL BE PROPERLY SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE (CEILING SLAB) AS REQUIRED. CABLES SHALL NOT DEPEND ON CEILING MESH, PIPES, DUCTS, CONDUITS, OR EQUIPMENT FOR SUPPORT. SECURE CABLES WITH TIES, STRAPS, OR SIMILAR FITTINGS, SO DESIGNED AND INSTALLED AS TO NOT DAMAGE THE CABLE. SECURE CABLES AT 3' INTERVALS NOT EXCEEDING 6" ON CENTERS AND WITHIN 12" OF EVERY ASSOCIATED CABINET, BOX, OR FITTING. UNDER NO CIRCUMSTANCES SHALL CABLES LAY ON CEILING SURFACE (FILES OR PLASTER TYPE SUSPENDED CEILING, ETC.).
- ALL FIRE ALARM CONNECTIONS AND TERMINATIONS IN ALL FIRE ALARM AND WATCH TOUR PANELS, ALL TESTING OF ALL WIRING FOR THE FIRE ALARM AND WATCH TOUR SYSTEMS, AND THE COMMISSIONING OF ALL EQUIPMENT AND SYSTEMS SHALL BE BY THE CONTRACTOR UNDER THE SUPERVISION OF AN EDWARDS FIELD TECHNICIAN. PROVIDE ADEQUATE SLACK FOR TERMINATIONS.
- ALL CONDUITS USED IN THIS PROJECT SHALL BE RIGID GALVANIZED STEEL CONDUITS (GSC) MINIMUM 3/4" ACTUAL CONDUIT SIZE SHALL BE DETERMINED BY CONTRACTOR / FIRE ALARM VENDOR BASED ON TOTAL NUMBER AND SIZE OF ASSOCIATED FIRE ALARM CABLES.
- ALL VERTICAL RISERS SHALL BE IN RIGID GALVANIZED STEEL CONDUIT.
- NO WIRING SHALL ENTER TOP OF THE FIRE ALARM CONTROL PANEL.
- FIRE ALARM SYSTEM CONDUITS (VERTICAL RISERS AND HORIZONTAL CONDUITS, EACH CONDUIT ASSOCIATED PULL BOX OR JUNCTION BOX FRONT COVER SHALL BE PAINTED RED. ON EACH FLOOR, WHERE PULL BOXES OR JUNCTION BOXES ARE NOT REQUIRED, ONE (1) FOOT SECTION OF EACH CONDUIT SHALL BE PAINTED (RED) MID SECTION OF CONDUIT IN EACH AREA, READILY VISIBLE). ALSO PROVIDE ON THAT RED SECTION A STANDARD SELF-ADHESIVE IDENTIFICATION TAPE TO INDICATE CONDUIT ASSOCIATED SYSTEM FIRE ALARM SYSTEM. PROPERTY FIRE SEAL AND PATCH UP WITH CONCRETE AROUND CONDUITS AND PAINT FLOOR SLAB ABOVE TO MATCH EXISTING FLOOR SLAB COLOR. LOCATE STAIR SPEAKERS CONDUIT RISERS AS DIRECTED BY THE BUILDING MANAGEMENT. STAY AWAY FROM STAIR PUBLIC TRAFFIC FLOW.
- ALL CONDUIT AND PIPE PENETRATIONS SHALL BE FIRE STOPPED IN ACCORDANCE WITH UL SPECIFICATIONS, AND BUILDING DEPARTMENT APPROVED MATERIALS SHALL BE USED.
- FIRE STOPPING / FIRE STOPPING / WALL SYSTEMS THAT ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION MUST BE REPLACED / PATCHED WITH MATERIALS APPROVED BY THE FIRE MARSHAL.

## FIELD CONDITIONS

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREAS. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL OR REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.
- ERECT TEMPORARY DUST PARTITIONS DURING DEMOLITION AND FOR THE DURATION OF CONSTRUCTION AS REQUIRED. CONTRACTOR SHALL PROVIDE IN HIS BID DAILY CLEANUP OF ALL WORK.
- CONTRACTOR SHALL PROPERLY PROTECT THE BUILDING AND ANY ADJOINING PROPERTY OR WORK AND ANY DAMAGE TO SAME CAUSED BY HIS WORK OR WORKMEN MUST BE MADE GOOD WITHOUT DELAY. PATCHING AND REPLACING OF DAMAGED WORK SHALL BE DONE AT THE COST AND EXPENSE OF CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- ANY EXISTING FIRE SAFETY EQUIPMENT AND ASSOCIATED CONDUIT AND WIRING SYSTEM SHALL NOT BE HARMED DURING DEMOLITION AND/OR CONSTRUCTION AND SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
- PROTECT EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING DURING CONSTRUCTION. ANY DAMAGE IS THE RESPONSIBILITY OF THE CONTRACTOR INCLUDING FIRE WATCH AS REQUIRED UNTIL DAMAGE IS REPAIRED TO THE OWNER'S SATISFACTION.
- CONTRACTOR SHALL PROVIDE ADEQUATE HEAT DETECTION COVERAGE DURING CONSTRUCTION. FURNISH AND INSTALL HEAT DETECTORS ON THE UNDERSIDE OF THE DECK AT ALL SMOKE DETECTOR LOCATIONS SHOWN ON PLANS. ONCE NEW CEILING IS INSTALLED, CONTRACTOR SHALL RELOCATE HEAT DETECTORS FROM UNDERSIDE OF DECK TO UNDERSIDE OF CEILING. AFTER DEMOLITION OF DECK IS COMPLETE IN EACH PHASE, THE CONTRACTOR SHALL DISCONNECT AND REMOVE HEAT DETECTORS AND FURNISH AND INSTALL SMOKE DETECTORS IN SAME LOCATION.
- EXISTING BUILDING SYSTEMS (NOT SHOWN UNLESS A PART OF ONE INSTALLATION) SHALL REMAIN INTACT. DO NOT REMOVE EXISTING BASE BUILDING FIRE ALARM DEVICES UNLESS SPECIFICALLY DIRECTED. RE-INSTALL ALL EXISTING FIRE ALARM EQUIPMENT, WHICH IS TO REMAIN IN REMOVED FOR INSTALLATION OF NEW CEILING OR DUE TO DEMOLITION. CONTRACTOR SHALL TIE ALL NEW CABLES TO ALL EXISTING FIRE ALARM EQUIPMENT THAT IS RELOCATED. COORDINATE EXISTING WORK WITH EXISTING BUILDING FIRE ALARM SYSTEMS. THE CONTRACTOR SHALL VERIFY THE PROPER OPERATION FOR EACH RELATED EQUIPMENT.
- ALL REQUIRED EXITS, WAYS OF APPROACH TO, AND WAY OF TRAVEL FROM THE EXIT TO THE EXTERIOR SHALL BE MAINTAINED CONTINUOUSLY UNINTERRUPTED EGRESS IN THE CASE OF FIRE OR OTHER EMERGENCY.
- DURING THE ENTIRE PERIOD OF DEMOLITION AND CONSTRUCTION ALL EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES AND ALARMS SHALL BE CONTINUOUSLY MAINTAINED.
- ALL EQUIPMENT SECURED TO INTERIOR PARTITIONS SHALL BE SCREWED DIRECTLY TO METAL STUDS AND SOLID BLOCKING INSTALLED IN PARTITION.
- ALL ITEMS RECESSED INTO RATED PARTITIONS SHALL HAVE THOSE OPENINGS PROTECTED WITH BACK-UP MATERIALS SO AS TO RETAIN THE INTEGRITY OF THE PARTITION RATING THROUGHOUT. PROTECTION OF THESE OPENINGS SHALL BE IN STRICT CONFORMITY WITH THE CODES OF ALL AUTHORITIES HAVING JURISDICTION.
- FIRE ALARM DEVICES IN FINISHED SPACES SHALL BE FULLY MOUNTED UNLESS OTHERWISE NOTED OR REQUIRED BY CODE. DEVICES SHALL CONFORM TO ALL APPLICABLE HANDICAP ACCESSIBILITY CODES AND ADA REQUIREMENTS. DEVICES SHALL BE RED WITH WHITE LETTERS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL MAINTAIN COMPLETE AND UP-TO-DATE DRAWINGS AND SPECIFICATIONS INCLUDING ALL ADDENDA ON SITE AT ALL TIMES.
- THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY IF HE CANNOT COMPLY WITH ALL WORK CALLED FOR ON THESE DRAWINGS.

## INITIATING DEVICES & NOTIFICATION APPLIANCES

- ALL EXISTING AND NEW HVAC UNITS SHOWN ON FIRE ALARM PLANS AND ASSOCIATED DUCT MOUNTED SMOKE DETECTORS, FIRE/SMOKE DAMPERS, ETC. ARE SHOWN FOR SHUTDOWN PURPOSES VIA THE FIRE ALARM SYSTEM (FIRE ALARM CONTROL PANEL / FIRE COMMAND CENTER). PROVIDE ALL REQUIRED SHUTDOWN RELAYS, INTERFACING RELAYS, CONTROL MODULES, ETC. AND ASSOCIATED WIRING CONDUIT, AND PROGRAMMING IN ORDER TO OPERATE PER BUILDING STANDARD FIRE ALARM SEQUENCE OF OPERATION. COORDINATE WORK WITH HVAC CONTRACTOR AND FIRE ALARM VENDOR.
- PROVIDE FAN SHUTDOWN CAPABILITY FOR FANS WITH RATINGS LONGER THAN 2,000 CFM. SHUT DOWN SHALL BE ACCOMPLISHED BY ONE OR MORE OUTPUT CONTROL POINTS FROM THE FIRE ALARM SYSTEM TO RELAYS FOR SHUTDOWN, FIRE CONTROL, AND MONITORING FOR ALL RELAYS. PROVIDE CONTROL, RELAYS, MONITORING, AND WIRING FOR ALL FIRE/SMOKE DAMPERS, DAMPER MONITORING SHALL BE FROM END SWITCH ON THE DAMPER VIA RELAY. REFER TO HVAC PLANS AND SPECIFICATIONS FOR REQUIRED FIRE MODE OPERATION OF ASSOCIATED DAMPERS AND FANS.
- REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF FIRE/SMOKE DAMPERS AND SMOKE DAMPERS. AT EACH FIRE/SMOKE DAMPER AND SMOKE DAMPER LOCATION PROVIDE A DUCT-MOUNTED SMOKE DETECTOR, ADDRESSABLE OUTPUT MODULE (CONTROL MODULE), AND NON-ADDRESSABLE

OUTPUT RELAY.

- DUCT MOUNTED SMOKE DETECTORS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR ALONG WITH FURNISHING OF THE SAMPLING TUBES. COORDINATE SAMPLING TUBES SIZE WITH ASSOCIATED DUCT SIZE. DUCTWORK MODIFICATIONS AND INSTALLATION OF SAMPLING TUBES SHALL BE BY THE MECHANICAL CONTRACTOR. FOR FANS RATED LARGER THAN 2,000 CFM PROVIDE DUCT DETECTOR IN SUPPLY AND RETURN DUCTWORK. ALL DUCT DETECTORS SHALL BE EQUIPPED WITH REMOTE INDICATOR LED PILOT LAMPS AND KEY TEST SWITCHES. IF DUCT DETECTOR IS NOT VISIBLE (DUCT DETECTOR LOCATED ABOVE HUNG CEILING), PROVIDE A REMOTE LED PILOT LAMP AND KEY TEST SWITCH ON CEILING TILE BELOW OR IN A VISIBLE AREA APPROVED BY THE ENGINEER AND THE OWNER. REFER TO HVAC DRAWINGS FOR EXACT QUANTITIES, LOCATIONS AND SIZES (CFM) OF ALL FANS. COORDINATE ENTIRE WORK WITH HVAC CONTRACTOR. ALL DUCTS 3" OR GREATER IN WIDTH AT THE POINT OF DUCT DETECTOR INSTALLATION SHALL PENETRATE WITH THE SAMPLING INLET TUBE THE OPPOSITE WALL OF THE DUCT.
- AREA SMOKE DETECTORS, ELEVATOR LOBBY SMOKE DETECTORS, AND DUCT-MOUNTED SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE WITH LED INDICATING LIGHT ON BASE. AREA SMOKE DETECTORS, ELEVATOR LOBBY SMOKE DETECTORS, AND DUCT-MOUNTED SMOKE DETECTORS SHALL BE EARLY DETECTION AND WARNING TYPE. DUCT MOUNTED DETECTORS SHALL BE FURNISHED COMPLETE WITH HOUSINGS, SAMPLING TUBES AND FAN SHUTDOWN RELAY. REMOTE INDICATING LAMPS SHALL BE FURNISHED FOR ALL SMOKE DETECTORS MOUNTED ABOVE CEILING AND INSIDE MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS OR CLOSETS.
- FURNISH, INSTALL, AND WIRE COMPLETE ALL REQUIRED DEVICE MONITOR MODULES ASSOCIATED WITH ALL NON-ADDRESSABLE TYPE FIRE ALARM DEVICES AND ALL CONTROL DEVICE MODULES AND SHUTDOWN RELAYS ASSOCIATED WITH ALL HVAC UNITS AND FIRE/SMOKE DAMPERS SHOWN ON FLOOR PLANS.
- COORDINATE EXACT LOCATION OF ALL FIRE ALARM SYSTEM DEVICES (SPEAKERS, STROBE LIGHTS, ETC.) WITH ARCHITECT AND OTHER TRADES PRIOR TO INSTALLATION. REFER TO FLOOR PLANS FOR NUMBER OF DEVICES.
- ALL NEW FIRE ALARM DEVICES SHALL BE ADDRESSABLE. ALL FIRE ALARM CIRCUITS SHALL BE SUPERVISED.
- FIRE ALARM SPEAKER, STROBE, AND COMBINATION SPEAKER/STROBE SHALL BE RED HOUSING OR WHITE HOUSING, SIMILAR TO EXISTING BASE BUILDING SYSTEM TYPE. SPEAKER FIELD-SELECTABLE POWER TAPS: 18 WATTS - 2 WATTS. IN GENERAL, STROBE LIGHT SHALL BE CAPABLE OF DELIVERING 100,000 PEAK CANDLE POWER, 24VDC, 50 mA AND SYNCHRONIZED TYPE.
  - THE LAMP SHALL BE A XENON STROBE TYPE.
  - THE LENS SHALL BE UNFILTERED OR CLEAR FILTERED WITH LIGHT.
  - THE MAXIMUM PULSE DURATION SHALL BE TWO-TENTHS OF ONE SECOND (0.2 SEC.) WITH A MAXIMUM DUTY CYCLE OF 40 PERCENT. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10 PERCENT OF MAXIMUM SIGNAL.
  - THE INTENSITY SHALL BE FIELD-SELECTABLE (1500/300/150 CANDLE).
  - THE FLASH RATE SHALL BE A MINIMUM OF 1/2 HZ AND A MAXIMUM OF 2 HZ.
  - THE STROBE SHALL BE CEILING MOUNTED OR WALL MOUNTED AS SHOWN ON THE DRAWINGS.
- IF REQUIRED BY THE TOTAL NUMBER OF AUDIOVISUAL (STROBE) DEVICES SHOWN ON PLANS, PROVIDE ADDITIONAL STROBE LIGHT PANELS, STROBE LIGHT POWER SUPPLIES, AND SYNCHRONIZING HARDWARE AS REQUIRED TO ACCOMMODATE ALL NEW AUDIOVISUAL (STROBE) DEVICES.
- ALL STROBE DEVICES SHALL BE SYNCHRONIZED. CONTRACTOR TO COORDINATE WITH THE BASE BUILDING FIRE ALARM VENDOR AND PROVIDE ALL LABOR, EQUIPMENT AND WIRING REQUIRED TO SYNCHRONIZE ALL STROBE DEVICES ON THE FLOOR.
- WALL MOUNTED STROBES SHALL HAVE NO OTHER APPURTENANCES WITHIN 5 FEET OF THE STROBE. THEY SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 INCHES AND NOT GREATER THAN 96 INCHES ABOVE THE FINISHED FLOOR. IF THE RANGE OF 80" TO 96" CANNOT BE ACHIEVED DUE TO LOW CEILING HEIGHTS, THE WALL-MOUNTED STROBES SHALL BE INSTALLED BELOW THE CEILING AND THE ROOM SIZE COVERED BY THE STROBE SHALL BE REDUCED TO MATCH THE DIFFERENCE BETWEEN THE MINIMUM MOUNTING HEIGHT OF 80 INCHES AND THE ACTUAL FLOOR MOUNTING HEIGHT.

- FIRE ALARM SPEAKERS AND STROBES SHALL BE INSTALLED AND WIRED ON ALTERNATING A-B CIRCUITING IN ALL AREAS, SO THAT LOSS OF PORTION OF THE WIRING ON A FLOOR SHALL NOT DISABLE THE ENTIRE ALARM REPRODUCTIVE CAPABILITY ON THE FLOOR. THE EXACT NUMBER OF ALTERNATING A-B EQUIPMENT AND SYSTEMS SHALL BE DETERMINED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE TOTAL NUMBER OF SPEAKERS AND STROBES SHOWN ON THE FLOOR AND CURRENT CALCULATIONS. PROVIDE ALL REQUIRED POWER SUPPLIES AND AMPLIFIERS.
- FIRE ALARM PULL STATION SHALL MATCH BASE BUILDING STANDARD.
  - MOUNT 48" ABOVE FINISHED FLOOR.
- FIRE ALARM TWO-WAY COMMUNICATIONS TELEPHONES SHALL MATCH BASE BUILDING STANDARD.
  - MOUNT 48" ABOVE FINISHED FLOOR.
  - RED LED CALL-CONNECT INDICATOR WITHIN ENCLOSURE.

- EACH ELECTRIC DOOR LOCK OR ELECTRIC STRIKE ASSOCIATED WITH CARD KEY READERS IN THE PATH OF EGRESS SHALL BE CONNECTED TO BUILDING NEW FIRE ALARM SYSTEM (FIRE ALARM CONTROL PANEL / FIRE COMMAND CENTER) FOR CARD RELEASE UNDER A FIRE ALARM CONDITION ORIGINATED FROM THE FLOOR. REFER TO ARCHITECTURAL DRAWINGS FOR CARD READERS LOCATIONS. PROVIDE ALL REQUIRED ADDRESSABLE MODULES, RELAYS, POWER WIRING AND CONTROL WIRING AND CONDUIT. COORDINATE WORK AND EXACT WIRING WITH THE FIRE ALARM VENDOR AND SECURITY SYSTEMS CONTRACTOR.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND QUANTITIES OF MAGNETIC DOOR HOLDERS. AT EACH MAGNETIC DOOR HOLDER LOCATION, PROVIDE TWO SMOKE DETECTORS (ONE ON EACH SIDE OF THE DOOR), AT EACH MAGNETIC DOOR HOLDER LOCATION, PROVIDE AN ADDRESSABLE OUTPUT MODULE AND A NON-ADDRESSABLE OUTPUT RELAY FOR FIRE ALARM SYSTEM CONNECTIONS.
- PROVIDE ADDRESSABLE OUTPUT MODULES AND NON-ADDRESSABLE OUTPUT RELAYS AT EACH ELEVATOR MACHINE ROOM AS REQUIRED FOR ELEVATOR RECALL.
- PROVIDE WIRING CONNECTIONS BETWEEN EACH DATA GATHERING PANEL AND THE FIRE ALARM CONTROL PANEL.
- PROVIDE WIRING CONNECTIONS TO THE CENTRAL MONITORING STATION, BMS SYSTEM, AND SECURITY SYSTEM FROM THE FIRE ALARM CONTROL PANEL.
- ALL EXISTING DEVICES SHALL BE REINSTALLED IN THEIR ORIGINAL LOCATIONS OR AS NOTED ON PLANS AFTER NEW CEILING IS IN PLACE AND WALL FINISHES ARE COMPLETE. PROVIDE TEMPORARY SUPPORT FOR EXISTING DEVICES AND KEEP OPERATIONAL DURING CONSTRUCTION.

## AS-BUILTS

- THE FIRE ALARM RISER DIAGRAM SHOWN IS AN INDICATION OF THE WORK REQUIRED AND SHALL BE USED FOR INFORMATION ONLY. THE SUCCESSFUL CONTRACTOR SHALL OBTAIN A POINT-TO-POINT WIRING DIAGRAM FROM THE BUILDING FIRE ALARM MAINTENANCE CONTRACTOR AND PERFORM ALL WORK IN ACCORDANCE WITH THAT DIAGRAM. CONTRACTOR SHALL SUBMIT FIVE COPIES OF WIRING DIAGRAMS AND CATALOG CUTS FOR ALL FIRE ALARM WORK FOR REVIEW PRIOR TO THE START OF ANY WORK.
- THE OPERATION OF THE FIRE ALARM INSTALLATION DOES NOT CONSTITUTE AN ACCEPTANCE OF THE WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS AND HAS FURNISHED TO THE LOCAL AUTHORITIES HAVING JURISDICTION REQUIREMENTS AND SEND ELECTRONIC CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND UNDERWRITERS.
- CONTRACTOR SHALL PERFORM ALL CITY OF WHITE PLAINS BUILDING DEPARTMENT FILINGS AND OBTAIN ALL APPROVALS. CONTRACTOR SHALL OBTAIN ALL REQUIRED SIGNED AND SEALED CITY OF WHITE PLAINS BUILDING DEPARTMENT FORMS AND ALL REQUIRED SETS OF DRAWINGS FROM ENGINEER OF RECORD AND BUILDING DEPARTMENT EXPEDITER. CONTRACTOR SHALL INCLUDE ALL FEES, COSTS, ETC. FOR FILING ALL REQUIRED FORMS AND DRAWINGS FOR LOCAL AUTHORITIES HAVING JURISDICTION: CITY OF WHITE PLAINS; APPROVALS, FINAL CONNECTIONS, SYSTEM RE-PROGRAMMING, PRE-TESTING AND FIRE DEPARTMENT TESTING AND SIGNOFF.
- FIRE ALARM RISER SHALL PREPARE AND PROVIDE AN AS-BUILT FIRE ALARM SEQUENCE OF OPERATIONS MATRIX AND RISER DIAGRAM DRAWING TO INCLUDE ALL NEW FIRE ALARM DEVICES INSTALLED (INTERFACE RELAYS AND THEIR FUNCTION INCLUDED), ALL ASSOCIATED WIRING AND INTERCONNECTIONS WITH BUILDING EXISTING FIRE ALARM CONTROL PANEL. INDICATE NO. OF WIRES AND WIRE SIZE, FIRE ALARM SEQUENCE OF OPERATION, FIRE ALARM SYMBOLS, ALARM POINT # NEXT TO EACH FIRE ALARM INITIATING DEVICE, ALARM POINTS LIST, ETC. AS APPLICABLE. AS-BUILT FIRE ALARM RISER DIAGRAM DRAWING SHALL BE SIMILAR TO ASSOCIATED FIRE ALARM RISER DIAGRAM SHOP DRAWING AND SHALL BE LABELED AS "AS-BUILT" SUBMIT 11" x 17" SHEET OF PAPER SIGNED BY THE ELECTRICIAN OR FIRE ALARM VENDOR STATING THAT THE FIRE ALARM SYSTEM HAS BEEN TESTED AND IS OPERATING IN ACCORDANCE WITH THE MATRIX. SUBMIT CORRESPONDING ACO FILE TO LORING FOR REVIEW AND APPROVAL. FIRE ALARM VENDOR SHALL SUBMIT THE AS-BUILT SEQUENCE OF OPERATIONS MATRIX AND FIRE ALARM RISER DIAGRAM DRAWING CORRESPONDING ACO FILE TO LORING IN ORDER FOR LORING TO PREPARE THE SIGNED AND SEALED AS-BUILT FIRE ALARM RISER AS THE ENGINEER OF RECORD FOR SUBMISSION TO THE FIRE DEPARTMENT (FDNY).
- THE CONTRACTOR SHALL PREPARE THE AS-BUILT FIRE ALARM DRAWINGS (FIRE ALARM RISER AND FIRE ALARM FLOOR PLANS LABELED AS "AS-BUILT") SIMILAR TO APPROVED FIRE ALARM SHOP DRAWINGS TO COMPLY WITH THE LOCAL AUTHORITIES HAVING JURISDICTION REQUIREMENTS AND SEND ELECTRONIC COPY TO LORING (ACAD FILES) FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL SIGN AND SEAL THE LORING DRAWING FOR THE FUNCTIONALITY STATEMENT PART OF THE AS-BUILT REQUIREMENTS. LORING WILL SIGN AND SEAL FOR THE ENGINEER OF RECORD.

## GENERAL NOTES

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## KEY NOTES

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
12491.000

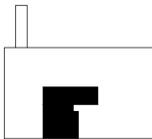
Description  
FIRE ALARM NOTES

Scale  
AS NOTED

**FA-002.00**

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## GENERAL NOTES

- REFER TO DRAWING FA-001.00 FOR SYMBOLS AND ABBREVIATIONS.
- REFER TO DRAWING FA-002.00 FOR GENERAL FIRE ALARM NOTES.

## KEY NOTES

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

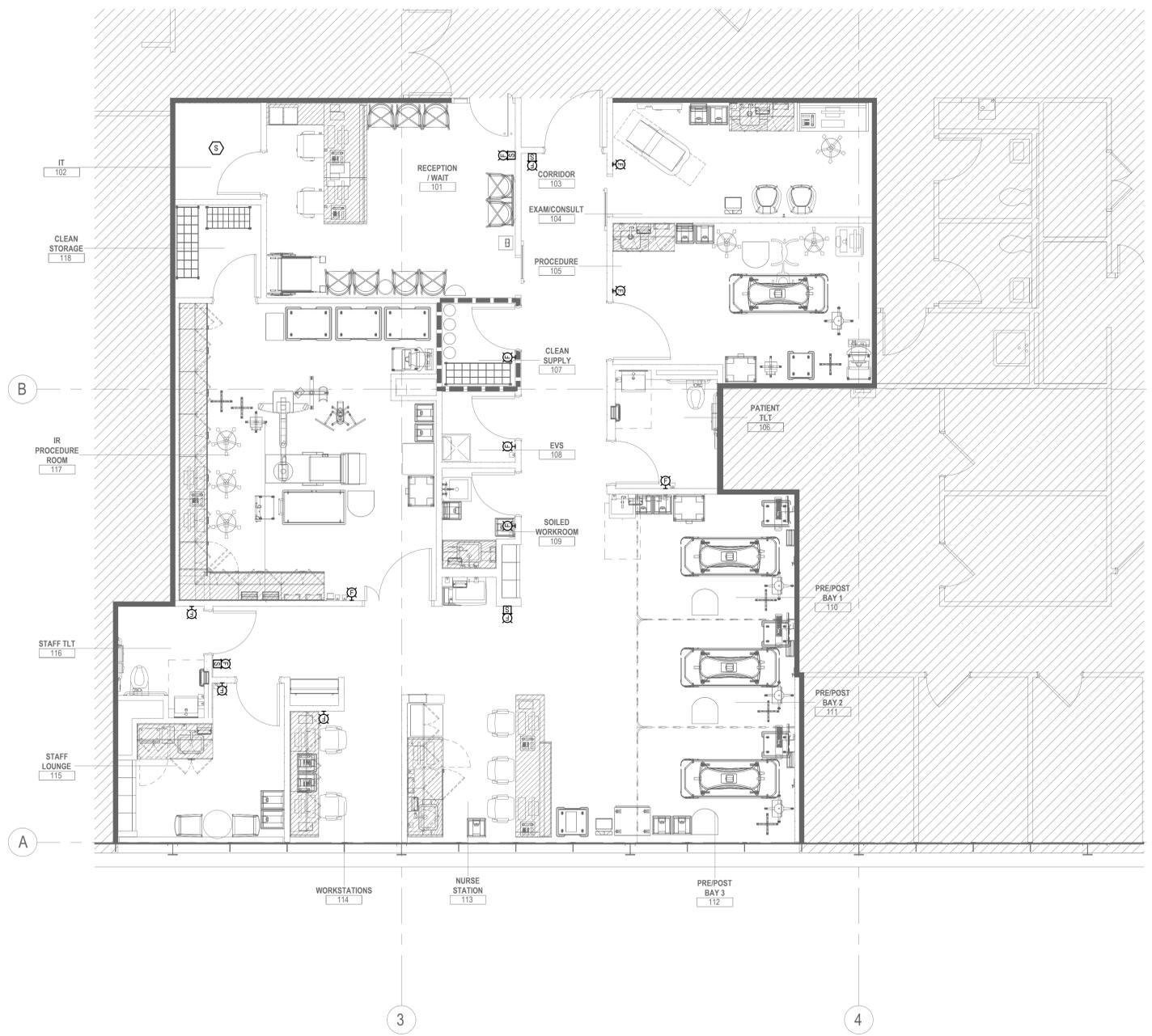
Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number  
**12491.000**

Description  
**FIRE ALARM LEVEL 01 PLAN**

Scale  
**AS NOTED**

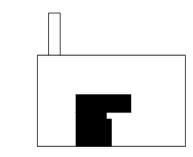
# FA-201.00



**1 LEVEL 01 FIRE ALARM PLAN**  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

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