PHASE ZERO DESIGN
architects | interior designers

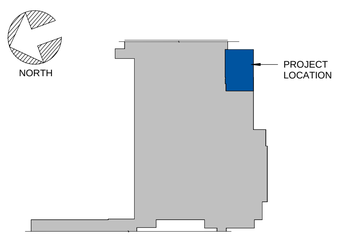
NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

ISSUED FOR: BID, 08/14/2024

LOCUS PLAN



KEY PLAN

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF AN INTERIOR BUILD-OUT OF A CLIENT PROVIDED EXISTING SPACE AT 34 MAPLE STREET, NORWALK, CT 06856. THIS BUILD-OUT CONSISTS OF A BRAND NEW PHARMACY WORKROOM.

THE PROJECT CONSISTS OF THE FOLLOWING WORK:

- LIMITED LOCAL DEMOLITION ONLY AS NEEDED FOR NEW CONSTRUCTION.
- NEW INTERIOR PARTITIONS AND DOORS
- NEW FURNITURE/ MILLWORK
- NEW FINISHES AS SCHEDULED
- NEW CEILING AS SCHEDULED
- NEW LIGHTING AS SCHEDULED
- NEW SPECIALITY EQUIPMENT & CONNECTIONS
- NEW ELECTRICAL DISTRIBUTION

PROJECT DESCRIPTION

OWNER / CLIENT

NUVANCE HEALTH
100 RESERVE ROAD
DANBURY, CT 06810
T: 845.224.6389
CONTACT: DAVID KEITH

ARCHITECT

COLLIERS ENGINEERING & DESIGN
8 WILCOX STREET
SIMSBURY, CT 06070
T: 860.264.1624
PROJECT MANAGER: NIK FUCCI
E-MAIL: nfucci@phasezerodesign.com

MEP ENGINEER

LONG CONSULTING
67 FEDERAL ROAD
BROOKFIELD, CT 06804
T: 203.663.3703
CONTACT: TIM LONG
E-MAIL: tim.long@longengineers.com

PROJECT TEAM

SHEET INDEX

SHEET NO.	SHEET NAME	REVISION NO.	REVISION DATE	REVISION DESCRIPTION
GENERAL				
G000	COVER SHEET			
G001	ADA STANDARDS, SYMBOLS & ABBREVIATIONS			
G002	GENERAL NOTES			
G003	GENERAL NOTES			
G004	SPECIFICATIONS			
G005	SPECIFICATIONS			
G006	SPECIFICATIONS			
G007	SPECIFICATIONS			
G101	CODE SUMMARY & EGRESS PLAN			
DEMOLITION				
AD101	DEMOLITION PLAN & RCP			
ARCHITECTURE				
A101	PROPOSED CONSTRUCTION PLAN & RCP, AND WALL ASSEMBLIES			
A102	DETAILS			
A103	DOOR SCHEDULE & DOOR TYPE ELEVATIONS			
A104	FINISH & FF&E PLAN			
A105	FF&E PLAN, FF&E SCHEDULE, & INTERIOR ELEVATIONS			
A106	MILLWORK DETAILS			
MECHANICAL				
M001	MECHANICAL NOTES, LEGEND, AND INDEX			
M100	MECHANICAL DEMOLITION PLAN			
M200	MECHANICAL FLOOR PLAN			
M300	MECHANICAL SCHEDULES AND DETAILS			
M400	MECHANICAL SPECIFICATIONS (1 OF 2)			
M401	MECHANICAL SPECIFICATIONS (2 OF 2)			
ELECTRICAL				
E001	ELECTRICAL NOTES & LEGEND			
E100	ELECTRICAL DEMOLITION PLANS			
E101	ELECTRICAL PLANS			
E102	ADD/ALT ELECTRICAL POWER PLAN			
E200	ELECTRICAL RISER DIAGRAM, PANEL SCHEDULES, & DETAILS			
E300	ELECTRICAL SPECIFICATIONS (1 OF 2)			
E301	ELECTRICAL SPECIFICATIONS (2 OF 2)			
FIRE PROTECTION				
FP001	FIRE PROTECTION NOTES AND LEGEND			
FP100	FIRE PROTECTION PLANS			
FP200	FIRE PROTECTION SPECIFICATIONS			

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: CP
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.

DRAWING NAME:

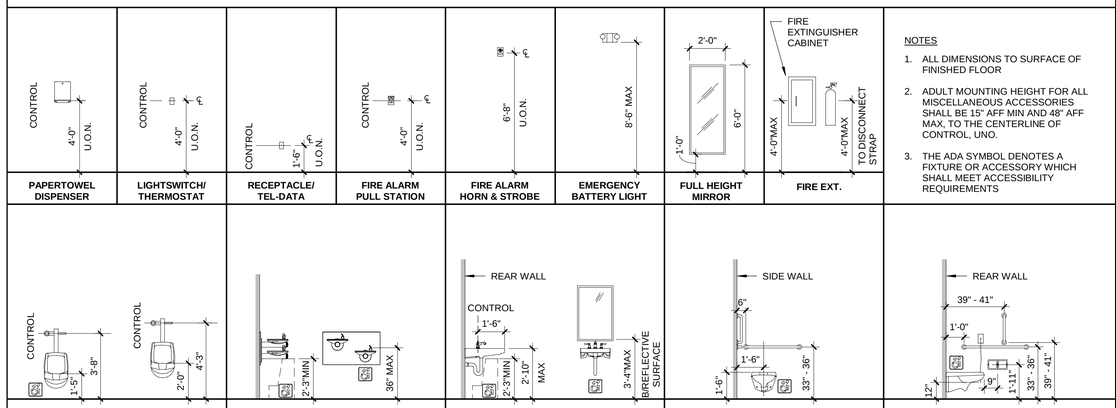
COVER SHEET

DRAWING NO.

G000

Plot Date: 7/15/2024 9:38:23 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

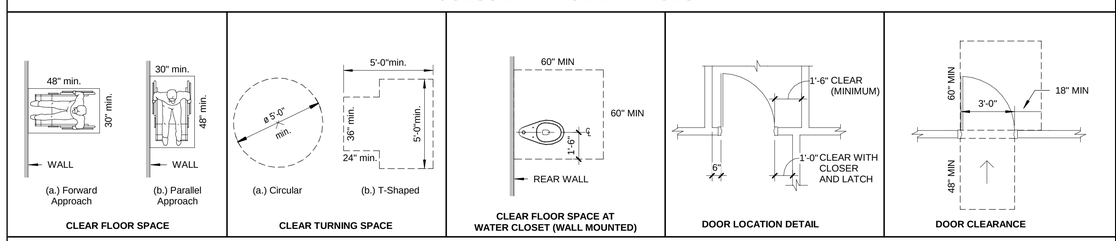
DEVICE MOUNTING HEIGHTS



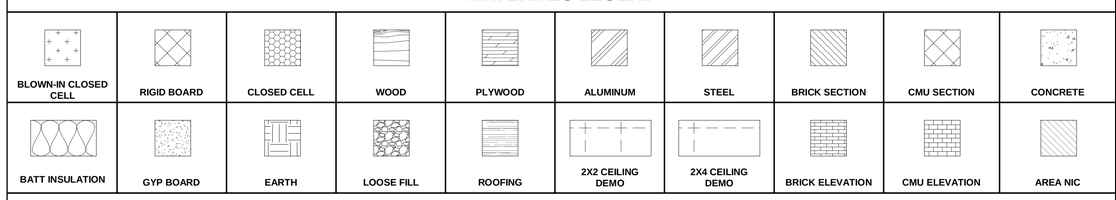
NOTES

1. ALL DIMENSIONS TO SURFACE OF FINISHED FLOOR
2. ADULT MOUNTING HEIGHT FOR ALL MISCELLANEOUS ACCESSORIES SHALL BE 15" AFF MIN AND 48" AFF MAX, TO THE CENTERLINE OF CONTROL, UNO.
3. THE ADA SYMBOL DENOTES A FIXTURE OR ACCESSORY WHICH SHALL MEET ACCESSIBILITY REQUIREMENTS

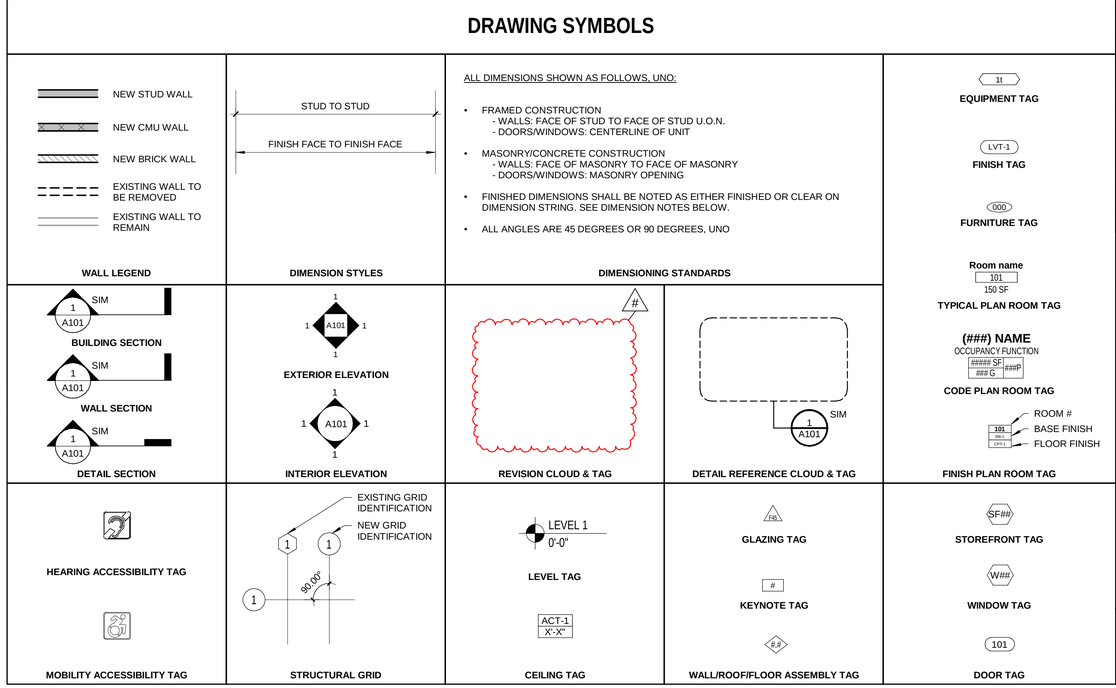
ACCESSIBILITY CLEARANCES



MATERIALS LEGEND



DRAWING SYMBOLS



ABBREVIATIONS

A	
&	AND
@	AT
AB	ANCHOR BOLT
ABRREV	ABBREVIATION
AC	AIR CONDITIONING
ACC	ACCESSIBLE
ACOUST	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGGR	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
ATTN	ATTENTION
AUTO	AUTOMATIC
AV	AUDIOVISUAL
B	
B	BRICK
BD	BOARD
BET	BETWEEN
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BR	BEDROOM
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
C	
C	CHANNEL
CAB	CABINET
CAT	CATEGORY
CB	CATCH BASIN
CB	CEMENT BOARD
CBU	CEMENTITIOUS BACKER UNIT
CC	CENTER TO CENTER
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CH	CHILLER
CI	CAST IRON
CIP	CAST-IN-PLACE
CIR	CIRCLE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CLEANOUT
COL	COLUMN
COMB.	COMBINATION
CONC	CONCRETE
COND	CONDITION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CORRUG	CORRUGATED
CPT	CARPET
CRS	COURSE
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTERSUNK
CU	CUBIC
CURT	CURTAIN WALL
CW	COLD WATER

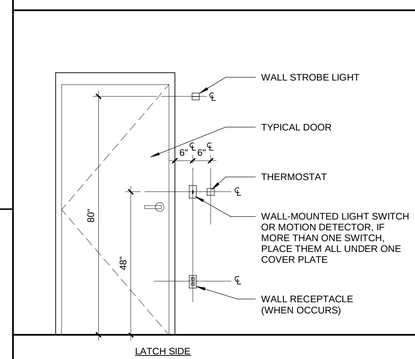
D	
D	DEEP, DEPTH
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DEP	DEPRESS(ED)(ION)
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA (ø)	DIAMETER
DIAG	DIAGINAL
DIFF	DIFFUSER
DIM	DIMENSION
DIMS	DIMENSIONS
DISP	DISPENSER
DIV	DIVISION
DL	DEADLOAD
DMPF	DAMP PROOFING
DN	DOWN
DO	DOOR OPENING
DP	PARTIAL HEIGHT DRYWALL
DR	DOOR
DRN	DRAIN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
E	
E	EAST
EA	EACH
EB	EXPANSION BOLT
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENG	ENGINEER
ENT	ENTRANCE
EP	ELECTRICAL PANEL
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS
EQ	EQUAL
EQUIP	EQUIPMENT
EST	ESTIMATE
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EXC	EXCAVATE
EXG	EXISTING
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	
FA	FIRE ALARM
FAST	FASTEN(ER)
FB	FACE BRICK
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF&E	FURNITURE, FIXTURES AND EQUIPMENT
FFB	FLUSH FLOOR BOX
FFE	FINISH FLOOR ELEVATION
FGL	FIBERGLASS
FH	FLAT HEAD
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLEX	FLEXIBLE
FLG	FLASHING
FLR	FLOOR
FLUOR	FLUORESCENT
FND	FOUNDATION
FO	FACE OF
FOC	FACE OF CONCRETE
FP	FIRE PROTECTION
FPG	FIREPROOFING
FR	FIRE RESISTANT

FRC	FIBER REINFORCED CONCRETE
FRT	FIRE RETARDANT TREATED
FT	FEET/FOOT
FTG	FOOTING
FURN	FURNITURE
FURR	FURRED, FURRING
G	
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACT(OR)
GEN	GENERAL
GFI	GROUND FAULT INTERRUPTOR
GFRC	GLASS FIBER REINFORCED CONCRETE
GKT	GASKET
GL	GLASS
GLAZ	GLAZING
GR	GRADE
GRAN	GRANULAR
GRD	GROUND
GSM	GALVANIZED SHEET METAL
GV	GAS VALVE
GVL	GRAVEL
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	
H	HIGH/HEIGHT
HB	HOSE BIB
HC	HANDICAPPED
HCR	HOLLOW CORE
HDWD	HARDWOOD
HDWR	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HNDRL	HANDRAIL
HO	HOLD OPEN
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HRC	HOSE REEL CABINET
HTG	HEATING
HTR	HEATER
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HW	HOT WATER
I	
ID	INSIDE DIAMETER
IN	INCH/INCHES
INCAND	INCANDESCENT
INCL	INCLUDED/INCLUDING
INFO	INFORMATION
INSUL	INSULAT(ED)(ION)
INT	INTERIOR
INTERM	INTERMEDIATE
INV	INVERT
J	
JB	JUNCTION BOX
JC	JANITOR'S CLOSET
JST	JOIST
JT	JOINT
K	
KO	KNOCK OUT
L	
LAM	LAMINATE
LAV	LAVATORY
LB	POUNDS
LIN	LINEAR
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LT	LIGHT
LVR	LOUVER
LVT	LUXURY VINYL TILE
LW	LIGHT WEIGHT
M	
MAS	MASONRY

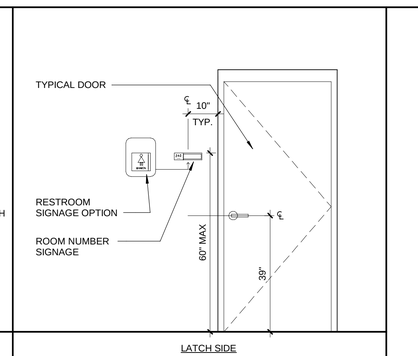
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MED	MEDIUM
MEMBR	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MAN HOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLD	MOLDING
MO	MASONRY OPENING
MOD	MODULAR
MOV	MOVABLE
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MULL	MULLION
N	
N	NORTH
NA	NOT APPLICABLE
NAT	NATURAL
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NON COMB	NON COMBUSTIBLE
NRC	NOISE REDUCTION COEFFICIENT
NSO	NON SIMULTANOUS OCCUPANCY
NTS	NOT TO SCALE
O	
OA	OUTSIDE AIR
OAL	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OD	OVERFLOW DRAIN
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OZ	OUNCE
P	
%	PERCENT
PAV	PAVING
PBD	PARTICLE BOARD
PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PDF	POWER DRIVEN FASTENER
PERF	PERFORATED
PERIM	PERIMETER
PERP	PERPENDICULAR
PI.	PLATE
PK	PARKING
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PLS	PLASTIC
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINT OR PAINTED
POL	POLISHED
PR	PAIR
PREFAB	PREFABRICATED
PROJ	PROJECT
PROT	PROTECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PT	PRESSURE TREATED
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT

Q	
QTY	QUANTITY
R	
R	RISER
RA	RETURN AIR
RAD	RADIUS
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
RECPT	RECEPTACLE
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCED
REL	RELOCATE
REM	REMOVABLE
REOOM	RECOMMENDED
REQ	REQUIRE/REQUIRED
RES	RESILIENT
REV	REVISION/REVISED
RFG	ROOFING
RFL	REFLECT(OR)(ED)(IVE)
RM	ROOM
RO	ROUGH OPENING
RTD	RATED
RTG	RATING
RTU	ROOF TOP MECHANICAL UNIT
S	
S	SOUTH
SA	SUPPLY AIR
SAF	SELF ADHERED FLASHING
SAN	SANITARY
SC	SOLID CORE
SCHED	SCHEDULE
SD	STORM DRAIN
SEAL	SEALANT
SECT	SECTION
SF	SQUARE FEET/FOOT
SF	STOREFRONT
SH	SPRINKLER HEAD
SHR	SHOWER
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SM	SHEET METAL
SM	SURFACE MOUNTED
SP	STANDPIPE
SPEC	SPECIFICATION
SPEC	SPECIFIED OR SPECIFICATION
SPK	SPRINKLER OR SPEAKER
SPKR	SPEAKER
SQ	SQUARE
SQFT	SQUARE FEET
SQYD	SQUARE YARD
SSK	SERVICE SINK
SST	STAINLESS STEEL
STA	STATION
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRG	STRINGER
STRUCT	STRUCTURAL
STRUCT	STRUCTURE OR STRUCTURAL
SUBCAT	SUBCATEGORY
SUP	SUPPORT
SUR	SURFACE
SUSP	SUSPENDED
SW	SWITCH
SYM	SYMMETRICAL
SYS	SYSTEM
T	
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE/TELECOM
TELE	TELEPHONE
TEMD	TEMPERED
TEMP	TEMPERATURE
TEMP	TEMPORARY
TEXT	TEXTURED

THK	THICKNESS
THR	THRESHOLD
THRU	THROUGH
TKBD	TACK BOARD
TLT	TOILET
TMPD	TEMPERED
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOL	TOLERENCE
TOP	TOP OF PAVEMENT
TOS	TOP OF SLAB, STEEL
TOW	TOP OF WALL
TRANS	TRANSPARENT
TRT	TREATED
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
U	
UC	UNDERCUT
UL	UNDERWRITER'S LABORATORY
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
URNL	URINAL
UTIL	UTILITY
V	
VAC	VENTILATION AND AIR CONDITIONING
VAR	VARIES
VCT	VINYL COMPOSITE TILE
VENT	VENTILATION
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VP	VISION PANEL
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOM
VWC	VINYL WALL COVERING
VYL	VINYL
W	
W	WIDE/WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WIN	WINDOW
WK	WORKING
WM	WIRE MESH
WP	WATERPROOF/WATERPROOFING
WPM	WATERPROOF MEMBRANE
WRG	WATER RESISTANT GYPSUM
WS	WEATHER-STRIPPING
WSCT	WAINSCOT
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH



TYPICAL MOUNTING HEIGHT DIAGRAM



TYP. SIGNAGE MOUNTING HEIGHT DIAGRAM

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

ADA STANDARDS, SYMBOLS & ABBREVIATIONS

DRAWING NO.

G001

Plot Date: 7/15/2024 9:38:24 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2G3X2E.rvt

ARCHITECTURAL GENERAL NOTES

1. ALL WORK SHALL CONFORM TO FEDERAL, STATE AND MUNICIPAL CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS. THESE SHALL SUPERSEDE DRAWINGS, NOTES AND DIMENSIONS IN ALL CASES. THE ARCHITECT SHALL BE NOTIFIED OF SUCH CHANGES BEFORE WORK IS STARTED. CONTRACTOR SHALL OBTAIN PERMITS BEFORE STARTING WORK, AND OBTAIN APPROVALS OF ALL REGULATORY AGENCIES UPON COMPLETION, AND AS REQUIRED.
2. THE CONTRACT DOCUMENTS CONSIST OF THE DRAWINGS, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, OWNER-CONTRACTOR AGREEMENTS AND ALL ADDENDA ISSUED PRIOR TO AND ALL PLAN CHANGES ISSUED AFTER EXECUTION OF THE CONTRACT.
3. NO DEVIATION FROM CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE DESIGN PROFESSIONAL. IF EMERGENCY DICTATES VERBAL APPROVAL, CHANGE MUST BE DOCUMENTED IN WRITING WITHIN THE NEXT BUSINESS DAY.
4. UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS AS BEING NOT IN CONTRACT (N.I.C.) OR EXISTING; ALL ITEMS, MATERIALS AND INSTALLATION OF SAME ARE A PART OF THE CONTRACT DEFINED BY THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES, COMPONENTS AND ASSEMBLIES REQUIRED FOR THE WORK SHOWN.
5. U.O.N. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PAYING FOR AND OBTAINING ALL PERMITS, INSPECTIONS, REQUIRED TESTS AND UTILITY CONNECTIONS, TERMINATIONS, AND CAPPING UNLESS OTHERWISE NOTED.
6. IN THE EVENT OF DISCREPANCIES IN THE DRAWINGS, THE COSTLIER OR MORE RESTRICTIVE CONDITIONS SHALL BE DEEMED THE CONTRACT REQUIREMENT, UNLESS OTHERWISE STATED IN WRITING, FROM THE OWNER OR OWNER'S REPRESENTATIVE. ANY DISCREPANCIES SHOULD IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
7. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO KEEP THE PREMISES CLEAN OF DEBRIS, RUBBISH, EXCESS MATERIALS, ETC. RESULTING FROM THE WORK OF THIS CONTRACT. OFFICE AREAS SHALL BE BROOM CLEANED EACH WORK DAY. AT THE END OF THE JOB THE SPACE SHALL BE BROOM CLEANED ONE LAST TIME WITH ALL LABELS, STICKERS, PAINT AND WRAPPING MATERIALS REMOVED FROM FIXTURES, WINDOWS AND FLOORS AS TO REQUIRE ONLY NORMAL WASHING AND CLEANING PRIOR TO THE TURNOVER OF THE SPACE TO THE TENANT.
8. ALL CHANGE ORDERS MUST BE SUBMITTED IN WRITING TO THE ARCHITECT AND CLIENT FOR REVIEW. ALL CHANGE ORDERS MUST INCLUDE A BRIEF NARRATIVE OUTLINING THE SCOPE AND REASON FOR THE WORK AS WELL AS THE COST ASSOCIATED WITH THE WORK AND ANY IMPACT THE WORK MAY HAVE ON THE OVERALL PROJECT SCHEDULE. NO CHANGE ORDER SHALL BE VALID UNTIL SIGNED BY ALL PARTIES.
9. ANY DEVIATION FROM THE CONSTRUCTION DOCUMENTS WITHOUT A PROPERLY EXECUTED CHANGE ORDER SHALL BE CONSIDERED INVALID AND WILL BE THE SOLE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR / SUPPLIER.
10. AS REQUIRED BY CODE, EACH CONTRACTOR AND EACH SUBCONTRACTOR SHALL OBTAIN REQUIRED INSPECTION OF THAT PORTION OF WORK WHICH THEY ARE RESPONSIBLE FOR, OR CONTRACTED TO DO.
11. CONTRACTOR TO COORDINATE WORK WITH THE CITY/OWNER/LANDLORD, INCLUDING SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, USE OF BUILDING SERVICES AND FACILITIES, AND USE OF ELEVATORS. COORDINATE WORK WITH OTHER CONTRACTS. MINIMIZE DISTURBANCE OF BUILDING FUNCTIONS AND OCCUPANTS, INCLUDING TRASH REMOVAL ACCESS.
12. CLIENT WILL PROVIDE WORK NOTED "BY OTHERS" OR "NIC" UNDER SEPARATE CONTRACT. CONTRACTOR TO INCLUDE SCHEDULE REQUIREMENTS IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE TO ASSURE ORDERLY SEQUENCE OF INSTALLATION.
13. CONTRACTOR TO PROTECT AND MAINTAIN EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES, AND ALARMS IN CONFORMANCE WITH CODES AND ORDINANCES DURING ENTIRETY OF CONSTRUCTION.
14. IF NOT EXISTING, CONTRACTOR SHALL PROVIDE TEMPORARY EXIT SIGNS TO ASSURE A MEANS OF EGRESS DURING CONSTRUCTION.
15. CONTRACTOR TO PROTECT AREA OF WORK AND ADJACENT AREAS FROM DAMAGE DURING CONSTRUCTION.
16. CONTRACTOR/OWNER/LANDLORD TO MAINTAIN WORK AREAS SECURE AND LOCKABLE FROM PUBLIC DURING CONSTRUCTION. COORDINATE WITH COUNTY TO PROVIDE SECURITY, IF REQUIRED.
17. WHERE EXISTING ACCESS PANELS CONFLICT WITH CONSTRUCTION. CONTRACTOR TO RELOCATE PANELS TO ALIGN WITH AND FIT WITHIN NEW CONSTRUCTION.
18. CONTRACTOR TO UNDERCUT DOORS TO CLEAR TOP OF FLOOR FINISHES BY 1/4 INCH, U.O.N.
19. DOORS ARE LOCATED 6" FROM INTERIOR OF DOOR FRAME ON HINGED SIDE TO FINISHED WALL U.O.N.
20. GC TO VERIFY WITH BUILDING OWNER REQUIREMENTS FOR CONSTRUCTION BARRIER. PROVIDE AND MAINTAIN BARRICADES, LIGHTING, AND GUARDRAILS AS REQUIRED BY APPLICABLE CODES AND REGULATIONS TO PROTECT OCCUPANTS OF BUILDING AND WORKERS.
21. WHERE A TYPICAL CONDITION IS DETAILED, IT SHALL BE UNDERSTOOD THAT ALL "LIKE" OR "SIMILAR" CONDITIONS ARE THE SAME UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE.
22. CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BLOCKING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, TOILET ROOM ACCESSORIES, FIXTURES AND PARTITIONS AND ALL WALL MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL OR MISCELLANEOUS EQUIPMENT AND FURNISHINGS, OR AS REQUIRED ELSEWHERE.
23. ALL WORK PERFORMED SHALL COMPLY HEREIN WITH THE CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS, INCLUDING THESE GENERAL NOTES. THE CONTRACTOR SHALL COORDINATE THE INTENT OF THE GENERAL NOTES WITH ALL TRADES.
24. SEPARATE BOOK SPECIFICATIONS OR SHEETED SPECIFICATIONS ARE PART OF THE CONTRACT DOCUMENTS (IF APPLICABLE).
25. THE ORGANIZATION OF THE DRAWINGS AND SPECIFICATIONS SHALL NOT CONTROL THE CONTRACTOR IN DIVIDING THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY TRADE.
26. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS. IF CONFLICT IS FOUND BETWEEN DRAWINGS, GENERAL NOTES AND SPECIFICATIONS, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
27. MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
28. ALL MATERIAL TO BE NEW UNLESS OTHERWISE NOTED "EXISTING".
29. THE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF STRUCTURAL, MECHANICAL AND ELECTRICAL WORK. SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE CONSULTING ENGINEERS' DRAWINGS THAT WOULD CAUSE AN AWKWARD INSTALLATION, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST. ALL WIRING, PLUMBING, HEATING, AND SPRINKLERS TO BE RUN CONCEALED IN WALLS AND FLOOR ASSEMBLIES U.O.N. PROVIDE ALL NECESSARY CHASES AND "BOX OUTS" FOR MEP COMPONENTS AS REQUIRED TO COMPLETE THE WORK. REVIEW LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
30. VERIFY KEYING REQUIREMENTS OF ALL LOCKS, BOTH NEW AND EXISTING, WITH CLIENT.
31. UNLESS LOCAL JURISDICTION REQUIRES DIFFERENTLY, FIRE ALARM AND FIRE PROTECTION DRAWINGS AND ASSOCIATED NARRATIVES TO BE CONTRACTED AND COORDINATED BY GENERAL CONTRACTOR AND SUBMITTED UNDER SEPARATE PERMIT.

DEMOLITION NOTES

1. THE TERM "PATCH AND REPAIR" SHALL BE DEFINED AS: THE PROCESS OF REPAIRING FLOOR, WALL, OR CEILING SURFACES THAT HAVE BEEN DAMAGED OR ARE ADJACENT TO DEMOLISHED CONSTRUCTION. THE REPAIR SHALL INCLUDE, BUT NOT BE LIMITED TO: FILLING VOIDS SOLID WITH CONCRETE, PREPARING SURFACES FOR NEW FINISH MATERIAL PER MANUFACTURER'S RECOMMENDATIONS, MATCH EXISTING FINISHES AND MATERIALS WHERE NO NEW FINISHES ARE CALLED FOR, CLOSING WALL, FLOOR OR ROOF PENETRATIONS AS DIRECTED BY ARCHITECT.
2. THE TERM "SALVAGE" SHALL BE DEFINED AS: THE PROCESS OF THE CONTRACTOR CAREFULLY REMOVING THE MENTIONED ITEM, SUCH THAT IT IS IN A USABLE CONDITION, AND STORING IT (IN LOCATION DETERMINED BY OWNER) UNTIL NEEDED FOR THE CONSTRUCTION PHASE. IF THE CLIENT DOES NOT NEED SAID ITEM CONTRACTOR SHALL DISPOSE OF PROPERLY AT NO ADDITIONAL COST.
3. DEMOLITION CONTRACTOR TO COORDINATE ALL PHASES OF DEMOLITION FOR PROJECT AND NOTIFY ARCHITECT OF ANY DISCREPANCIES OR CONFLICTING CONDITIONS WHICH WOULD INTERFERE WITH THE SATISFACTORY COMPLETION OF THE WORK, PRIOR TO THE START OF CONSTRUCTION.
4. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION DURING DEMOLITION PHASE.
5. ERECT AND MAINTAIN DUSTPROOF PARTITIONS AS REQUIRED TO PREVENT SPREAD OF DUST, FUMES, AND SMOKE, ETC. TO OTHER PARTS OF THE BUILDING. ON COMPLETION, REMOVE PARTITIONS AND REPAIR DAMAGED SURFACES TO MATCH ADJACENT SURFACES.
6. WHEN REMOVING EXISTING COMPONENTS, CARE MUST BE TAKEN TO ENSURE THAT ADJACENT SURFACES ARE NOT DAMAGED. PATCH AND REPAIR ANY DAMAGE THAT MAY OCCUR. IF DEMOLITION IS PERFORMED IN EXCESS OF THAT REQUIRED, CONTRACTOR WILL RESTORE EFFECTED AREAS AT NO COST TO THE OWNER.
7. REMOVE FROM SITE DAILY AND LEGALLY DISPOSE OF REFUSE, DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. LEAVE ALL AREAS BROOM CLEAN DAILY. RETURN ALL REUSABLE ITEMS TO BE REMOVED SUCH AS DOORS, WINDOWS, WOOD TRIM, HARDWARE, ETC. TO OWNER.
8. REMOVE DESIGNATED PARTITIONS, COMPONENTS, BUILDING EQUIPMENT, AND FIXTURES AS REQUIRED FOR NEW WORK.
9. REMOVE ABANDONED ELECTRICAL, TELEPHONE AND DATA CABLING AND DEVICES, U.O.N. ALL ELECTRICAL SHALL BE TEMPORARILY CAPPED AND MADE SAFE UNTIL PROPOSED WORK.
10. NO EXISTING BUILDING OWNER WORK SHALL BE REMOVED UNLESS SUCH REMOVAL IS APPROVED IN WRITING BY THE BUILDING OWNER.
11. REF. ARCHITECTURAL AND MEP DRAWINGS. COORDINATE SCOPE OF DEMOLITION WITH ARCH AND MEP.
12. DO NOT ABANDON ANY UTILITIES OR MATERIALS WITHIN AREA OF WORK. REMOVE BACK TO THE SOURCE.
13. PROVIDE TEMPORARY SHORING AS REQUIRED TO ASSURE SAFETY AND STABILITY OF EXISTING STRUCTURE AT ALL TIMES. CONDUCT A SURVEY OF THE EXISTING CONDITIONS TO DETERMINE THE NEED FOR SHORING.
14. REFER TO SITE & MEP DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE.

HVAC

15. COORDINATE REMOVAL AND / OR RELOCATION OF MECHANICAL UNITS IN PLENUM SPACE WITH MEP DRAWINGS. RELOCATION OF UNITS REQUIRED BY NEW CONSTRUCTION SHALL BE COORDINATED WITH DEMOLITION WORK.
16. REMOVE ABANDONED HVAC EQUIPMENT, INCLUDING DUCT WORK. DEMO EXISTING MECHANICAL DUCTS BACK TO MAIN TRUNK, VERIFY WITH MEP PRIOR TO THE START OF ANY MECHANICAL DEMO WORK.
17. REMOVE ALL ABANDONED SMOKE FIRE DAMPERS AS REQUIRED BY NEW CONSTRUCTION, INCLUDING ALL ELECTRICAL AND CONNECTIONS.
18. CONTRACTOR SHALL MAINTAIN THE INTEGRITY AND CONTINUITY OF THE EXIST. BASE BUILDING SYSTEMS AND SHALL EXERCISE CARE BY NOT DEMOLISHING, OR DISRUPTING ANY BASE BUILDING SYSTEMS. ANY DAMAGED AND/OR DISCONNECTED SERVICE SHALL BE RESTORED AT CONTRACTOR'S COST.

ELECTRICAL

19. REMOVE ALL LIGHT FIXTURES, EXIT SIGNS, LIGHT SWITCHES, POWER AND TELE/DATA OUTLETS. REMOVE ALL BRANCH CIRCUIT FEEDERS, INCLUDING CONDUITS, BOXES AND WIRING BACK TO ELECTRICAL PANELBOARDS. CONTRACTOR SHALL SWITCH ALL SPARE BREAKERS TO OFF POSITION FOR FUTURE REFERENCE. ALL ABANDONED CONDUIT AND CABLING SHALL BE COMPLETELY REMOVED BACK TO ORIGIN.
20. MAINTAIN CIRCUIT CONTINUITY TO AREAS NOT AFFECTED BY WORK. CONTRACTOR SHALL REWORK BRANCH FEEDER HOME-RUNS AS REQUIRED TO KEEP CONTINUITY TO EXISTING LIGHT FIXTURES, EXIT SIGNS AND DEVICES IN AREAS NOT BE DEMOLISHED.

PLUMBING

21. IN DEMOLITION AREAS, UNUSED PIPING SHALL NOT BE ABANDONED "IN PLACE". PIPING SHALL BE REMOVED BACK TO SOURCE OR POINT OF DISCHARGE, AND THE RESULTING OPENINGS PLUGGED U.N.O.
22. EXISTING PLUMBING FIXTURES AND EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE OWNER.
23. DISCONNECT AND REMOVE EXISTING UNUSED PIPING AND FIXTURES WITHOUT INTERRUPTING EXISTING REQUIRED FUNCTIONING SYSTEMS.
24. UNUSED PIPING AND RELATED ITEMS CONCEALED IN WALLS, FLOORS AND CEILING WITHIN THE STRUCTURE SHALL BE REMOVED WHERE EXPOSED TO VIEW. REMOVAL OF EXISTING PIPING SHALL BE DONE IN A SATISFACTORY MANNER TO THE ENGINEER AND BUILDING ENGINEER.
25. WASTE AND SANITARY DRAINAGE PIPING NOT BEING REUSED SHALL BE REMOVED AND PLUGGED AT ACTIVE MAIN OR RISER. NO DEAD ENDS SHALL REMAIN LONGER THAN TWO (2) FEET.

FIRE ALARM

26. ALL EXISTING FIRE ALARM EQUIPMENT TO REMAIN. WALL MOUNTED EQUIPMENT (I.E. HORN/STROBE) SHALL BE REMOVED PRIOR TO DEMOLITION OF WALL FINISH MATERIALS AN SALVAGED FOR REINSTALLATION AFTER THE NEW WALL FINISH MATERIAL HAS BEEN INSTALLED.

TURNOVER NOTES

1. THE CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS AND SHALL ALSO OBTAIN AND FURNISH OWNER'S REPRESENTATIVE WITH THE CERTIFICATE OF OCCUPANCY AND/OR CERTIFICATE OF COMPLETION. G.C. IS ALSO TO PROVIDE A TYPE-WRITTEN LIST OF NAMES, ADDRESSES AND PHONE NUMBERS OF ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE ENTIRE SPACE CLEANED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE TIME OF TURNOVER.
3. PRIOR TO OPENING OF SPACE, CONTRACTOR IS TO ARRANGE FOR A NEBB CERTIFIED INDEPENDENT BALANCING CONTRACTOR TO BALANCE THE HVAC SYSTEM AND PROVIDE A COPY OF THE BALANCING REPORT TO THE OWNER AND OWNER'S REPRESENTATIVE IN A FORMAT ACCEPTABLE TO THE OWNER.
4. IF REQUIRED BY BUILDING OWNER, THE CONTRACTOR SHALL SECURE ANY NECESSARY APPROVALS FOR PROJECT SPRINKLER SYSTEM REQUIRED BY BUILDING OWNER'S INSURANCE CARRIER.
5. CONTRACTOR TO TURN OVER ALL KEYS TO THE OWNER'S REPRESENTATIVES AND MARK EACH KEY FOR IDENTIFICATION.
6. THE CONTRACTOR SHALL SET ALL THE TIME CLOCKS, THERMOSTATS, ETC. PER THE REQUIREMENTS OF THE OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR SHALL EXPLAIN THE OPERATION OF ALL MECHANICAL SYSTEMS TO THE OWNER'S REPRESENTATIVE AND PROVIDE COPIES OF OPERATION, MAINTENANCE AND WARRANTY MANUALS.
8. GENERAL CONTRACTOR SHALL MAINTAIN AND SUBMIT ONE COMPLETE SET OF REPRODUCIBLE "AS-BUILT" DRAWINGS INDICATING ALL DISCREPANCIES, CHANGES, ETC. AND ACTUAL LOCATIONS OF CONCEALED WORK (I.E., UNDERGROUND CONDUIT) TO THE OWNER'S REPRESENTATIVE. THE GENERAL CONTRACTOR SHALL ALSO SUBMIT A PHOTOCOPY OF THE ACTUAL PANEL DIAGRAM AND A COPY OF ANY APPLICABLE SHOP DRAWINGS INCLUDING APPROVED SPRINKLER SHOP DRAWINGS.
9. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL WARRANTY THE WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY TENANT OF FINISHED WORK.
10. THE GENERAL CONTRACTOR SHALL INSTALL NEW FILTERS IN THE HVAC UNITS AFTER FINAL CLEANING.

ACCESSIBILITY NOTES

1. IN ALL BUILDINGS, FLOORS OF A GIVEN STORY SHALL BE A COMMON LEVEL THROUGHOUT, OR SHALL BE CONNECTED BY PEDESTRIAN RAMPS, PASSENGER ELEVATORS OR SPECIAL ACCESS LIFTS.
2. FLOOR SURFACES SHALL BE SLIP-RESISTANT.
3. ALL CORRIDORS SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE NOT LESS THAN 44" IN WIDTH.
4. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2" IN HEIGHT. LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL. BEVEL OTHERS W/ A SLOPE NO GREATER THAN 1:2.
5. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. MOUNT DOOR OPENING HARDWARE BETWEEN 30" AND 44" ABOVE FLOOR FINISH.
6. CENTER HAND ACTIVATED DOOR OPENING HARDWARE BETWEEN 30" AND 44" ABOVE THE FLOOR.
7. MAXIMUM PULL OR PUSH EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, MEASURED AT RIGHT ANGLES TO HINGED DOORS AND AT CENTER PLANE OF SLIDING OR FOLDING DOORS. CORRESPONDING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. MAXIMUM EFFORT TO OPERATE REQUIRED FIRE DOORS MAY BE INCREASED NOT TO EXCEED 15 POUNDS.
8. THE BOTTOM 10" OF ALL DOORS (EXCEPT SLIDING AND AUTOMATIC) OR KICKPLATES SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. PROVIDE A 10" HIGH SMOOTH PANEL ON THE PUSH SIDE OF NARROW FRAME DOORS.
9. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE NOT LESS THAN 3' IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32".
10. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
11. IDENTIFY ACCESSIBLE ENTRANCES WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS.
12. THE FLOOR OR LANDING ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL AND CLEAR. THE LEVEL AND CLEAR AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60" AND THE LENGTH OPPOSITE THE DIRECTION OF DOOR SWING OF 44" AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.
13. PROVIDE A CLEAR FLOOR SPACE 30" X 48" IN FRONT OF LAVATORY TO PERMIT A FORWARD APPROACH.
14. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF CLOSING ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
15. INSULATE OR OTHERWISE COVER HOT WATER AND DRAIN PIPES UNDER LAVATORIES.
16. IF APPLICABLE, LOW DRINKING FOUNTAIN BUBBLER SHALL BE ACTIVATED BY MANUALLY OPERATED SYSTEM NOT REQUIRING A FORCE GREATER THAN 5LBS THAT IS LOCATED WITHIN 6 INCHES OF THE FRONT EDGE OF THE FOUNTAIN OR AN ELECTRONICALLY CONTROLLED DEVICE.

QUALITY ASSURANCE/ QUALITY CONTROL NOTES

1. THE G.C. SHALL REVIEW ALL DOCUMENTS AND EXISTING CONDITIONS IF POSSIBLE TO CONFIRM THAT THE WORK CAN BE BUILT AS SHOWN. IN THE EVENT OF ANY CONFLICTS OR OMISSIONS WITHIN THE DRAWINGS, G.C. TO CONTACT TENANT'S PROJECT MANAGER & ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.
2. CONTRACT DOCUMENTS ARE NOT AS-BUILT DRAWINGS. UPON POSSESSION OF THE CLIENT'S SPACE AND PRIOR TO SUBMITTING BIDS IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FULLY EXAMINE AND VERIFY THE EXISTING CONDITIONS OF THE PROJECT SITE. THE CONTRACTOR IS TO FIELD VERIFY ALL DIMENSIONS USING THE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES EXIST, G.C. TO MARK UP THE DRAWINGS TO REFLECT THE ACTUAL CONDITION AND FORWARD THEM TO THE ARCHITECT WITHIN (3) DAYS FOR REVIEW & CLARIFICATION AS REQUIRED.
3. DO NOT SCALE THE DRAWINGS. DIMENSIONS SHALL TAKE PRECEDENCE OVER ANY SCALES SHOWN ON THE DRAWINGS.
4. DRAWINGS ARE INTENDED TO CONVEY DESIGN INTENT ONLY. CONTRACTOR AND/OR FABRICATOR SHALL HAVE SOLE RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK TO PRODUCE THE INTENT OF THE DRAWINGS. CONTRACTOR/FABRICATOR IS SOLELY RESPONSIBLE FOR STRUCTURAL INTEGRITY AND PERFORMANCE OF ALL ELEMENTS.
5. ANY DEVIATION FROM THE INTENT OF THE DRAWINGS MUST BE APPROVED BY ARCHITECT & OWNER.
6. GENERAL CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SCHEDULE AND IS SOLELY RESPONSIBLE FOR CONSTRUCTION SEQUENCING, METHODS AND TECHNIQUES.
7. UPON STARTING CONSTRUCTION, CONTRACTOR TO CONDUCT SITE MEETINGS AND WRITE MEETING MINUTES AT FREQUENCY AS DIRECTED BY OWNER, UNLESS OTHERWISE DIRECTED BY OWNER OR OWNER'S REPRESENTATIVE. CONTRACTOR AND ALL RELEVANT SUB-CONTRACTORS AND VENDORS MUST BE PRESENT, UNLESS WAIVED BY OWNER.
8. THE GENERAL CONTRACTOR WILL ISSUE BI-WEEKLY CONSTRUCTION STATUS REPORTS INCLUDING A SUMMARY OF THAT WEEK'S WORK, A ONE WEEK LOOK AHEAD FORECAST OF WORK TO BE DONE (INCLUDING INSPECTIONS IF APPLICABLE), STATUS OF OVERALL CONSTRUCTION SCHEDULE, PROGRESS PICTURES, STATUS OF SUBMITTALS, STATUS OF RFI'S, AND STATUS OF CHANGE ORDER REQUEST.
9. EXCEPT AS MORE STRINGENT REQUIREMENTS ARE INDICATED ON THESE DRAWINGS AND IN THESE NOTES, COMPLY WITH GENERALLY ACCEPTED INDUSTRY STANDARDS AND INSTALL PRODUCTS IN STRICT COMPLIANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
10. WHEN EVALUATING APPEARANCE OR CONFORMANCE WITH DESIGN INTENT, THE WORDS "ACCEPTABLE", "VISIBLE", "INVISIBLE", "MATCHING", "ALIGNED", AND SIMILAR TERMS OF JUDGMENT SHALL MEAN "ACCEPTABLE, ETC., IN THE OPINION OF THE ARCHITECT OR OWNER".
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND FAMILIARIZING THEMSELVES WITH ALL DOCUMENTATION RELATED TO OR PERTAINING TO THIS PROJECT INCLUDING BUT NOT LIMITED TO: CONSTRUCTION DRAWINGS (STARTING WITH THE FIRST ISSUE AS WELL AS ALL SUBSEQUENT REVISIONS), SPECIFICATIONS, BULLETINS, ADDENDA AND/OR SKETCHES, SHOP DRAWINGS AND CUT SHEETS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ALL OF THE BEFORE MENTIONED DOCUMENTATION TO ALL SUB-CONTRACTOR TRADES INVOLVED WITH THIS PROJECT AND TO MAKE SURE THEY ARE FAMILIAR WITH ALL CONDITIONS AND SCOPE OF WORK AS THEY RELATE TO THIS JOB. THE BEFORE MENTIONED PROJECT DOCUMENTATION, IN ITS ENTIRETY, REPRESENTS THE FULL SCOPE OF WORK ASSOCIATED WITH THIS PROJECT. AS SUCH, SCOPE OF WORK OR INFORMATION RELATIVE TO A PARTICULAR SUB-CONTRACTOR THAT IS NOT SHOWN ON SPECIFIC TRADE DOCUMENTS (BUT SHOWN ELSEWHERE WITHIN THE PROJECT DOCUMENTATION) DOES NOT RELIEVE THAT SUB-CONTRACTOR OF RESPONSIBILITY FOR INCLUSION OF THAT SCOPE OF WORK OR INFORMATION WITHIN THE SUB CONTRACTOR'S BID.

HOSPITAL REPRESENTATIVE NOTES

1. GENERAL CONTRACTOR MUST CHECK-IN WITH HOSPITAL'S ON-SITE REPRESENTATIVE PRIOR TO WORK START. PRE-CONSTRUCTION MEETING MUST BE SCHEDULED 72 HOURS IN ADVANCE OF CONSTRUCTION START.
2. CONSTRUCTION WORK WILL NOT INVOLVE INTERRUPTION OF HEATING, WATER OR ELECTRIC SERVICES TO OTHER AREAS OF THE HOSPITAL WITHOUT A COORDINATED SHUT DOWN. ANY WORK INVOLVING ALTERATIONS TO THE EXISTING BUILDING UTILITIES & WHICH REQUIRE UTILITY SHUT DOWN, SHALL BE COORDINATED W/ THE HOSPITAL AND SHALL REQUIRE A MIN. OF (5) FIVE DAYS NOTICE, OR AS DIRECTED BY THE HOSPITAL.
3. GENERAL CONTRACTOR WILL REPAINT AND/OR REPAIR HOSPITAL'S PROPERTY, (NEUTRAL PIERS, BULKHEADS, REAR CORRIDOR, ETC.) DAMAGED DURING IMPROVEMENT.
4. SUPPORT WIRES FOR LAY-IN CEILING GRID, LIGHTS, HVAC EQUIPMENT, ETC, MUST NOT BE CONNECTED TO ANY ELECTRICAL, PLUMBING, FIRE PROTECTION PIPING, AND MECHANICAL EQUIPMENT.
5. ALL MATERIALS USED IN THE CONSTRUCTION MUST BE ASBESTOS FREE.
6. IT IS CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF HOSPITAL'S DEMISING WALLS, FLOOR SLABS, ROOF, AND BUILDING STRUCTURE.
7. CONTRACTOR IS TO MAINTAIN ANY EXPANSION JOINTS WITHIN THEIR AREA OF WORK. INSTALL COVER PLATES PER HOSPITAL REQUIREMENTS.
8. ANY AND ALL STOREFRONT SYSTEMS MUST BE SELF SUPPORTED FROM THE FLOOR. ATTACHMENT TO BUILDING STRUCTURE ABOVE IS ALLOWED FOR LATERAL BRACING ONLY.
9. WOOD BLOCKING, DECKING, AND FRAMING IS ALLOWED ONLY BELOW THE CEILING LINE AND IF IT IS MILL-STAMPED FIRE RETARDANT.
10. COVER RETURN AIR OPENINGS BEFORE AND DURING CONSTRUCTION.
11. ALL ROOF WORK TO BE PERFORMED BY HOSPITAL'S APPROVED ROOFING CONTRACTOR AT CONTRACTOR'S EXPENSE.
12. CONTRACTOR IS LIABLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE HOSPITAL'S FIRE PROTECTION ENGINEERS DURING ORIGINAL CONSTRUCTION AND ALL SUBSEQUENT FIELD INSPECTIONS.
13. ANY CHANGES OR MODIFICATIONS IN THE CONSTRUCTION DOCUMENTS MUST BE APPROVED BY A HOSPITAL REPRESENTATIVE AND ARCHITECT IN WRITING.
14. ANY PENETRATIONS OR OTHER MODIFICATIONS TO STRUCTURAL STEEL OR CONCRETE MUST BE COORDINATED WITH A HOSPITAL REPRESENTATIVE.
15. PROVIDE TEMPORARY CONSTRUCTION BARRICADE AS APPLICABLE PRIOR TO COMMENCEMENT OF CONSTRUCTION. DO NOT FASTEN TO HOSPITAL'S FINISH MATERIAL.
16. HAZARDOUS SUBSTANCE IS THE RESPONSIBILITY OF THE CONTRACTOR WHEN PREPARING FOR AND PROCEEDING WITH CONSTRUCTION IN THE PREMISES TO COMPLY WITH ALL REQUIREMENTS OF ALL APPLICABLE LAWS CONCERNING HAZARDOUS SUBSTANCES. THE CONTRACTOR SHALL NOT PERMIT THE INSTALLATION OR USE OF ANY HAZARDOUS SUBSTANCES IN ANY COMPONENT OF THE PREMISES.
17. APPROVAL IS SUBJECT TO VERIFICATION OF CONDITIONS AND COMPLIANCE WITH PROCEDURES FROM THE HOSPITAL.
18. THE CONTRACTOR MUST PROVIDE TO THE FIRE MARSHAL SPRINKLER DRAWINGS AND CALCULATIONS SPECIFICATIONS BEFORE A PERMIT WILL BE ISSUED BY THE BUILDING DEPARTMENT.
19. ALL MATERIALS IN THE CEILING AND WALLS MUST BE NON-COMBUSTIBLE MATERIALS (MUST BE STAMPED NON-COMBUSTIBLE").
20. CONSTRUCTION WORK WILL BE CONFINED TO THE INTERIOR SPACE AND WILL NOT CREATE DUST, DIRT, OR OTHER SUCH INCONVENIENCES TO ADJACENT AREAS OF THE BUILDING.
21. CONSTRUCTION WORK WILL NOT BLOCK HALLWAYS OR MEANS OF EGRESS FOR THE OTHER OCCUPANTS OF THE BUILDING.
22. CONSTRUCTION WORK HOURS SHALL BE COORDINATED WITH BUILDING OWNER'S SITE REPRESENTATIVE.
23. EXISTING FIRE ALARM SYSTEM & WIRING TO BE COILED & SUPPORTED IN CEILING FOR RELOCATION.
24. FIRE ALARM SYSTEM AND ALARMS MUST REMAIN ACTIVE AT ALL TIMES.
25. PROVIDE FIRE WATCH AT ALL TIMES IF REQUIRED BY BUILDING RULES AND REGULATIONS AND APPLICABLE FEDERAL, STATE, AND MUNICIPAL CODES.
26. CONTRACTOR TO COORDINATE TRASH ACCESS.
27. THE GC SHALL REVIEW AND BE FAMILIAR WITH ANY "DESIGN AND CONSTRUCTION CRITERIA" AND ANY OTHER OWNER BUILDING STANDARDS. THE GENERAL CONTRACTOR SHALL INCLUDE ALL ASSOCIATED COSTS ASSOCIATED WITH COMPLIANCE TO THESE STANDARDS IN THE BID.
28. FINAL CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, MEP, STRUCTURAL, ETC., ARE REQUIRED FOR HOSPITAL REVIEW PRIOR TO COMMENCEMENT OF WORK. THESE DRAWINGS MUST BE STAMPED BY A LICENSED DESIGN PROFESSIONAL.

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PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:
Nuvance Health.

CONSULTANT:

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REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
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CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
GENERAL NOTES

DRAWING NO.
G002

Plot Date: 7/15/2024 9:38:25 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

FINISH NOTES

1. ENSURE SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE, AND FREE OF IRREGULARITIES. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
2. GENERAL CONTRACTOR TO PROTECT EXISTING FLOORING TO REMAIN AND SHALL PATCH AND REPAIR ANY AREAS DAMAGED DURING CONSTRUCTION PRIOR TO INSTALLATION OF NEW FINISHES.
3. GENERAL CONTRACTOR SHALL VERIFY WALL SUBSTRATE PRIOR TO INSTALLATION OF NEW FINISH AND CONVEY ANY ISSUES BACK TO AOR IMMEDIATELY.
4. ANY REQUEST FOR MATERIAL SUBSTITUTIONS ARE TO BE SENT TO ARCHITECT AND/OR CLIENT FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. SAMPLES OF ALL FINISHES MUST BE SUBMITTED AND MUST BE APPROVED BY ARCHITECT & HOSPITAL.
5. RETOUCH OR REFINISH SURFACES DAMAGED BY SUBSEQUENT WORK AS DIRECTED BY GC. THE COST OF SUCH RESTORATION WORK SHALL BE BORNE BY SUB CONTRACTOR.
6. THE GC SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL FINISHES IN THE SPACE PRIOR TO TURNOVER. G.C. SHALL TOUCH UP ALL CORNER BEADS, WALLS, CEILING AND FLOORING AS REQUIRED PRIOR TO TURNOVER AND ANY DAMAGE CAUSED BY OTHER TRADES INCLUDING MILLWORK VENDOR.
7. USE CLEAR CAULK BETWEEN MILLWORK AND GWB IF REQUIRED TO CREATE A SMOOTH FINISH.
8. ALL GWB SHALL BE INSTALLED WITH METAL CORNER BEADS, TRIM, ACCESSORIES AND MOLDINGS, ETC. AS REQUIRED FOR COMPLETION, TAPED AND SANDED READY FOR PAINT, OR SELECTED FINISH, BY DRYWALL CONTRACTOR. PATCH AND REPAIR EXISTING WALLS AS REQUIRED TO ACCEPT NEW FINISHES.
9. MOISTURE RESISTANT GYPSUM BOARD TO BE USED IN ALL 'WET' AREAS.
10. GYPSUM WALL BOARD SURFACES SHALL BE WIPED WITH A DAMP CLOTH JUST PRIOR TO APPLICATION OF THE FIRST COAT OF PAINT IN ORDER TO LAY FLAT ANY NAP WHICH MAY HAVE FORMED IN SANDING.
11. PAINTING SUBCONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OR REMOVAL & REINSTALLATION OF HARDWARE, SWITCH / OUTLET COVERS, ETC. TO PROTECT FROM PAINTING.
12. ALL PAINTED SURFACES TO RECEIVE (1) COAT PRIMER & (2) COATS FINISH PAINT (MINIMUM) WITH ADDITIONAL COATS AS REQUIRED FOR PROPER COVERAGE.
13. AT COMPLETION OF PAINTING, ALL PAINT MATERIALS & EQUIPMENT SHALL BE REMOVED, ALL PAINT SPOTS REMOVED AND ALL AREAS THOROUGHLY CLEANED. ANY DIRT OR DEBRIS CAUSED BY WORK SHALL BE CLEANED UP AS WORK PROGRESSES.
14. ALL FLOORING SUBCONTRACTORS SHALL HAVE A MINIMUM OF FIVE YEARS EXPERIENCE WORKING WITH RESPECTIVE FLOORING MATERIAL.
15. ALL FINISHED FLOORING TO BE PROTECTED BY G.C. FOLLOWING INSTALLATION.
16. U.O.N. ALL INTERIOR FINISHES (WALL, FLOOR, AND CEILING), FURNISHINGS, AND MILLWORK ARE TO BE CLASS 'A' FIRE-RATED AND ARE TO COMPLY WITH CODE-REQUIRED (INTERIOR FLAME SPREAD) RATINGS.
17. ALL TILE EDGES, CORNER TRANSITIONS, OR TOP CAPS SHALL BE FINISHED WITH SCHLUTER-JOLLY OR EQUAL STAINLESS STEEL FINISHING OR EDGE-PROTECTION PROFILE THROUGHOUT.
18. ANY WALL SURFACES ADJACENT TO EQUIPMENT THAT PRODUCE MODERATE TO HIGH LEVELS OF HEAT ARE TO BE FINISHED WITH STAINLESS STEEL PANELS. COORDINATE WITH AOR AND CLIENT PRIOR TO FABRICATION AND INSTALLATION.
19. ALL FLOOR TRANSITIONS BETWEEN DIFFERENT FLOORING MATERIALS ARE TO RECEIVE FLOOR TRANSITION STRIPS PER THE MANUFACTURER'S STANDARDS U.O.N. GENERAL CONTRACTOR TO FOLLOW ADA STANDARDS FOR ALL TRANSITION STRIPS BETWEEN MATERIALS.
20. G.C. TO PROVIDE LEVEL 4 DRYWALL FINISH THROUGHOUT SPACE U.O.N.

FINAL CLEANING NOTES

1. THE WORK INCLUDED IN THIS CONTRACT SHALL BE PERFORMED ACCORDING TO THE GENERAL CONDITIONS AND REQUIREMENTS WHICH ARE STATED ON THIS SET OF DRAWINGS.
2. EACH SUBCONTRACTOR SHALL CLEAN THEIR WORK AND REMOVE ALL TRASH, DEBRIS, PACKING, ETC. RESULTING FROM THAT WORK.
3. ALL SURFACES AND FINISHES SHALL BE LEFT FREE OF MARKS, BLEMISHES, DUST, DIRT, OVER SPRAY, PAINT SPILLS, ETC.
4. ALL SUB CONTRACTORS SHALL REMOVE EXCESS MATERIALS AFTER WORK IS COMPLETED AND FLOOR TO BE BROOM CLEANED.
5. GENERAL CONTRACTOR SHALL PROVIDE A PROFESSIONAL CLEANING SERVICE FOR ALL AREAS OF THE SPACE AT THE COMPLETION OF THE PROJECT AND BEFORE TURNING THE SPACE OVER TO THE CLIENT. WORK TO INCLUDE BUT NOT BE LIMITED TO REMOVAL OF ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES, AND FOREIGN MATTER. REMOVE ALL TRACES OF SPLASHED MATERIAL FROM ADJACENT SURFACES. CLEAN GLASS, BOTH SIDES. TO SURFACES REQUIRING POLISH, APPLY POLISH RECOMMENDED BY MANUFACTURER OF THE MATERIAL BEING POLISHED. FLOORING REQUIRING WAXING, AFTER ADHESIVE HAS FULLY DRIED SHALL HAVE ANY DRIED ADHESIVES REMOVED. THE FLOOR SHALL BE CLEANED AND WAXED USING MANUFACTURER'S RECOMMENDED CLEANING AND WAXING MATERIALS ONLY.

REFLECTED CEILING NOTES

1. SUPPORT LIGHT FIXTURES AND AIR DIFFUSERS DIRECTLY BY WIRES TO THE STRUCTURE ABOVE.
2. LOCATE REGISTERS AND LIGHTING FIXTURES WITHIN GRID LINES. CENTER SPRINKLER HEADS, SPEAKERS, RECESSED FIXTURES, AND SIMILAR CEILING ELEMENTS IN ACOUSTICAL UNITS, U.O.N.
3. FINISH HVAC DIFFUSERS, TRIM PIECES, AND SPEAKER GRILLES TO MATCH ADJACENT FINISH, U.O.N.
4. CONTRACTOR TO USE LASER FOR LEVELING OF ALL SOFFITS, CEILINGS AND SUSPENDED GRIDS.
5. ALL FIXTURES TO BE INSTALLED IN ACOUSTIC CEILINGS TO BE CENTERED IN CEILING GRID, U.O.N.
6. HANGER WIRE AT SUSPENDED GYP BD CEILINGS TO BE 8 GA.; HANGER WIRE AT SUSPENDED ACOUSTICAL CEILINGS TO BE 10 GA.
7. HANGER WIRES SHALL BE ATTACHED TO STRUCTURAL STEEL ONLY W/ U.L. LISTED CLAMPS. DO NOT HANG SUPPORT WIRES FROM MECHANICAL EQUIPMENT OR PIPING. NO SCREWS PERMITTED IN METAL DECKING.
8. ALL SUSPENDED CEILING SYSTEMS TO BE INSTALLED PER INDUSTRY STANDARDS, ALL CODE REQUIREMENTS, AND ALL RECOMMENDATIONS OF THE MANUFACTURER OF THE SYSTEM.
9. ALL LIGHT FIXTURES, HVAC EQUIPMENT AND DIFFUSERS SHALL BE SUPPORTED FROM THE TOP CHORD OF THE JOIST AND/OR STRUCTURAL MEMBERS ABOVE.
10. GC SHALL VERIFY ALL CEILING HEIGHTS, AND CONFIRM THAT THE WORK CAN BE BUILT AS SHOWN. IN THE EVENT OF ANY CONFLICTS OR OMISSIONS WITHIN THE DRAWINGS, GC TO CONTACT ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.
11. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES.
12. IF THE SPACE ABOVE THE SUSPENDED CEILING IS USED AS A RETURN AIR PLENUM, THEN ALL EQUIPMENT AND WIRING (COMMUNICATION, POWER ETC) SHALL BE LISTED FOR INSTALLATION IN A PLENUM.

MECHANICAL NOTES

1. EXCEPT WHERE SHOWN IN DIMENSIONAL DETAIL, THE LOCATIONS OF MECHANICAL EQUIPMENT, DUCTS, PIPING, AND FITTING ARE ONLY APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ARCHITECT.
2. CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PADS AND BASES AS WELL AS POWER AND WATER OR DRAIN INSTALLATIONS WITH EQUIPMENT MANUFACTURERS BEFORE PROCEEDING WITH THE WORK. CHANGES TO ACCOMMODATE FIELD CONDITIONS OR SUBSTITUTIONS SHALL BE MADE AT NO ADDITIONAL COST.
3. MECHANICAL SUPPLY AND RETURN AIR SHAFTS SHALL BE AIRTIGHT AND SEALED.
4. ALL FLEXIBLE AIRDUCTS, IF USED, SHALL MEET THE REQUIREMENTS OF NFPA 90A, 2-3-2 IN CONSTRUCTION AND INSTALLATION.

ELECTRICAL / TELEPHONE NOTES

1. ALL LINE AND DISCONNECT SWITCHES, SAFETY CUT-OUTS, CONTROL PANELS, FUSE BOXES, OR OTHER ELECTRICAL CONTROLS, FITTINGS, AND CONNECTIONS NOT FURNISHED AS A STANDARD PART OF THE FIXTURE BY THE MANUFACTURER TO BE FURNISHED AND INSTALLED UNDER ELECTRICAL CONTRACT. STARTING SWITCHES PROVIDED BY EQUIPMENT CONTRACTOR AND FURNISHED LOOSE AS STANDARD BY FOOD SERVICE EQUIPMENT MANUFACTURERS (OTHER THAN CUSTOM FABRICATED ITEMS) IS TO BE MOUNTED AND WIRED COMPLETE UNDER ELECTRICAL CONTRACT.
2. ELECTRICAL SUB TO VERIFY SERVICE PROVIDED IS ADEQUATE. IF NOT, NOTIFY ARCHITECT IMMEDIATELY.
3. PRIOR TO CORING SLAB, REVIEW LOCATIONS WITH ARCHITECT AND COORDINATE LOCATIONS WITH OWNER. ALL LOCATIONS SHALL BE MARKED FOR LANDLORD APPROVAL PRIOR TO CORING.
4. CONTRACTOR TO COORDINATE INSTALLATION OF TELECOMMUNICATIONS, DATA, SECURITY, AUDIO VISUAL SYSTEMS W/ LOCAL HOSPITAL PROVIDERS.
5. VERIFY EQUIPMENT SPECIFICATIONS, POWER AND INSTALLATION REQUIREMENTS WITH MANUFACTURER TO ENSURE PROPER FIT AND FUNCTION.
6. VERIFY MOUNTING REQUIREMENTS OF ELECTRICAL, TELEPHONE AND OTHER EQUIPMENT. PROVIDE NON-COMBUSTIBLE BLOCKING WITHIN WALLS AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION.
7. GANG ADJACENT LIGHT SWITCHES AND COVER WITH A SINGLE PLATE.
8. INDICATED DIMENSIONS ARE TO THE CENTER LINE OF OUTLET OR SWITCH, OR CLUSTER OF OUTLETS OR SWITCHES, UNLESS OTHERWISE NOTED.
9. INSTALL OUTLETS ON OPPOSITE SIDES OF PARTITIONS IN SEPARATE STUD CAVITIES. DO NOT INSTALL BACK-TO-BACK.
10. IDENTIFY DEDICATED OR ISOLATED GROUND ELECTRICAL OUTLETS WITH A RED DOT.
11. MOUNT STANDARD WALL OUTLETS, SWITCHES AND THERMOSTATS AT HEIGHTS REQUIRED BY TITLE 24 AND ADA GUIDELINES, UNLESS OTHERWISE NOTED. WHEN THERMOSTATS AND LIGHT SWITCH OCCUR TOGETHER, INSTALL BOTH ALIGNED HORIZONTALLY WITH CENTER LINE AT +3' - 2" ABOVE FINISHED FLOOR.
12. IF SPECIFICALLY INDICATED ON PLANS, ALL OUTLETS AND/OR SWITCHES ARE TO BE INSTALLED AS DIMENSIONED. ANY DISCREPANCIES BETWEEN PLAN AND EXISTING FIELD CONDITIONS TO BE CLARIFIED WITH THE ARCHITECT BEFORE COMMENCEMENT OF WORK.
13. ALL ELECTRICAL AND TELEPHONE WORK TO BE INSTALLED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF ALL ELECTRICAL CODES, NATIONAL BOARD OF FIRE UNDERWRITERS, UTILITY COMPANIES, TELEPHONE COMPANIES, THE LANDLORD, AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
14. THE GC SHALL PROVIDE ALL CUTTING AND PATCHING OF FLOORS, WALLS AND CEILING AS REQUIRED.
15. U.O.N. ALL DEVICES (TELEPHONE, DATA, ELECTRIC, SWITCH) SHALL BE WHITE WITH WHITE COVER PLATES AND ALL EXISTING OUTLETS TO REMAIN TO RECEIVE NEW WHITE DEVICES WITH WHITE COVER PLATES.
16. ALL SURFACES WITH EXISTING OUTLETS BEING REMOVED SHALL BE PATCHED FLUSH WITH ADJACENT WALL SURFACES.
17. PROVIDE BREAKER LOCKS FOR A.C. UNITS AND POS/PHONE SYSTEMS.
18. ALL TELEPHONE OUTLETS SHALL BE PROVIDED WITH TWO (2) PULL STRINGS BACK TO THE TELEPHONE EQUIPMENT.
19. U.O.N, ALL ELECTRICAL, TELEPHONE, AND DATA OUTLETS ARE TO BE MOUNTED 15" A.F.F.
20. CENTERLINE TO CENTERLINE DIMENSIONS OF ANY OUTLET PAIR OR GROUP SHALL NOT EXCEED 6".
21. ALL LIGHT FIXTURES SHALL BEAR UL LABELS.
22. EMERGENCY & EXIT LIGHTS TO BE INSTALLED ON SEPARATE CIRCUIT.

PLUMBING NOTES

1. WHERE POSSIBLE, UTILITIES SHALL BE CONCEALED WITHIN BUILDING WALLS OR COLUMN CHASES, NOT RUN ALONG WALL FACE. DO NOT STUB OUT OF FLOOR AND RUN ON THE FACE OF THE WALL.
2. ANY AND ALL EXPOSED PIPING OR FITTINGS TO BE STAINLESS STEEL, CHROME PLATED OR ENCLOSED IN A CONCEALED, MOUNTED STAINLESS STEEL CHASE.
3. DRINKING FOUNTAINS ARE BY MECHANICAL TRADES. VERIFY UTILITY REQUIREMENTS WITH MECHANICAL ENGINEER.

FIRE / LIFE SAFETY NOTES

1. FIRE PROTECTION EQUIPMENT AND SERVICE ACCESS MUST BE PROVIDED DURING THE CONSTRUCTION PERIOD AS REQUIRED BY THE COUNTY.
2. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A WITHIN 75 FOOT TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT, AND ADDITIONAL EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT FIELD INSPECTOR OR BUILDING DEPARTMENT INSPECTOR.
3. ALL FIRE-RATED ASSEMBLES SHALL BE INSTALLED, LABELED, AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE WHEN REQUIRED.
4. PROVIDE EXIT SIGN WITH 6" LETTERS OVER REQUIRED EXITS, WHERE SHOWN ON DRAWINGS, AND ADDITIONAL SIGNS AS REQUIRED BY BUILDING DEPARTMENT INSPECTOR OR FIRE DEPARTMENT FIELD INSPECTOR. CONNECT EXIT SIGNS TO EMERGENCY POWER CIRCUITS. COMPLY WITH BUILDING CODES.
5. PROVIDE EMERGENCY LIGHTING OF ONE FOOT-CANDLE AT FLOOR LEVEL. COMPLY WITH BUILDING CODES.
6. EVERY EXIT DOOR SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE. ALL NEW DOORS SHALL HAVE APPROVED LEVER HANDLES.
7. DOORS OPENING INTO REQUIRED 1-HOUR, FIRE-RESISTIVE CORRIDORS SHALL BE PROTECTED WITH A SMOKE OR DRAFT STOP ASSEMBLY HAVING A 20-MINUTE RATING AND SHALL BE SELF-CLOSING.
8. 20-MINUTE DOOR JAMBS TO BE TIGHT-FITTING, SMOKE AND DRAFT CONTROLLED.
9. EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHEN SERVING 50 OR MORE PERSONS.
10. PROVIDE FIRE DAMPERS OR DOORS WHERE AIR DUCTS PENETRATE FIRE-RATED WALLS OR CEILINGS.
11. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, FLAMMABLE GAS AND HAZARDOUS SUBSTANCES SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS.
12. EXTEND OR MODIFY EXISTING FIRE / LIFE SAFETY SYSTEM AS REQUIRED TO PROVIDE AN APPROVED FIRE / LIFE SAFETY SYSTEM FOLLOWING LANDLORD APPROVAL. SUBMIT PLANS TO FIRE DEPARTMENT WITH COMPLETE DESCRIPTION OF SEQUENCE OF OPERATION, AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
13. LOCATE THE CENTER OF FIRE ALARM INITIATING DEVICES 48" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE OR SIDEWALK.
14. EMERGENCY WARNING SYSTEMS SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.
15. THE FIRE PROTECTION DOCUMENTATION CONTAINED WITHIN THESE DRAWINGS HAVE BEEN PREPARED TO PERFORMANCE SPECIFICATION LEVEL OF DEVELOPMENT FOR GENERAL DESIGN AND FIRE PROTECTION CODE COMPLIANCE / CRITERIA. THE GENERAL CONTRACTOR IS TO RETAIN A LICENSED FIRE PROTECTION ENGINEER WHOM WILL PROVIDE / PERFORM HYDRAULIC AND / OR FLOW TESTING, PREPARE F.P. SHOP DRAWINGS, STAMP / SIGN SAID SHOP DRAWINGS AND SUBMIT SAID SHOP DRAWINGS FOR PERMIT.

STRUCTURAL NOTES

1. THE GENERAL CONTRACTOR SHALL PROVIDE COLD FORMED METAL FRAMING SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER.
2. ENGINEERING RESPONSIBILITY: PREPARATION OF SHOP DRAWINGS, DESIGN CALCULATIONS, AND OTHER STRUCTURAL DATA BY A QUALIFIED PROFESSIONAL ENGINEER.
3. PROFESSIONAL ENGINEER QUALIFICATIONS: A PROFESSIONAL ENGINEER WHO IS LEGALLY QUALIFIED TO PRACTICE IN JURISDICTION WHERE PROJECT IS LOCATED AND WHO IS EXPERIENCED IN PROVIDING ENGINEERING SERVICES OF THE KIND INDICATED. ENGINEERING SERVICES ARE DEFINED AS THOSE PERFORMED FOR INSTALLATIONS OF COLD-FORMED STEEL FRAMING THAT ARE SIMILAR TO THOSE INDICATED FOR THIS PROJECT IN MATERIAL, DESIGN, AND EXTENT.
4. SHOP DRAWINGS:
   A. INCLUDE LAYOUT, SPACINGS, SIZES, THICKNESSES, AND TYPES OF COLD-FORMED STEEL FRAMING; FABRICATION; AND FASTENING AND ANCHORAGE DETAILS, INCLUDING MECHANICAL FASTENERS.
      A. INDICATE REINFORCING CHANNELS, OPENING FRAMING, SUPPLEMENTAL FRAMING, STRAPPING, BRACING, BRIDGING, SPLICES, ACCESSORIES, CONNECTION DETAILS, AND ATTACHMENT TO ADJOINING WORK.

MILLWORK NOTES

1. REFER TO FINISH SCHEDULE FOR ALL FINISHES.
2. MILLWORK CONTRACTOR TO SITE VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
3. GENERAL CONTRACTOR SHALL REFER TO CASEWORK & COUNTERTOP SPECIFICATIONS.
4. PATIENT SIDE OF ALL TRANSACTION COUNTERS SHALL NOT EXCEED 34" ABOVE FINISHED FLOOR.
5. G.C. IS RESPONSIBLE FOR SUPPLYING & INSTALLING ALL SITE REQUIREMENTS (IN WALL BLOCKING, ETC.) FOR MILLWORK. COORDINATE ALL REQUIREMENTS WITH VENDOR(S).
6. SHOP DRAWINGS MUST BE SUBMITTED AND APPROVED BY ARCHITECT & TENANT'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO FABRICATION WHEN REQUIRED.
7. ALL MILLWORK IS TO CONFORM TO A.W.I./A.W.M.A.C. PREMIUM STANDARDS.
8. G.C. IS RESPONSIBLE FOR THE COORDINATION OF THE INSTALLATION PROCESS OF ALL MILLWORK, INCLUDING TOUCH UP OF ANY DAMAGE AND FINAL CLEANING AFTER INSTALLATION.
9. MILLWORK VENDOR TO COORDINATE WITH OTHER TRADES AND PROVIDE CONCEALED GROUNDS & OR BLOCKING AS REQUIRED. PROVIDE CUTOUTS FOR OUTLETS AND EQUIPMENT AS REQUIRED. VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
10. G.C. TO PROVIDE ADDITIONAL CUTOUTS AS REQUIRED IN VENDOR SUPPLIED MILLWORK. ALL MODIFICATIONS TO BE PERFORMED BY A QUALIFIED FINISH CARPENTER. ALL CUTS TO BE PLACED TO MINIMIZE VISIBILITY. NO ADDITIONAL MODIFICATION TO MILLWORK WILL ABE ALLOWED WITHOUT PRIOR APPROVAL FROM TENANT'S PROJECT MANAGER.
11. ALL CUTOUTS IN ENGINEERED STONE SHALL BE SPACED A MINIMUM OF 2" APART AND/OR PER MANUFACTURER'S SPECIFICATIONS.
12. ALL FINISHED VENEERED WOOD SHALL BE FREE FROM KNOTS, SHAKES AND OTHER DEFECTS AFFECTING EITHER DURABILITY OR APPEARANCE, & SHALL BE CAREFULLY SELECTED FOR GRAIN & COLOR FOR MARKED VARIATIONS AT JOINTS BETWEEN VENEERS.
13. ALL MILLWORK IS TO BE LASER CUT IN A TRADE SHOP ONLY, NO FIELD CUTTING WILL BE ALLOWED. ALSO, NO FIELD FINISHING OTHER THAN MINOR TOUCH-UPS OF MILLWORK WILL BE PERMITTED.
14. ALL MILLWORK HARDWARE TO BE FURNISHED & INSTALLED BY MILLWORK VENDOR.
15. MILLWORK VENDOR TO FURNISH & INSTALL RUBBER BUMPERS ON ALL DOORS AND DRAWERS, AND ON WALLS WHEREVER CABINET DOOR MAKES CONTACT.
16. WOOD BLOCKING SHALL BE FIRE TREATED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. LENGTHS OF WALL BLOCKING ARE NOMINAL, ALWAYS EXTEND TO THE NEXT STUD IN EACH DIRECTION.
17. ALL SURFACES TO BE FINISHED. NO EXPOSED UNFINISHED SURFACES WILL BE ACCEPTED.
18. U.O.N. ALL INTERIOR KNEEWALL SURFACES TO RECEIVE A WHITE CLEANABLE FRP FINISH.
19. U.O.N. ALL CABINET INTERIORS TO RECEIVE A WHITE PLASTIC LAMINATE FINISH.
20. U.O.N. THE UNDERSIDE OF ALL COUNTERTOP SUBSTRATES TO RECEIVE A WHITE PLASTIC LAMINATE FINISH.
21. MILLWORK CONTRACTOR TO ENSURE ALL SPECIFIED EQUIPMENT FITS INTO COUNTER AS NOTED. CHECK ALL MANUFACTURER'S SPECIFICATIONS PRIOR TO FABRICATION.
22. MILLWORK CONTRACTOR TO ENSURE COUNTER FITS SNUG WITH SURROUNDING SITE AND MILLWORK CONDITIONS. IF NECESSARY SCRIBE COUNTER ON SITE.
23. COORDINATE ALL CUTOUTS & FINAL LOCATIONS WITH KITCHEN EQUIPMENT CONTRACTOR, TYP.
24. 1/2" X 1/2" STAINLESS STEEL CORNER GUARDS ALL EXPOSED OUTSIDE CORNERS AT MILLWORK, TYP.
25. 1/2" X 1/2" STAINLESS STEEL BOTTOM EDGING AT ALL EXPOSED LAMINATE TOE-KICKS AT MILLWORK, TYP.
26. FIXED EQUIPMENT AND MILLWORK TO BE SEALED, USING APPROVED CLEAR SILICONE SEALANT, TO FLOORS, WALLS AND COUNTER TOPS AS REQUIRED.
27. ALL ENGINEERED STONE BACKSPLASHES AND COUNTERTOPS SHALL BE SEALED TO ADJACENT WALLS WITH CLEAR SILICONE SEALANT AS REQUIRED. GAPS BETWEEN ENGINEERED STONE AND WALL SURFACES SHALL NOT EXCEED 1/4" MAX.
28. ANY SUPPORT LEGS INDICATED ON THE DRAWINGS ARE SUGGESTED PLACEMENT ONLY. QUANTITY OF SUPPORT LEGS SHALL BE DETERMINED BY THE MILLWORK CONTRACTOR AND KEC.
29. INSTALLATION OF EQUIPMENT AND MILLWORK TO INCLUDE PROPER SPACING TO ALLOW FOR CLEANING.
30. ALL STAINLESS STEEL ADJUSTABLE LEGS SHALL HAVE FEET MECHANICALLY FASTENED TO THE FLOOR.
31. MAX SPAN BETWEEN LOW WALL SUPPORTS AND/OR STAINLESS STEEL LEGS SHALL NOT EXCEED 4'-0" MAX.
32. WHERE COUNTERTOP SUBSTRATE INTERFERES WITH UNDERCOUNTER EQUIPMENT CLEARANCES, STEEL FLAT BARS SHALL BE USED TO SUPPORT THE COUNTERTOP AS NEEDED.
33. ALL SEAM LOCATIONS SHALL BE SUPPORTED BY LOW WALL AND/OR STAINLESS STEEL LEG SUPPORT WITH STEEL CHANNEL RUNNING BACK TO MAIN LOW WALL SUPPORT.
34. AFTER WORK IS COMPLETED ALL MILLWORK AND/OR EQUIPMENT WILL BE CLEANED AND SANITIZED BEFORE OPERATIONS COMMENCE.
35. U.O.N ALL MILLWORK SUBSTRATE MATERIALS TO BE EITHER SOLID WOOD OR 3/4" C-3 GRADE PLYWOOD OR APPROVED EQUAL. NO M.D.F OR PARTICLE BOARD WILL BE ACCEPTED WITHOUT PRIOR APPROVAL.
36. NO MATERIAL SUBSTITUTIONS WILL BE PERMITTED WITHOUT PRIOR AUTHORIZATION FROM ARCHITECT.
37. ALL PLYWOOD SUBSTRATES SHALL BE MARINE GRADE PLYWOOD OR APPROVED EQUAL.
38. G.C. SHALL FURNISH AND INSTALL ACCESS PANELS IN MILLWORK WHERE INDICATED ON DRAWINGS, REQUIRED BY THE NATURE OF THE PROJECT, OR REQUIRED TO SERVICE DEVICES WITHIN THE MILLWORK. THE ACCESS PANELS SHALL BE OF SUFFICIENT SIZE SO THAT ALL EQUIPMENT WILL BE COMPLETELY SERVICEABLE. PANELS SHALL BE FINISHED TO MATCH THE SURFACE IN WHICH THEY ARE LOCATED.
39. MILLWORK CONTRACTOR TO PROVIDE ADEQUATE VENTILATION IN COUNTERS FOR REQUIRED EQUIPMENT. CHECK ALL MANUFACTURER'S SPECIFICATIONS PRIOR TO FABRICATION.
40. U.O.N. LOUVERED MILLWORK DOORS SHALL HAVE 1/2" VENTILATION SLOTS ROUTED INTO THE ENTIRE DOOR @ 11/2" O.C. VENTILATION SLOTS SHALL STOP MIN. 3" ON ALL SIDES. INSIDE OF SLOT TO BE PAINTED BLACK WITH WATERPROOF SEALANT.

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

GENERAL NOTES

DRAWING NO.

G003

Plot Date: 7/15/2024 9:38:25 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 011000
SUMMARY

PART 1 GENERAL
1.01 PROJECT
A. Project Name: Retail Pharmacy Expansion
B. Owner's Name: Nuvance - Norwalk Hospital; Attn: David Keith, Project Manager
C. Architect's Name: Colliers Engineering & Design.
1.02 DESCRIPTION OF ALTERATIONS WORK
1.03 WORK BY OWNER
A. Owner will supply the following for installation by Contractor:
1. Refer to Equipment Schedule.
1.04 OWNER OCCUPANCY
A. Owner intends to occupy the Project upon Substantial Completion.
B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
C. Schedule the Work to accommodate Owner occupancy.

END OF SECTION 011000

SECTION 012000
PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Procedures for preparation and submittal of applications for progress payments.
B. Change procedures.
1.02 SCHEDULE OF VALUES
A. Use Schedule of Values Form: AIA G703, or as stipulated in the Owner / Contractor agreement.
B. Forms filled out by hand will not be accepted.
1.03 APPLICATIONS FOR PROGRESS PAYMENTS
A. Payment Period: Submit at intervals stipulated in the Agreement.
B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
C. Forms filled out by hand will not be accepted.
D. Execute certification by signature of authorized officer.
E. Submit one electronic copy of each Application for Payment.
1.04 MODIFICATION PROCEDURES
A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue supplemental instructions directly to Contractor.
B. For changes for which advance pricing is desired, Architect will issue a Bulletin or Supplemental Instructions document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications. Contractor shall prepare and submit a fixed price quotation within 14 days. Contractor shall advise owner on any schedule impacts of proposed change. Owner may elect to instruct Contractor to proceed with the change, for subsequent inclusion in a Change Order.
C. Computation of Change in Contract Amount or Contract Time: As specified in the Agreement and Conditions of the Contract.

END OF SECTION 012000

SECTION 012500
SUBSTITUTION PROCEDURES

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Procedural requirements for proposed substitutions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION
3.01 GENERAL REQUIREMENTS
A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
2. Agrees to provide the same warranty for the substitution as for the specified product.
3. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
4. Waives claims for additional costs or time extension that may subsequently become apparent.
B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
D. Limit each request to a single proposed substitution item.
3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT
A. Submittal Time Restrictions:
1. Owner will consider requests for substitutions only if submitted at least 10 days prior to the date for receipt of bids.
3.03 SUBSTITUTION PROCEDURES DURING CONSTRUCTION
A. Architectwill consider requests for substitutions only within 30days after date ofAgreement.
B. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
C. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
3.04 RESOLUTION
A. Architect will notify Contractor in writing of decision to accept or reject request.
3.05 ACCEPTANCE
A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

END OF SECTION 012500

SECTION 013000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Submittals for review, information, and project closeout.
B. Requests for Interpretation (RFI) procedures.
C. Submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION
3.01 REQUESTS FOR INTERPRETATION (RFI)
A. Definition: A request seeking one of the following:
1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
B. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
1. Prepare a separate RFI for each specific item.
C. Attachments: Include sketches, proposeld solution(s), coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
D. Review Time: Architect will respond and return RFIs to Contractor, on average, within seven calendar days of receipt. For the purpose of establishing the start of the response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
3.02 SUBMITTAL SCHEDULE
A. Submit to Architect for review a schedule for submittals in tabular format.
1. Coordinate with Contractor's construction schedule and schedule of values.
2. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
3.03 SUBMITTALS FOR REVIEW
A. When the following are specified in individual sections, submit them for review:
1. Product data.
2. Shop drawings.
3. Samples for selection.
4. Samples for verification.
B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
C. Samples will be reviewed for aesthetic, color, or finish selection.
D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 017800 - Closeout Submittals.

3.04 SUBMITTALS FOR INFORMATION
A. When the following are specified in individual sections, submit them for information:
1. Design data.
2. Certificates.
3. Test reports.
4. Inspection reports.
5. Manufacturer's instructions.
6. Manufacturer's field reports.
7. Other types indicated.
B. Submit for Architect's knowledge as contract administrator or for Owner.
3.05 SUBMITTALS FOR PROJECT CLOSEOUT
A. Submit Correction Punch List for Substantial Completion.
B. Submit Final Correction Punch List for Substantial Completion.
C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 017800 - Closeout Submittals:
1. Project record documents.
2. Operation and maintenance data.
3. Warranties.
4. Bonds.
5. Other types as indicated.
D. Submit for Owner's benefit during and after project completion.
3.06 SUBMITTAL PROCEDURES
A. General Requirements:
1. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
2. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and ContractDocuments.
3. Schedule submittals to expedite the Project, and coordinate submission of related items.
a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.

END OF SECTION 013000

SECTION 013114
FACILITY SERVICES COORDINATION

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Coordination documents.
1.02 SUBMITTALS
A. Submit coordination drawings and schedules prior to submitting shop drawings, product data, and samples.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION
3.01 COORDINATION REQUIRED
A. Coordinate the work listed below:
1. Fire Suppression: Division 21.
2. Plumbing: Division 22.
3. Heating, Ventilating, and Air Conditioning: Division 23.
4. Electrical: Division 26.
B. Conduct meetings among subcontractors and others concerned, to establish and maintain coordination and schedules, and to resolve coordination matters in dispute.
3.02 COORDINATION DOCUMENTS
A. Prepare coordination drawings to organize installation of products for efficient use of available space, for proper sequence of installation, and to identify potential conflicts.
B. Identify electrical power characteristics and control wiring required for each item of equipment.
C. Maintain documents for the duration of the work, recording changes due to site instructions, modifications or adjustments.
3.03 EQUIPMENT START-UP
A. Verify utilities, connections, and controls are complete and equipment is in operable condition as required by Section 017000.
B. Observe start-up and adjustments, test run, record time and date of start-up, and results.
C. Observe equipment demonstrations made to Owner; record times and additional information required for operation and maintenance manuals.
3.04 INSPECTION AND ACCEPTANCE OF EQUIPMENT
A. Prior to inspection, verify that equipment is tested, operational, clean, and ready for operation.

END OF SECTION 013114

SECTION 014000
QUALITY REQUIREMENTS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Testing and inspection agencies and services.
B. Control of installation.
C. Mock-ups.
D. Manufacturers' field services.
E. Defect Assessment.
1.02 TESTING AND INSPECTION AGENCIES AND SERVICES
A. Ownerwill employ and pay for services of an independent testing agency to performspecified testing.
B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION
3.01 CONTROL OF INSTALLATION
A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
B. Comply with manufacturers' instructions, including each step in sequence.
C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
E. Have work performed by persons qualified to produce required and specified quality.
F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.
3.02 MOCK-UPS
A. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
C. Architect will use accepted mock-ups as a comparison standard for the remaining Work.
D. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.
3.03 TESTING AND INSPECTION
A. See individual specification sections for testing and inspection required.
B. Testing Agency Duties:
1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
2. Perform specified sampling and testing of products in accordance with specified standards.
3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
5. Perform additional tests and inspections required by Architect.
6. Submit reports of all tests/inspections specified.
C. Limits on Testing/Inspection Agency Authority:
1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency may not approve or accept any portion of the Work.
3. Agency may not assume any duties of Contractor.
4. Agency has no authority to stop the Work.
D. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
3. Provide incidental labor and facilities:
a. To provide access to Work to be tested/inspected.
b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
c. To facilitate tests/inspections.
d. To provide storage and curing of test samples.
4. Notify Testing Agency 48 hours prior to expected time for operations requiring testing/inspection services.
E. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.
3.04 MANUFACTURERS' FIELD SERVICES
A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance equipment, and train staff as applicable, and to initiate instructions when necessary.
B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
3.05 DEFECT ASSESSMENT
A. Replace Work or portions of the Work not complying with specified requirements.

END OF SECTION 014000

SECTION 015000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Temporary utilities.
B. Temporary sanitary facilities.
C. Temporary Controls: Barriers, enclosures, and fencing.
D. Waste removal facilities and services.
1.02 TEMPORARY UTILITIES
A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes.
1.03 TEMPORARY SANITARY FACILITIES
A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
B. Maintain daily in clean and sanitary condition.
1.04 BARRIERS
A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
1.05 FENCING
A. Construction: Contractor's option.
B. Provide 6 foot (1.8 m) high fence around construction site; equip with vehicular and pedestrian gates with locks.
1.06 INTERIOR ENCLOSURES
A. Provide temporary partitions and ceilings as indicated to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.
B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
1.07 WASTE REMOVAL
A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
B. Provide containers with lids. Remove trash from site periodically.
C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 015000

SECTION 017000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL
1.01 COORDINATION
A. Coordinate scheduling, submittals, and work of the various sections of the Contract Documents to ensure efficient and orderly sequence of installation of interdependent construction elements.
B. Notify affected utility companies and comply with their requirements.
C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
F. Coordinate completion and clean-up of work of separate sections.
G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS
2.01 PATCHING MATERIALS
A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
C. Examine and verify specific conditions described in individual specification sections.
D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
3.02 PREPARATION
A. Clean substrate surfaces prior to applying next material or substance.
B. Patch and/or repair cracks and openings in substrate in compliance with manufacturer's requirements for application prior to applying next material or substance.
C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.
3.03 GENERAL INSTALLATION REQUIREMENTS
A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
E. Make neat transitions between different surfaces, maintaining texture and appearance.
3.04 CUTTING AND PATCHING
A. Whenever possible, execute the work by methods that avoid cutting or patching.
B. Perform whatever cutting and patching is necessary to:
1. Complete the work.
2. Fit products together to integrate with other work.
3. Provide openings for penetration of mechanical, electrical, and other services.
4. Match work that has been cut to adjacent work.
5. Repair areas adjacent to cuts to required condition.
6. Repair new work damaged by subsequent work.
7. Remove samples of installed work for testing when requested.
8. Remove and replace defective and non-complying work.
C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
F. Restore work with new products in accordance with requirements of Contract Documents.
G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire ratedmaterial to full thickness of the penetrated element.
I. Patching:
1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
2. Match color, texture, and appearance.
3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
3.05 PROGRESS CLEANING
A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
3.06 PROTECTION OF INSTALLED WORK
A. Protect installed work from damage by construction operations.
B. Provide special protection where specified in individual specification sections.
C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.
3.07 SYSTEM STARTUP
A. Coordinate schedule for start-up of various equipment and systems.
B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
D. Verify that wiring and support components for equipment are complete and tested.
E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
F. Submit a written report that equipment or system has been properly installed and is functioning correctly.
3.08 ADJUSTING
A. Adjust operating products and equipment to ensure smooth and unhindered operation.
3.09 FINAL CLEANING
A. Use cleaning materials that are nonhazardous.
B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
E. Clean filters of operating equipment.
F. Clean debris from roofs and drainage systems.
G. Clean site; sweep paved areas, rake clean landscaped surfaces.
H. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
3.10 CLOSEOUT PROCEDURES
A. Make submittals that are required by governing or other authorities.
B. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
D. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
E. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
F. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.
3.11 MAINTENANCE
A. Provide service and maintenance of components indicated in specification sections.
B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION 017000

SECTION 017800
CLOSEOUT SUBMITTALS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Project record documents.
B. Operation and maintenance data.
C. Warranties and bonds.
1.02 RELATED REQUIREMENTS
A. Section 013000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
B. Individual Product Sections: Specific requirements for operation and maintenance data.
C. Individual Product Sections: Warranties required for specific products or Work.
1.03 SUBMITTALS
A. Project Record Documents: Submit documents to Owner within 10 days after final inspection.
B. Operation and Maintenance Data:
1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents to Owner within ten days after acceptance.
C. Warranties and Bonds:
1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents to Owner within 10 days after acceptance.
2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION
3.01 PROJECT RECORD DOCUMENTS
A. Maintain on site one set of the following record documents; record actual revisions to the Work:
1. Drawings.
2. Addenda.
3. Change Orders and other modifications to the Contract.
B. Ensure entries are complete and accurate, enabling future reference by Owner.
C. Store record documents separate from documents used for construction.
D. Record information concurrent with construction progress.
E. Record Drawings: Legibly mark each item to record actual construction including:
1. Field changes of dimension and detail.
2. Details not on original Contract drawings.
3.02 OPERATION AND MAINTENANCE DATA
A. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
B. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
C. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
3.03 WARRANTIES AND BONDS
A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
B. Verify that documents are in proper form, contain full information, and are notarized.
C. Co-execute submittals when required.
D. Retain warranties and bonds until time specified for submittal.

END OF SECTION 017800

DIVISION 02 - EXISTING CONDITIONS

SECTION 024100
DEMOLITION

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Selective demolition of building elements for alteration purposes.

PART 2 PRODUCTS --NOT USED

PART 3 EXECUTION
3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS
A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
1. Obtain required permits.
2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
3. Provide, erect, and maintain temporary barriers and security devices.
4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
5. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction.
6. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time. Protect persons using entrances and exits from removal operations.
7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
B. Do not begin removal until receipt of notification to proceed from Owner.
C. Protect existing structures and other elements to remain in place and not removed.
1. Provide bracing and shoring.
2. Prevent movement or settlement of adjacent structures.

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN
CLIENT:
Nuvance Health
CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024
DRAWN BY: NF
CHECKED BY: NF
PROJECT NUMBER: 22559
Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
SPECIFICATIONS

DRAWING NO.
G004

Plot Date: 7/15/2024 9:38:26 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GY2E.rvt

3. Stop work immediately if adjacent structures appear to be in danger.
D. Hazardous Materials:
1. If hazardous materials are discovered during removal operations, stop work and notify the Owner; hazardous materials include regulated asbestos containing materials, lead, PCBs, and mercury.

3.02 EXISTING UTILITIES
A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.
B. Protect existing utilities to remain from damage.
C. Do not disrupt public utilities without permit from authority having jurisdiction.
D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

3.03 SELECTIVE DEMOLITION FOR ALTERATIONS
A. Existing construction and utilities indicated on drawings are based on casual field observation only.
1. Verify construction and utility arrangements are as indicated.
2. Report discrepancies to Architect before disturbing existing installation.
3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
B. Separate areas in which demolition is being conducted from areas that remain occupied.
1. Provide, erect, and maintain temporary dustproof partitions as required.
C. Remove existing work as indicated and required to accomplish new work.
1. Remove items indicated on drawings.
D. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications: Remove existing systems and equipment as indicated.
1. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
3. Verify that abandoned services serve only abandoned facilities before removal.
4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings Remove back to source of supply where possible, otherwise cap stub and tag with identification as allowed by local authorities having jurisdiction.
E. Protect existing work to remain.
1. Prevent movement of structure. Provide shoring and bracing as required.
2. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
3. Repair adjacent construction and finishes damaged during removal work.
4. Patch to match new work.

3.04 DEBRIS AND WASTE REMOVAL
A. Remove debris, junk, and trash from site.
B. Leave site in clean condition, ready for subsequent work.
C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 024100

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

SECTION 061000
ROUGH CARPENTRY

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Rough opening framing for doors, windows, and roof openings.
B. Sheathing.
C. Roofing nailers.
D. Preservative treated wood materials.
E. Fire retardant treated wood materials.
F. Concealed wood blocking, nailers, and supports.

1.02 REFERENCE STANDARDS
A. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023.
B. AWPA U1 - Use Category System: User Specification for Treated Wood; 2023.
C. ICC-ES AC310 - Acceptance Criteria for Water-Resistive Membranes Factory-Bonded to Wood-Based Structural Sheathing, Used as Water-Resistive Barriers; 2008, with Editorial Revision (2021).
D. PS 2 - Performance Standard for Wood Structural Panels; 2018.
E. PS 20 - American Softwood Lumber Standard; 2021.

PART 2 PRODUCTS
2.01 GENERAL REQUIREMENTS
A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
1. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
2. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.02 CONSTRUCTION PANELS
A. Wall Sheathing: Oriented strand board structural wood panel with factory laminated water-resistive barrier layer.
1. Sheathing Panel: PS 2, Exposure 1.
2. Integral Water-Resistive Barrier: Sheet material qualifying as a Grade D water-resistive barrier; complying with ICC-ES AC310.
B. Wall Sheathing: Oriented strand board structural wood panel with factory laminated rigid plastic insulation board, and water-resistive barrier layer.
1. Sheathing Panel: PS 2, Exposure 1.
2. Insulation Board: Polyisocyanurate (ISO) insulation board; comply with ASTM C1289, Type II, Class 2 - Faced with coated polymer-bonded glass fiber mat facers on both major surfaces of the core foam.
3. Integral Water-Resistive Barrier: Sheet material qualifying as a Grade D water-resistive barrier; complying with ICC-ES AC310.

2.03 FACTORY WOOD TREATMENT
A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.
B. Preservative Treatment:
1. Products:
2. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.

PART 3 EXECUTION
3.01 INSTALLATION - GENERAL
A. Select material sizes to minimize waste.
B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.02 BLOCKING, NAILERS, AND SUPPORTS
A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
B. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
C. Provide the following specific nonstructural framing and blocking:
1. Cabinets and shelf supports.
2. Wall brackets.
3. Handrails.
4. Grab bars.
5. Towel and bath accessories.
6. Wall-mounted door stops.

3.03 INSTALLATION OF CONSTRUCTION PANELS
A. Wall Sheathing and Roof Sheathing with Laminated Water-Resistive Barrier and Air Barrier: Secure to studs in accordance with manufacturer's installation instructions.
1. Install with laminated water-resistive and air barrier on exterior side of sheathing.
2. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
3. Apply manufacturer's standard seam tape to joints between sheathing panels; use tape gun or hard rubber roller in accordance with manufacturer's installation instructions.

END OF SECTION 061000

SECTION 064100
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Hardware.

1.02 REFERENCE STANDARDS
A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
C. BHMA A156.9 - Cabinet Hardware; 2020.
D. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2020.

1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.

1.04 QUALITY ASSURANCE
A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
1. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.
B. Quality Certification:
1. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
2. Provide designated labels on shop drawings as required by certification program.
3. Provide designated labels on installed products as required by certification program.
4. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.
5. Replace, repair, or rework all work for which certification is refused.

PART 2 PRODUCTS
2.01 CABINETS
A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

2.02 WOOD-BASED COMPONENTS
A. Wood fabricated from old growth timber is not permitted.

2.03 PANEL CORE MATERIALS - NOT USED AND NOT PERMITTED

2.04 HARDWOOD PLYWOOD PANELS
A. Hardwood Plywood: Plywood manufactured for nonstructural decorative applications; consisting of faces and backs applied to a variety of core types; comply with HPVA HP-1.
1. Woodwork Quality Standard: Panels complying with specified woodwork quality standard.

2.05 COUNTERTOPS
A. Basis of Design: Wilsonart
1. Color: As indicated on drawings.

2.06 ACCESSORIES
A. Adhesive: Type recommended by fabricator to suit application.
B. Plastic Edge Banding: Extruded PVC, convex shaped; smooth finish; self locking serrated tongue; of width to match component thickness.
1. Color: As indicated on drawings.
C. Grommets: Standard plastic, painted metal, or rubber grommets for cut-outs, in color to match adjacent surface.

2.07 HARDWARE
A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.
B. Metal Z-Shaped Wall Cabinet Support Clips: Paired, cleated, structural anchorage components applied to back of cabinets and walls for wall cabinet mounting.
C. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated shelf rests, polished chrome finish, for nominal 1 inch (25 mm) spacing adjustments.
D. Countertop Support Brackets: Fixed, surface-mounted to in-wall blocking.
1. Materials: Steel; T-shape cross-section.
2. Materials: Steel plates.
3. Products:
a. A&M Hardware, Inc; Standard Workstation and Countertop Brackets; https://www.aandmhardware.com/
b. or equal.
E. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers ("U" shaped wire pull, steel with chrome finish, 100 mm centers).
F. Sliding Door Pulls: Circular shape for recessed installation, steel with satin finish.
G. Drawer Slides:
1. Type: Extension types as indicated.
2. Static Load Capacity: Commercial grade.
3. Mounting: Side mounted.
4. Stops: Integral type.
5. Features: Provide self closing/stay closed type.
6. Manufacturers:
a. Accuride International, Inc.; https://www.accuride.com/en-us
b. or equal.
H. Hinges: European style concealed self-closing and soft-closing type, steel with nickel-plated finish.
1. Manufacturers:
a. Blum, Inc.; https://www.blum.com/us/en/
b. or equal.

2.08 FABRICATION
A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.
B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs. (Locate counter butt joints minimum 600 mm from sink cut-outs.)

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify adequacy of backing and support framing.

3.02 INSTALLATION
A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

3.03 CLEANING
A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION 064100

SECTION 068200
COMPOSITE TRIM

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Fiber-reinforced polymer (FRP) trim.

1.02 REFERENCE STANDARDS
A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023a.

1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements, for submittal procedures.

1.04 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing manufacturing products specified in this section, with minimum three years documented experience.

1.05 MOCK-UPS
A. See Section 014000 - Quality Requirements for additional requirements.

1.06 WARRANTY
A. See Section 017800 - Closeout Submittals, for additional warranty requirements.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Polymer Composite Trim:
1. Royal Corinthian: www.royalcorinthian.com/#sle.
2. Worthington Millwork LLC: www.worthingtonmillwork.com/#sle.
B. Fiber-Reinforced-Polymer (FRP) Composite Trim:
1. Royal Corinthian: www.royalcorinthian.com/#sle.
2. Wilson Composites, LLC: www.fibertech.net/#sle.
3. Worthington Millwork LLC: www.worthingtonmillwork.com/#sle.

2.02 REGULATORY REQUIREMENTS
A. Surface Burning Requirements:
1. Interior Use: Flame spread index of 75 or less and smoke-development index of 450 or less; Class B interior finish classification when tested in accordance with ASTM E84.
2. Exterior Use: Flame spread index of 200 or less when tested in accordance with ASTM E84.

2.03 FIBER-REINFORCED-POLYMER (FRP) TRIM
A. Fiber-Reinforced-Polymer (FRP) Trim: Nonstructural plastic fabrications formed into various trim profiles using resins, fillers, additives, and fiber reinforcement in open-mold processes.
B. Resin: Polyester.
C. Fillers and Additives: As recommended by manufacturer for application.

2.04 FABRICATION
A. Fabricate and finish units at factory to greatest extent possible in accordance with approved shop drawings.
B. Provide consistent finish over exposed surfaces matching approved samples.
C. Radius corners and edges with 1/4 inch (6.4 mm) minimum radius; polish exposed edges.
D. Fabricate cutouts where indicated.
E. Label units with permanent serial numbers.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify field measurements are as indicated on shop drawings.
B. Verify substrates are prepared to receive composite trim.

3.02 PREPARATION
A. Prepare substrates in accordance with manufacturer's written instructions.

3.03 INSTALLATION
A. Install composite trim in accordance with manufacturer's written instructions.

3.04 TOLERANCES
A. Maximum Variation from True Position: 1/4 inch (6.4 mm).
B. Maximum Variation from Plumb: 1/4 inch in 10 feet (2 mm in 1 m).
C. Maximum Variation from Level: 1/4 inch in 10 feet (2 mm in 1 m).

3.05 CLEANING
A. See Section 017000 - Execution and Closeout Requirements for additional requirements.

3.06 PROTECTION
A. Protect installed composite trim units from subsequent construction operations.

END OF SECTION 068200

SECTION 079200
JOINT SEALANTS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Nonsag gunnable joint sealants.
B. Joint backings and accessories.

1.02 REFERENCE STANDARDS
A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
B. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016.
C. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2022.

1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
2. List of backing materials approved for use with the specific product.
3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
4. Substrates the product should not be used on.
C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Nonsag Sealants:
1. Bostik Inc.
2. Henry Company
3. Hilti, Inc.
4. Tremco Commercial Sealants & Waterproofing

2.02 JOINT SEALANT APPLICATIONS
A. Scope:
1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to:
a. Wall expansion and control joints.
b. Joints between door, window, and other frames and adjacent construction.
c. Joints between different exposed materials.
d. Openings below ledge angles in masonry.
e. Other joints indicated below.
2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
a. Joints between door, window, and other frames and adjacent construction.
b. Other joints indicated below.
B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated.
C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
D. Interior Wet Areas: Bathrooms, restrooms, kitchens, food service areas, and food processing areas; fixtures in wet areas include plumbing fixtures, food service equipment, countertops, cabinets, and other similar items.

2.03 JOINT SEALANTS - GENERAL
A. Sealants and Primers: Provide products with acceptable levels of volatile organic compound (VOC) content; see Section 016116.

2.04 NONSAG JOINT SEALANTS
A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
2. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
B. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component;not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 50 percent,minimum.

2.05 ACCESSORIES
A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
C. Masking Tape: Self-adhesive, nonabsorbent, nonstaining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
D. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
E. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify that joints are ready to receive work.
B. Verify that backing materials are compatible with sealants.
C. Verify that backer rods are of the correct size.

3.02 INSTALLATION
A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
B. Provide joint sealant installations complying with ASTM C1193.
C. Install bond breaker backing tape where backer rod cannot be used.
D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
E. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

END OF SECTION 079200

DIVISION 08 - OPENINGS

SECTION 081113
HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Non-fire-rated hollow metal doors and frames.
B. Hollow metal frames for wood doors.
C. Fire-rated hollow metal doors and frames.
D. Thermally insulated hollow metal doors with frames.
E. Stainless-steel hollow metal doors and frames.
F. Hollow metal borrowed lites glazing frames.

1.02 REFERENCE STANDARDS
A. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2018.
B. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2017.
C. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2020.
D. ASTM A480/A480M - Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip; 2022a.
E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
F. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.
G. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2021a.
H. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2023.
I. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.
J. ITS (DIR) - Directory of Listed Products; Current Edition.
K. NAAMM HMMA 805 - Recommended Selection and Usage Guide for Hollow Metal Doors and Frames; 2012.
L. NAAMM HMMA 860 - Guide Specifications for Hollow Metal Doors and Frames; 2018.
M. NAAMM HMMA 866 - Guide Specifications for Stainless Steel Hollow Metal Doors and Frames; 2012 (Reapproved 2018).
N. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.
O. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; 2022.
P. UL (DIR) - Online Certifications Directory; Current Edition.
Q. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced standards/guidelines.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Hollow Metal Doors and Frames:
1. Ceco Door, an Assa Abloy Group company:www.assaabloydss.com/#sle.
2. Curries, an Assa Abloy Group company:www.assaabloydss.com/#sle.
3. Krieger Specialty Products:www.kriegerproducts.com/#sle.
4. Steelcraft, an Allegion brand:www.allegion.com/#sle.
B. Sound-Rated Hollow Metal Doors and Frames:
1. AMBICO Limited:www.ambico.com/#sle.
2. Megamet Industries, Inc; MegaSonic 2A-B - Series Flush Doors: www.megametusa.com/#sle.
3. Overly Door Company:www.overly.com/#sle.
C. Stainless-Steel Hollow Metal Doors and Frames:
1. Ceco Door, an Assa Abloy Group company:www.assaabloydss.com/#sle.
2. Curries, an Assa Abloy Group company:www.assaabloydss.com/#sle.
3. Steelcraft, an Allegion brand:www.allegion.com/#sle.

2.02 PERFORMANCE REQUIREMENTS
A. Requirements for Hollow Metal Doors and Frames:
1. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.

2.03 HOLLOW METAL DOORS
A. Door Finish: As specified on finish schedule.
B. Exterior Doors: Thermally insulated.
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
a. Level 1 - Standard-duty.
b. Physical Performance Level C, 250,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 1 - Full Flush.
d. Door Face Metal Thickness: 20 gauge, 0.032 inch (0.8 mm), minimum.
2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
3. Door Thickness: 1-3/4 inches (44.5 mm), nominal.
C. Interior Doors, Non-Fire-Rated:
1. Based on NAAMM HMMA Custom Guidelines:
a. Comply with guidelines of NAAMM HMMA 860 for Hollow Metal Doors and Frames.
b. Performance Level 1 - Light Duty, in accordance with NAAMM HMMA 805.
c. Physical Performance Level C, 250,000 cycles; in accordance with ANSI/SDI A250.4.
d. Door Face Metal Thickness: 20 gauge, 0.032 inch (0.8 mm), minimum.
2. Door Thickness: 1-3/4 inches (44.5 mm), nominal.
D. Fire-Rated Doors:
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
a. Level 1 - Standard-duty.
b. Physical Performance Level C, 250,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 1 - Full Flush.
d. Door Face Metal Thickness: 20 gauge, 0.032 inch (0.8 mm), minimum.
2. Fire Rating: As indicated on Door Schedule, tested in accordance with UL 10C and NFPA 252 ("positive pressure fire tests").
3. Provide units listed and labeled by UL (DIR) or ITS (DIR).
a. Attach fire rating label to each fire rated unit.
4. Door Thickness: 1-3/4 inches (44.5 mm), nominal.
E. Stainless-SteelInteriorDoors:
1. Applications: Comply with designated application in accordance with NAAMM HMMA 866 guidelines.
2. Door Face Sheets: Stainless-steel, Type 304 alloy in compliance with ASTM A666.
a. Sheet Thickness: 18 gauge, 0.042 inch (1.0 mm), minimum.
b. Door Finish: No.4 - Brushed satin finish in accordance with ASTM A480/A480M.
3. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
4. Door Thickness: 1-3/4 inches (44.5 mm).

2.04 HOLLOW METAL FRAMES
A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
B. Exterior Door Frames: Full profile/continuously welded type.
1. Frame Finish: Factory primed and field finished.
2. Weatherstripping: Separate, see Section 087100.
C. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
1. Frame Finish: Factory primed and field finished.
D. Door Frames, Fire-Rated: Full profile/continuously welded type.
1. Fire Rating: Same as door, labeled.
2. Frame Finish: Factory primed and field finished.
E. Stainless-Steel Door Frames: Provide full profile and continuously welded typein compliance with NAAMM HMMA 866, with Type 304 alloyin compliance with ASTM A666.
F. Frames for Wood Doors: Comply with frame requirements in accordance with corresponding door.
G. Borrowed Lites Glazing Frames: Construction and face dimensions to match door frames, and as indicated on drawings.

2.05 FINISHES
A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.06 ACCESSORIES
A. Glazing: As specified in Section 088000, factory installed.
B. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
C. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 PREPARATION
A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

3.03 INSTALLATION
A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
B. Install fire rated units in accordance with NFPA 80.
C. Coordinate frame anchor placement with wall construction.
D. Install door hardware as specified in Section 087100.

END OF SECTION 081113

SECTION 081416
FLUSH WOOD DOORS

PART 1 GENERAL
1.01 REFERENCE STANDARDS
A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
C. WDMA I.S. 1A - Interior Architectural Wood Flush Doors; 2021, with Errata.

1.02 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Wood Veneer Faced Doors:
1. Haley Brothers:www.haleybros.com/#sle.
2. Masonite Architectural; Aspiro Select Wood Veneer Doors: www.architectural.masonite.com/#sle.
3. VT Industries, Inc:www.vtindustries.com/#sle.
B. Lead-Lined Wood Doors:
1. Construction Specialties, Inc; Acrovyn Flush Doors, Lead Lined and 20 Minute Fire Rated: www.c-sgroup.com/#sle.

2.02 DOORS AND PANELS
A. Doors: See drawings for locations and additional requirements.
1. Quality Standard: Premium Grade,Heavy Dutyperformance, in accordance with WDMA I.S. 1A.
2. Wood Veneer Faced Doors: 5-ply unless otherwise indicated.
B. Interior Doors: 1-3/4 inches (44 mm) thick unless otherwise indicated; flush construction.
1. Provide solid core doors at each location.
2. Woodveneer facing with factorytransparent finishas indicated on drawings.

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN
CLIENT:
Nuvance Health
CONSULTANT:

NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

PROJECT:

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024
DRAWN BY: NF
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
SPECIFICATIONS

DRAWING NO.
G005

Plot Date: 7/15/2024 9:38:26 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GXZE.rvt

2.03 DOOR AND PANEL CORES
A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC), plies and faces as indicated.
B. Fire-Rated Doors: Mineral core type, with fire resistant composite core (FD), plies and faces as indicated above; with core blocking as required to provide adequate anchorage of hardware without through-bolting.
C. Lead Lined Doors: Equivalent to type, with bonded particleboard core (PC) with continuous lead sheet from edge to edge in center of core or between crossband and core; lead thickness; plies and faces as indicated above.
2.04 DOOR FACINGS
A. Veneer Facing for Transparent Finish: Species as specified on drawings, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face.
1. "Running Match" each pair of doors and doors in close proximity to each other.
2.05 DOOR CONSTRUCTION
A. Fabricate doors in accordance with door quality standard specified.
B. Cores Constructed with stiles and rails:
1. Provide solid blocks at lock edge for hardware reinforcement.
2. Provide solid blocking for other throughbolted hardware.
C. Glazed Openings: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings.
D. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
E. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.
F. Provide edge clearances in accordance with the quality standard specified.
2.06 FINISHES - WOOD VENEER DOORS
A. Finish work in accordance with WDMA I.S. 1A for grade specified and as follows:
1. Transparent:
a. System - TR-6, Catalyzed Polyurethane.
b. Sheen: Satin.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.
3.02 INSTALLATION
A. Install doors in accordance with manufacturer's instructions and specified quality standard.
B. Factory-Finished Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.
C. Use machine tools to cut or drill for hardware.
D. Coordinate installation of doors with installation of frames and hardware.

END OF SECTION 081416

SECTION 087100
DOOR HARDWARE

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Hardware for wood and hollow metaldoors.
B. Hardware for fire-rated doors.
C. Electrically operated and controlled hardware.
1.02 RELATED REQUIREMENTS
A. Section 281000 - Access Control: Electronic access control devices.
1.03 REFERENCE STANDARDS
A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
B. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.
C. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; 2022.
D. UL (DIR) - Online Certifications Directory; Current Edition.
E. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.
1.04 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
2. Provide complete description for each door listed.

PART 2 PRODUCTS
2.01 DESIGN AND PERFORMANCE CRITERIA
A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
B. Provide individual items of single type, of same model, and by same manufacturer.
C. Provide door hardware products that comply with the following requirements:
1. Applicable provisions of federal, state, and local codes.
2. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
3. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
D. Electrically Operated and/or Controlled Hardware: Provide necessary power supplies, power transfer hinges, relays, and interfaces as required for proper operation; provide wiring between hardware and control components and to building power connection in compliance with NFPA 70.
E. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. See Door Hardware Schedule.
2.02 FINISHES
A. Finishes: Identified in Door Hardware Schedule.

PART 3 EXECUTION
3.01 INSTALLATION
A. Install hardware in accordance with manufacturer's instructions and applicable codes.
B. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
C. Use templates provided by hardware item manufacturer.
D. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.
3.02 ADJUSTING
A. Adjust hardware for smooth operation.
B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

END OF SECTION 087100

DIVISION 09 - FINISHES

SECTION 090561
COMMON WORK RESULTS FOR FLOORING PREPARATION

PART 1 GENERAL
1.01 SECTION INCLUDES
A. This section applies to floors identified in Contract Documents that are receiving the following types of floor coverings:
1. Resilient tile and sheet.
2. Carpet tile.
3. Thin-set ceramic tile and stone tile.
B. Removal of existing floor coverings.
C. Preparation of new and existing concrete floor slabs for installation of floor coverings.
D. Testing of concrete floor slabs for moisture and alkalinity (pH).
E. Patching compound.
F. Remedial floor coatings.
1.02 REFERENCE STANDARDS
A. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50 mm] Cube Specimens); 2021.
B. ASTM C472 - Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters, and Gypsum Concrete; 2020.
C. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; 2022.
D. RFCI (RWP) - Recommended Work Practices for Removal of Resilient Floor Coverings; 2011.
1.03 QUALITY ASSURANCE

PART 2 PRODUCTS
2.01 MATERIALS
A. Patching Compound: Floor covering manufacturer's recommended product, suitable for conditions, and compatible with adhesive and floor covering. In the absence of any recommendation from flooring manufacturer, provide a product with the following characteristics:
1. Cementitious moisture-, mildew-, and alkali-resistant compound, compatible with floor, floor covering, and floor covering adhesive, and capable of being feathered to nothing at edges.
2. Compressive Strength: 3000 psi, minimum, after 28 days, when tested in accordance with ASTM C109/C109M or ASTM C472, whichever is appropriate.
B. Alternate Flooring Adhesive: Floor covering manufacturer's recommended product, suitable for the moisture and pH conditions present; low-VOC. In the absence of any recommendation from flooring manufacturer, provide a product recommended by adhesive manufacturer as suitable for substrate and floor covering and for conditions present.
C. Remedial Floor Coating: Single- or multi-layer coating or coating/overlay combination intended by its manufacturer to resist water vapor transmission to degree sufficient to meet flooring manufacturer's emission limits, resistant to the level of alkalinity (pH) found, and suitable for adhesion of flooring without further treatment.

PART 3 EXECUTION
3.01 CONCRETE SLAB PREPARATION
A. Perform following operations in the order indicated:
1. Preliminary cleaning.
2. Moisture vapor emission tests; 3 tests in the first 1000 square feet (100 square meters) and one test in each additional 1000 square feet (100 square meters), unless otherwise indicated or required by flooring manufacturer.
3. Internal relative humidity tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
4. Alkalinity (pH) tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
5. Specified remediation, if required.
6. Patching, smoothing, and leveling, as required to meet the requirements of the specified flooring manufacturer. For large format tile (greater than 15" on one edge), level concrete sub-floor to achieve deviations in flatness no greater than 1/8" in 10'.
7. Other preparation specified.
8. Adhesive bond and compatibility test.
9. Protection.
3.02 REMOVAL OF EXISTING FLOOR COVERINGS
A. Comply with local, State, and federal regulations and recommendations of RFCI (RWP), as applicable to floor covering being removed.
B. Dispose of removed materials in accordance with local, State, and federal regulations and as specified.
3.03 MOISTURE VAPOR EMISSION TESTING
A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
B. Where this specification conflicts with the referenced test method, comply with the requirements of this section.
C. Test in accordance with ASTM F1869 and as follows.
D. Plastic sheet test and mat bond test may not be substituted for the specified ASTM test method, as those methods do not quantify the moisture content sufficiently.
E. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if test values exceed 3 pounds per 1000 square feet (1.4 kg per 93 square meters) per 24 hours.
F. Report: Report the information required by the test method.
3.04 ALKALINITY TESTING
A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
B. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if alkalinity (pH) test value is over 10.
3.05 ADHESIVE BOND AND COMPATIBILITY TESTING
A. Comply with requirements and recommendations of floor covering manufacturer.
3.06 APPLICATION OF REMEDIAL FLOOR COATING
A. Comply with requirements and recommendations of coating manufacturer.

END OF SECTION 090561

SECTION 092116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Performance criteria for gypsum board assemblies.
B. Metal stud wall framing.
C. Metal channel ceiling framing.
D. Acoustic insulation.
E. Cementitious backing board.
F. Gypsum wallboard.
G. Joint treatment and accessories.
1.02 RELATED REQUIREMENTS
A. Section 061000 - Rough Carpentry: Wood blocking product and execution requirements.
1.03 REFERENCE STANDARDS
A. AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing; 2020.
B. AISI S240 - North American Standard for Cold-Formed Steel Structural Framing; 2015, with Errata (2020).
C. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units; 2018.
D. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 2019.
E. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members; 2015.
F. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2017 (Reapproved 2022).
G. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2023.
H. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2020.
I. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2020.
J. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2019.
K. ASTM C1325 - Standard Specification for Fiber-Mat Reinforced Cementitious Backer Units; 2022.
L. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.
M. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.
N. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).
O. ASTM E413 - Classification for Rating Sound Insulation; 2022.
P. GA-216 - Application and Finishing of Gypsum Panel Products; 2021.
1.04 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data:
1. Provide data on metal framing, gypsum board, accessories, and joint finishing system.

PART 2 PRODUCTS
2.01 GYPSUM BOARD ASSEMBLIES
A. Provide completed assemblies complying with ASTM C840 and GA-216.
B. See architectural drawings for partition type assemblies.
C. Interior Partitions, Indicated as Acoustic: Provide completed assemblies with the following characteristics:
1. Acoustic Attenuation: STC as indicated calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.
2.02 METAL FRAMING MATERIALS
A. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S240.
B. Nonstructural Framing System Components: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa).
1. Studs: C-shaped with knurled or embossed faces.
a. Stud width: Refer to drawings.
b. Stud gauge: Limit 25-gage studs to 10 foot high partitions or less, provide 20-gage studs for partition heights greater than 10 feet.
2. Runners: U shaped, sized to match studs.
3. Ceiling Channels: C-shaped.ASTM C754, roll-formed steel, 16-gage x 1 1/2 inch wide flange, minimum. Provide deflection track whenever framing to underside of structure.
4. Furring Members: Hat-shaped sections, minimum 25 gage, minimum depth of 7/8 inch (22 mm).
5. Resilient Furring Channels: Single or double leg configuration; 1/2 inch (13 mm) channel depth.
C. Shaft Wall Studs and Accessories: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 and specified performance requirements.
D. Grid Suspension Systems: Steel grid system of main tees and support bars connected to structure using hanging wire.
2.03 BOARD MATERIALS
A. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
2. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
B. Abuse Resistant Wallboard:
1. Application: High-traffic areas indicated.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
C. Backing Board For Wet Areas: One of the following products:
1. Application: Surfaces behind tile in wet areas.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
3. ANSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with glass fiber mesh embedded in front and back surfaces complying with ANSI A118.9 or ASTM C1325.
D. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place; ends square cut.
1. Application: Vertical surfaces behind thinset tile, except in wet areas.
2. Edges: Tapered.
E. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings, unless otherwise indicated.
F. Shaftwall and Coreboard: Type X; 1 inch (25 mm) thick by 24 inches (600 mm) wide, beveled long edges, ends square cut.
2.04 GYPSUM BOARD ACCESSORIES
A. Acoustic Insulation: ASTM C665; preformed mineral-fiber, friction fit type, unfaced; see partition types for wall thickness.
1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.
2. Smoke Developed Index: 50 or less, when tested in accordance with ASTM E84.
B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
C. Fire Rated Acoustic Sealant: Acrylic, latex based, skinning, UL classified for use in conjunction with fire rated gypsum board assemblies.
D. Beads, Joint Accessories, and Other Trim: ASTM C1047, rigid plastic, galvanized steel, or rolled zinc, unless noted otherwise.
E. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify that project conditions are appropriate for work of this section to commence.
3.02 SHAFT WALL INSTALLATION
A. Shaft Wall Framing: Install in accordance with manufacturer's installation instructions.
3.03 FRAMING INSTALLATION
A. Metal Framing: Install in accordance with AISI S220 and manufacturer's instructions.
B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
C. Blocking: Install wood blocking(fire retardant treated blocking in fire rated assemblies) for support of:
1. Wall-mounted cabinets.
2. Plumbing fixtures.
3. Toilet partitions.
4. Toilet accessories.
5. Wall-mounted door hardware.
6. Other wall mounted items such as signage.
7. As indicated on drawings.
3.04 ACOUSTIC ACCESSORIES INSTALLATION
A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.
B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
3.05 BOARD INSTALLATION
A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
B. Cementitious Backing Board: Install over steel framing members and plywood substrate where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.
3.06 INSTALLATION OF TRIM AND ACCESSORIES
A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
1. Not more than 30 feet (10 meters) apart on walls and ceilings over 50 feet (16 meters) long.
2. At exterior soffits, not more than 30 feet (10 meters) apart in both directions.
B. Corner Beads: Install at external corners, using longest practical lengths.
3.07 JOINT TREATMENT
A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish, walls indicated to receive wallcovering and/or graphics and other areas specifically indicated.
2. Level 4: Walls and ceilings to receive paint finish, unless otherwise indicated.
3. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.
B. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).
C. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

END OF SECTION 092116

SECTION 095100
ACOUSTICAL CEILINGS

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Suspended metal grid ceiling system.
B. Acoustical units.
1.02 REFERENCE STANDARDS
A. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2022.
B. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019.
C. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2022.
D. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2022.
1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Provide data on suspension system components and acoustical units.

PART 2 PRODUCTS
2.01 ACOUSTICAL UNITS
A. Acoustical Panels: Painted mineral fiber, Manufacturer and Model as indicated on drawings, with the following characteristics:
1. Classification: ASTM E1264 Type III.
2. Suspension System: Exposed grid.
2.02 SUSPENSION SYSTEM(S)
A. Metal Suspension Systems: By same manfacturer as Acoustical Panels as indicated on drawings; Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold down clips, stabilizer bars, clips, and splices as required.

PART 3 EXECUTION
3.01 INSTALLATION - SUSPENSION SYSTEM
A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.
B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
C. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
D. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
E. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
F. Support fixture loads using supplementary hangers located within 6 inches (152 mm) of each corner, or support components independently.
G. Do not eccentrically load system or induce rotation of runners.
3.02 INSTALLATION - ACOUSTICAL UNITS
A. Install acoustical units in accordance with manufacturer's instructions.
B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
C. Fit border trim neatly against abutting surfaces.
D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
E. Cutting Acoustical Units:
1. Make field cut edges of same profile as factory edges.

END OF SECTION 095100

SECTION 099123
INTERIOR PAINTING

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Surface preparation.
B. Field application of paints.
C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
D. Do Not Paint or Finish the Following Items:
1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
2. Items indicated to receive other finishes.
3. Items indicated to remain unfinished.
4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
5. Floors, unless specifically indicated.
6. Glass.
7. Concealed pipes, ducts, and conduits.
1.02 REFERENCE STANDARDS
A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.
1.03 SUBMITTALS
A. See Section 013000 - Administrative Requirements, for submittal procedures.
B. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
2. MPI product number (e.g., MPI #47).

PART 2 PRODUCTS
2.01 PAINTS AND FINISHES - GENERAL
A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Supply each paint material in quantity required to complete entire project's work from a single production run.
3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
2.02 PAINT SYSTEMS - INTERIOR
A. Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry units, brick, wood, plaster, uncoated steel, shop primed steel, galvanized steel, aluminum, and acoustical ceilings.
1. Two top coats and one coat primer.
2. Top Coat(s): Institutional Low Odor/VOC Interior Latex; MPI #143, 144, 145, 146, 147, or 148.

PART 3 EXECUTION
3.01 PREPARATION
A. Clean surfaces thoroughly and correct defects prior to application.
B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
D. Seal surfaces that might cause bleed through or staining of topcoat.
3.02 APPLICATION
A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
D. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
E. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

END OF SECTION 099123

DIVISION 10 - SPECIALTIES

SECTION 104400
FIRE PROTECTION SPECIALTIES

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Fire extinguishers.
B. Fire extinguisher cabinets.
1.02 REFERENCE STANDARDS
A. ASTM E814 - Standard Test Method for Fire Tests of Penetration Firestop Systems; 2013a (Reapproved 2017).
B. FM (AG) - FM Approval Guide; Current Edition.
C. NFPA 10 - Standard for Portable Fire Extinguishers; 2022.
D. UL (DIR) - Online Certifications Directory; Current Edition.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Fire Extinguishers:
1. Kidde, a unit of United Technologies Corp; www.kidde.com/#sle.
2. Potter-Roemer; www.potterroemer.com/#sle.
B. Fire Extinguisher Cabinets and Accessories:
1. Kidde, a unit of United Technologies Corp; www.kidde.com/#sle.
2. Larsen's Manufacturing Co; www.larsensmfg.com/#sle.
3. Potter-Roemer; www.potterroemer.com/#sle.
2.02 FIRE EXTINGUISHERS
A. Fire Extinguishers - General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent.
1. Provide extinguishers labeled by UL (DIR) or FM (AG) for purpose specified and as indicated.
B. Multipurpose Dry Chemical Type Fire Extinguishers: Carbon steel tank, with pressure gauge.
1. Class: A:B:C type.
2. Temperature range: Minus 40 degrees F (Minus 40 degrees C)to 120 degrees F (49 degrees C).
2.03 FIRE EXTINGUISHER CABINETS
A. Fire Rating: Listed and labeled in accordance with ASTM E814 requirements for fire resistance rating of walls where being installed.
B. Fire Rated Cabinet Construction: One-hour fire rated.
C. Cabinet Configuration: Semi-recessed type unless noted otherwise.
1. Size to accommodate accessories.

PART 3 EXECUTION
3.01 INSTALLATION
A. Install in accordance with manufacturer's instructions.
3.02 MAINTENANCE
A. See Section 017000 - Execution and Closeout Requirements, for additional requirements relating to maintenance service.

END OF SECTION 104400

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN
CLIENT:
Nuvance Health
CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024
DRAWN BY: NF
CHECKED BY: NF
PROJECT NUMBER: 22559
Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
SPECIFICATIONS

DRAWING NO.
G006

Plot Date: 7/15/2024 9:38:27 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

DIVISION 12 - FURNISHINGS

SECTION 123200
MANUFACTURED WOOD CASEWORK

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Manufactured standard and custom casework, with cabinet hardware.
B. Countertops.
1.02 DEFINITIONS
A. Exposed: Portions of casework visible when drawers and cabinet doors are closed, including end panels, bottoms of cases more than 42 inches (1.066 m) above finished floor, tops of cases less than 72 inches (1.82 m) above finished floor and all members visible in open cases or behind glass doors.
B. Semi-Exposed: Portions of casework and surfaces behind solid doors, tops of cases more than 72 inches (1.828 m) above finished floor and bottoms of cabinets more than 30 inches (0.762 m) but less than 42 inches (1.066 m) above finished floor.
C. Concealed: Sleepers, web frames, dust panels and other surfaces not generally visible after installation and cabinets less than 30 inches (762 mm) above finished floor.
1.03 REFERENCE STANDARDS
A. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test; 2015 (Reaffirmed 2020).
B. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.
C. ASTM C1036 - Standard Specification for Flat Glass; 2021.
D. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.
E. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
F. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
G. BHMA A156.9 - Cabinet Hardware; 2020.
H. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2020.
I. ISFA 2-01 - Classification and Standards for Solid Surfacing Material; 2013.
J. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
1.04 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Shop Drawings: Indicate casework types, sizes, and locations, using large scale plans, elevations, and cross sections (details at 1 1/2"=1'-0" scale min.) Include rough-in and anchors and reinforcements, placement dimensions and tolerances, clearances required, and keying information.
C. Maintenance Data: Manufacturer's recommendations for care and cleaning.
D. Finish touch-up kit for each type and color of materials provided.
1.05 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.
B. Installer Qualifications: Company specializing in performing work of the type specified in this section, with not less than three years of documented experience and approved by manufacturer.
1.06 DELIVERY, STORAGE, AND HANDLING
A. Protect items provided by this section, including finished surfaces and hardware items during handling and installation. For metal surfaces, use polyethylene film or other protective material standard with the manufacturer.
B. Acceptance at Site:
1. Do not deliver or install casework until the conditions specified under Part 3, Examination Article of this section have been met. Products delivered to sites that are not enclosed and/or improperly conditioned will not be accepted if warping or damage due to unsatisfactory conditions occurs.
C. Storage:
1. Store casework in the area of installation. If necessary, prior to installation, temporarily store in another area, meeting the environmental requirements specified under Part 3, "Site Verification of Conditions" Article of this section.

PART 2 PRODUCTS
2.01 CASEWORK, GENERAL
A. Quality Standard: AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
2.02 FABRICATION
A. Assembly: Shop assemble casework items for delivery to site in units easily handled and to permit passage through building openings.
B. Construction: As required for selected grade.
C. Removable back panels on all base cabinets. Provide partial height back panels at sink cabinets.
D. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
E. Scribes and Fillers: Panels of matching construction and finish, for locations where cabinets do not fit tight to adjacent construction.
F. Apron Frames: Construction similar to other cabinets, with modifications.
G. Countertop Panel-Type Supports: Materials similar to adjacent casework, 1-1/2 inch (38 mm) in width, with front-to-back and toe space dimensions matching base cabinet. Designed to be secured in a concealed fashion to countertop material. Include two leveling devices per support panel.
2.03 WOOD-VENEER-FACED CASEWORK
A. Wood-Veneer-Faced Casework: Solid wood and wood panel construction; each unit self-contained and not dependent on adjacent units or building structure for rigidity; in sizes necessary to avoid field cutting except for scribes and filler panels. Include adjustable levelers for base cabinets.
1. Style: Flush overlay. Ease doors and drawer fronts slightly at edges.
2. Cabinet Nominal Dimensions: Unless otherwise indicated, provide cabinets of widths and heights indicated on drawings, and with following front-to-back dimensions:
a. Base Cabinets: 24 inches (610 mm).
b. Tall Cabinets: 24 inches (559 mm).
c. Wall Cabinets: 15 inches (406 mm).
3. Finishes:
a. Exposed Exterior Surfaces: HPVA HP-1 Grade A, Ash, plain sliced, random-matched.
b. Exposed Interior Surfaces: HPVA HP-1 Grade B, Ash, plain sliced, random-matched.
c. Semi-Exposed Surfaces: HPVA HP-1 Grade B, Ash, plain sliced, random-matched.
d. Concealed Surfaces: Manufacturer's option.
2.04 PLASTIC-LAMINATE-CLAD CASEWORK
A. Plastic-Laminate-Clad Casework: Solid wood and wood panel construction; each unit self-contained and not dependent on adjacent units or building structure for rigidity; in sizes necessary to avoid field cutting except for scribes and filler panels. Include adjustable levelers for base cabinets.
1. Style: Flush overlay. Ease doors and drawer fronts slightly at edges.
2. Cabinet Nominal Dimensions: Unless otherwise indicated, provide cabinets of widths and heights indicated on drawings, and with following front-to-back dimensions:
a. Base Cabinets: 24 inches (559 mm).
b. Tall Cabinets: 24 inches (559 mm).
c. Wall Cabinets: 15 inches (406 mm).
3. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline.
a. Finish: Matte or suede, gloss rating of 5 to 20.
2.05 SOLID PHENOLIC CASEWORK
A. Solid Phenolic Casework: Solid phenolic panel construction; each unit self-contained and not dependent on adjacent units or building structure for rigidity; in sizes necessary to avoid field cutting except for scribes and filler panels. Include adjustable levelers for base cabinets.
1. Style: Flush overlay. Ease doors and drawer fronts slightly at edges.
2. Cabinet Nominal Dimensions: Unless otherwise indicated, provide cabinets of widths and heights indicated on drawings, and with following front-to-back dimensions:
a. Base Cabinets: 24 inches (610 mm).
b. Tall Cabinets: 24 inches (559 mm).
c. Wall Cabinets: 15 inches (406 mm).
2.06 THERMALLY FUSED LAMINATE CASEWORK
A. Thermally Fused Laminate Casework: Thermally fused laminate panel construction; each unit self-contained and not dependent on adjacent units or building structure for rigidity; in sizes necessary to avoid field cutting except for scribes and filler panels. Include adjustable levelers for base cabinets.
1. Style: Flush overlay. Ease doors and drawer fronts slightly at all edges.
2. Cabinet Nominal Dimensions: Unless otherwise indicated, provide cabinets of widths and heights indicated on drawings, and with following front-to-back dimensions:
a. Base Cabinets: 24 inches (610 mm).
b. Tall Cabinets: 24 inches (559 mm).
c. Wall Cabinets: 15 inches (406 mm).
2.07 COUNTERTOPS
A. Types: More than one type is required. See drawings for location of each type of countertop.
B. Stainless Steel Countertops: Manufacturer's standard alloy and gauge.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
C. Plastic Laminate Countertops: High pressure decorative laminate sheet bonded to substrate.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
2. Fabricate in accordance with manufacturer's standard requirements.
D. Solid Phenolic Countertops: Self-supporting high pressure laminate panel with decorative surface over structural members.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
2. Fabricate in accordance with manufacturer's standard requirements.
E. Epoxy Resin Countertops: Filled epoxy resin molded into homogenous, non-porous sheets; no surface coating and color and pattern consistent throughout thickness; with integral or adhesively seamed components.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
2. Fabricate in accordance with manufacturer's standard requirements.
F. Solid Surfacing Countertops: Solid surfacing sheet or plastic resin casting over continuous substrate.
1. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
2. Manufacturer's standard configuration for exposed edges, back and end splashes.
3. Fabricate in accordance with manufacturer's standard requirements..
G. Natural Quartz and Resin Composite Countertops: Sheet or slab of natural quartz and plastic resin over continuous substrate.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
2. Fabricate in accordance with manufacturer's standard requirements.
H. Natural Stone Countertops: Stone slabs bonded to substrate; use as large pieces as possible with inconspicuous adhesive joints.
1. Manufacturer's standard configuration for exposed edges, back and end splashes.
2. Fabricate in accordance with manufacturer's standard requirements.
2.08 CABINET HARDWARE
A. Manufacturer's standard types, styles and finishes.
B. Comply with BHMA A156.9 requirements.
2.09 MATERIALS
A. Wood-Based Materials:
1. Solid Wood: Air-dried to 4.5 percent moisture content, then tempered to 6 percent moisture content before use.
2. Composite Wood Panels: Containing no urea-formaldehyde resin binders.
B. Stainless Steel Sheet: ASTM A666 Type 304.
C. Glass: Fully tempered float; ASTM C1036, Type 1, Quality Q3; ASTM C1048, tempered using horizontal tempering and complying with ANSI Z97.1; 3/16 inch (4.5 mm) thick minimum; exposed edges ground, and cut or drilled to receive hardware; clear.
2.10 ACCESSORIES
A. Plastic Edge Banding: Extruded PVC, convex shaped; smooth finish; self locking serrated tongue; of width to match component thickness.
B. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
C. Concealed Joint Fasteners: Corrosion-resistant, standard with manufacturer.
D. Grommets: Standard plasticgrommets for cut-outs, in color tomatch adjacent surface.

PART 3 EXECUTION
3.01 PREPARATION
A. Large Components: Ensure that large components can be moved into final position without damage to other construction.
3.02 EXAMINATION
A. Site Verification of Environmental Conditions:
1. Do not deliver casework until the following conditions have been met:
a. Building has been enclosed (windows and doors sealed and weather-tight).
b. An operational HVAC system that maintains temperature and humidity at occupancy levels has been put in place.
c. Ceiling, overhead ductwork, piping, and lighting have been installed.
d. Installation areas do not require further "wet work" construction.
B. Verify adequacy of support framing and anchors.
C. Verify that service connections are correctly located and of proper characteristics.
3.03 INSTALLATION
A. Perform installation in accordance with manufacturer's instructions.
B. Use anchoring devices to suit conditions and substrate materials encountered. Use concealed fasteners to the greatest degree possible. Use exposed fasteners only where allowed by approved shop drawings, or where concealed fasteners are impracticable.
C. Set casework items plumb and square, securely anchored to building structure.
D. Align cabinets to adjoining components, install filler and/or scribe panels where necessary to close gaps.
E. Fasten together cabinets in continuous runs, with joints flush, uniform and tight. Misalignment of adjacent units not to exceed 1/16 inch (1.6 mm). In addition, do not exceed the following tolerances:
1. Variation of Tops of Base Cabinets from Level: 1/16 inch (1.6 mm) in 10 feet (3 m).
2. Variation of Faces of Cabinets from a True Plane: 1/8 inch (3 mm) in 10 feet (3 m).
3. Variation of Adjacent Surfaces from a True Plane (Lippage): 1/32 inch (0.8 mm).
4. Variation in Alignment of Adjacent Door and Drawer Edges: 1/16 inch (1.6 mm).
F. Base Cabinets: Fasten cabinets to service space framing and/or wall substrates, with fasteners spaced not more than 16 inches (407 mm) on center. Bolt adjacent cabinets together with joints flush, tight, and uniform.
G. Install hardware uniformly and precisely.
H. Countertops: Install countertops intended and furnished for field installation in one true plane, with ends abutting at hairline joints, and no raised edges.
I. Replace units that are damaged, including those that have damaged finishes.
3.04 CLEANING
A. Clean casework and other installed surfaces thoroughly.
3.05 PROTECTION
A. Do not permit finished casework to be exposed to continued construction activity.
B. Protect casework and countertops from ongoing construction activities. Prevent workmen from standing on, or storing tools and materials on casework or countertops.
C. Repair damage, including to finishes, that occurs prior to Date of Substantial Completion, using methods prescribed by manufacturer; replace units that cannot be repaired to like-new condition.

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN
CLIENT:
Nuvance Health
CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

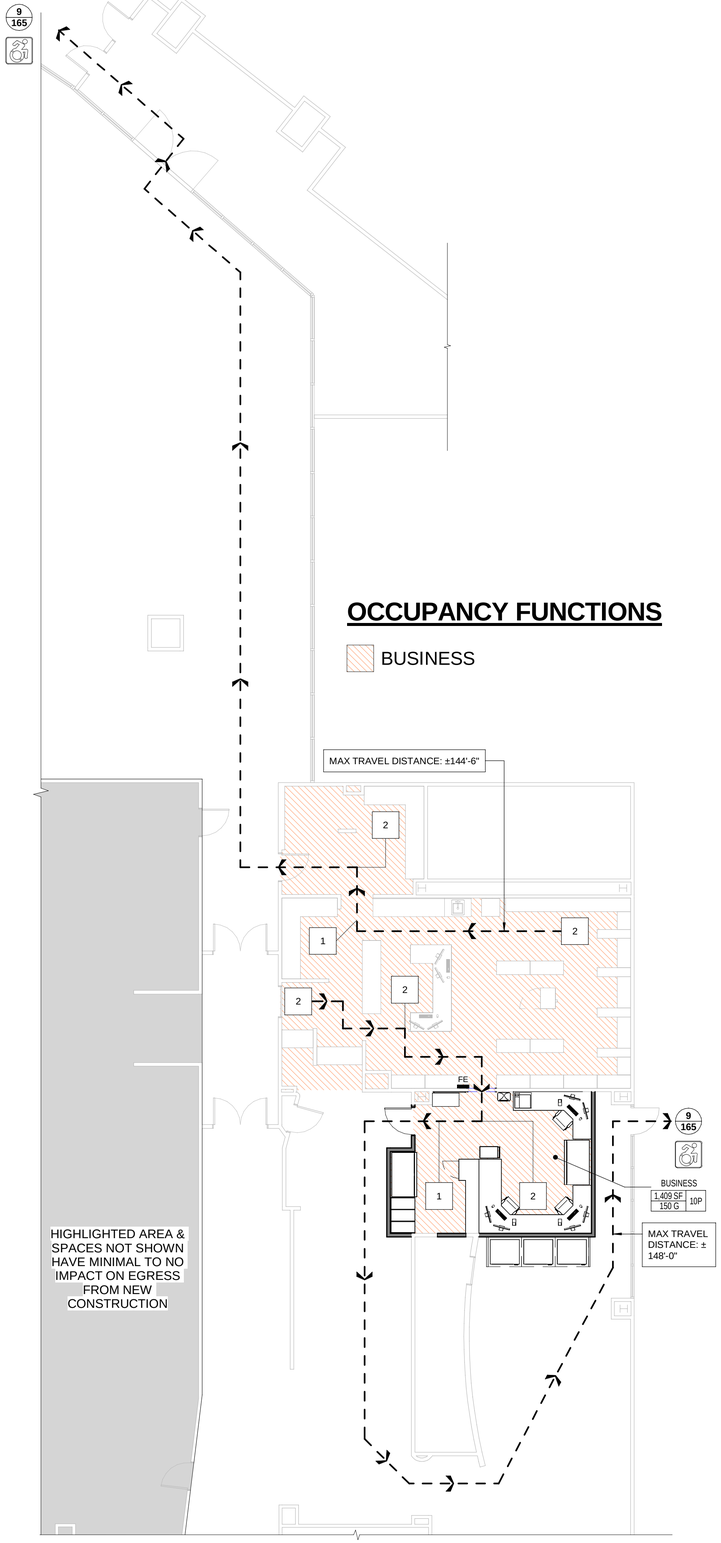
DRAWN BY: NF
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
SPECIFICATIONS

DRAWING NO.
G007

Plot Date: 7/15/2024 9:38:27 AM Dwg Filename: C:\Usersic_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2EI.rvt



1 **FIRST FLOOR EGRESS & OCCUPANCY PLAN - PER IBC TABLE: 1004.1.2**
1/8" = 1'-0"

CODE SYMBOLS LEGEND

CALCULATED OCCUPANCY LOAD	(###) NAME — NUMBER & NAME; OCCUPANCY FUNCTION; ##### SF — AREA (SQFT); ### G — OCCUPANT LOAD; ##P — OCCUPANCY LOAD FACTOR (GROSS OR NET)
EXIT CAPACITY	10 / 360 — ACTUAL EGRESS LOAD; MAXIMUM EGRESS CAPACITY
HANDICAP ACCESSIBLE ROUTE	ACCESSIBLE ROUTE; HEARING ACCESSIBLITY
FIRE EXTINGUISHER	FE — FIRE EXTINGUISHER
PROJECT SCOPE LIMITS	NIC — AREA NOT IN CONTRACT, UNLESS NOTED OTHERWISE
MAXIMUM COMMON PATH OF TRAVEL	
MAXIMUM TRAVEL DISTANCE W/ ACCUMULATED OCCUPANT LOAD	EGRESS PATH START; EGRESS DIRECTION; 10; 37; TRAVEL DISTANCE: ± 0'-0"; EGRESS PATH; 27; ACCUMULATED OCCUPANCY; NSO — NON SIMULANTOUS OCCUPANCY

FIRE RATING LEGEND

SYMBOL	PARTITION	OPENINGS *
# # U.N.O.	THREE HOUR RATED FIRE/SMOKE WALL	3 HR
# # U.N.O.	TWO HOUR RATED FIRE BARRIER	90 MIN
# # U.N.O.	TWO HOUR RATED FIRE/SMOKE WALL	90 MIN
# # U.N.O.	ONE HOUR RATED FIRE BARRIER	60 MIN 45 MIN
# # U.N.O.	ONE HOUR RATED SMOKE BARRIER	45 MIN 20 MIN
# # U.N.O.	SMOKE RESISTIVE PARTITION	SMOKE RESIST/ LATCH

*SEE OPENING SCHEDULE FOR PROTECTION REQUIREMENT WHERE MULTIPLE RATINGS ARE LISTED.
NOTE: LIFE SAFETY PLAN IS BEST VIEWED IN COLOR.

OCCUPANCY ANALYSIS - PER IBC TABLE 1004.1.2

USE GROUP	OCCUPANCY FUNCTION	AREA	LOAD FACTOR	CALCULATED OCCUPANCY
FIRST FLOOR				
I-2	BUSINESS	1,409 SF	150 SF	10
		1,409 SF		10
TOTAL CALCULATED SF & OCCUPANT LOAD		1,409 SF		10

NOTE:
THE REMAINDER OF NORWALK HOSPITAL'S OCCUPANCY LOADS, FUNCTIONS, AND EGRESS PATHS ARE EXISTING TO REMAIN.

CONNECTICUT APPLICABLE CODES

CODE	CODE SECTION(S)
BUILDING CODE	2021 IBC PORTION OF THE 2022 CT STATE BUILDING CODE ADOPTS WITH AMENDMENTS: INTERNATIONAL BUILDING CODE 2021 (IBC 2021)
PLUMBING CODE	2021 IPC PORTION OF THE 2022 CONNECTICUT STATE BULDING CODE ADOPTS WITH AMENDMENTS: 2021 INTERNATIONAL PLUMBING CODE (IPC 2021)
MECHANICAL CODE	2021 IMC PORTION OF THE 2022 CONNECTICUT STATE BUILDING CODE ADOPTS WITH AMENDMENTS: 2021 INTERNATIONAL MECHANICAL CODE (IMC 2021)
ELECTRICAL CODE	2020 NFPA 70 PORTION OF THE 2018 CT STATE BUILDING CODE ADOPTS WITH AMENDMENTS: NFPA 70, 2020
LIFE SAFETY CODE	2022 CONNECTICUT STATE FIRE PREVENTION CODE ADOPTS WITH AMENDMENTS: NFPA 1, 2021
ACCESSIBILITY	ACCESSIBLE AND USABLE BUILDING AND FACILITIES 2017 OF CONNECTICUT ADOPTS WITH AMENDMENTS: A117.1, 2017
ENERGY CODE COMPLIANCE	2021 IECC PORTION OF THE 2022 CONNECTICUT STATE BUILDING CODE ADOPTS WITH AMENDMENTS: INTERNATIONAL ENERGY CONSERVATION CODE 2021 (IECC 2021)
EXISTING BUILDING CODE	2021 IEBC PORTION OF THE 2022 CONNECTICUT STATE BUILDING CODE ADOPTS WITH AMENDMENTS: INTERNATIONAL EXISTING BUILDING CODE 2021 (IEBC 2021)

PROJECT DATA

ITEM	CODE SECTION(S)	
CONSTRUCTION TYPE	IBC: 601	TYPE II A
USE & OCCUPANCY CLASSIFICATION	IBC: 302	I-2
TABULAR ALLOWABLE BUILDING HEIGHT	IBC: TABLE 504.3 & 504.4	(I-2) = 85'-0", 3 STORY(S) MAX - SPRINKLERED
ACTUAL BUILDING HEIGHT		ETR
TABULAR ALLOWABLE BUILDING AREA	IBC: TABLE 506.2	(I-2) = 45,000 SF - WITH SPRINKLER SYSTEM
ACTUAL BUILDING AREA		ETR
FIRE SUPPRESSION	IBC: 903.3.1.1	SPRINKLERED
FIRE DETECTION	IBC: 907	PROVIDED
TOTAL BUILDING OCCUPANT LOAD	IBC: TABLE 1004.5	EXISTING TO REMAIN
AREA OF REFUGE	IBC: 1009.3.3	N/A
COMMON PATH OF TRAVEL	IBC: TABLE 1006.2.1	(I-2) (75') WITH SPRINKLER SYSTEM
MAX TRAVEL DISTANCE	IBC: TABLE 1017.2	(I-2) (200') WITH SPRINKLER SYSTEM
CORRIDOR WIDTH	IBC: TABLE 1020.3	44", MINIMUM
DEAD END CORRIDOR	IBC: TABLE 1020.5	(I-2) NO MORE THEN 20' WITH SPRINKLER SYSTEM
NUMBER OF EXITS	IBC: TABLE 1006.3.3	ETR
SMOKE PARTITIONS	IBC: 407.3	(I-2) REQUIRED

FIRE RESISTANCE RATINGS

ITEM	CODE SECTION(S)		
PRIMARY FRAME STRUCTURE	IBC: TABLE 601	1 HOUR(S)	
BEARING WALLS		EXTERIOR: 1 HOUR(S)	
		INTERIOR: 1 HOUR(S)	
NON-BEARING WALLS		EXTERIOR: 0 HOUR(S)	
		INTERIOR: 0 HOUR(S)	
FLOOR CONSTRUCTION		1 HOUR(S)	
ROOF CONSTRUCTION		1 HOUR(S)	
SHAFT ENCLOSURES	IBC: 713.4	2 HOUR(S) WHEN 4 STORIES OR MORE, 1 HOUR WHEN LESS THAN 4 STORIES	
EXIT ENCLOSURES	IBC: 1023.2	2 HOUR(S) WHEN 4 STORIES OR MORE, 1 HOUR WHEN LESS THAN 4 STORIES	
CORRIDORS	IBC: TABLE 1020.2	0 HOUR(S) WITHOUT SPRINKLER SYSTEM	
DOOR RATINGS	IBC: TABLE 716.2	1 HOUR(S) EXIT ENCLOSURE = # HOUR(S) DOOR	
		1 HOUR(S) CORRIDOR WALL = # HOUR(S) DOOR	
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY	IBC TABLE 803.13	SPRINKLERED	
		INTERIOR EXIT STAIRWAYS, RAMPS, AND EXIT PASSAGEWAYS	B
		CORRIDORS & ENCLOSURE FOR EXIT ACCESS STAIRWAYS & RAMPS	B
		ROOMS & ENCLOSED SPACES	B
INTERIOR WALL & CEILING FINISH MATERIALS TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723	IBC: 803.1.2	CLASS B = FLAME SPREAD INDEX 26-75 SMOKE DEVELOPED INDEX 0-450	

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:
Nuvance Health

CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

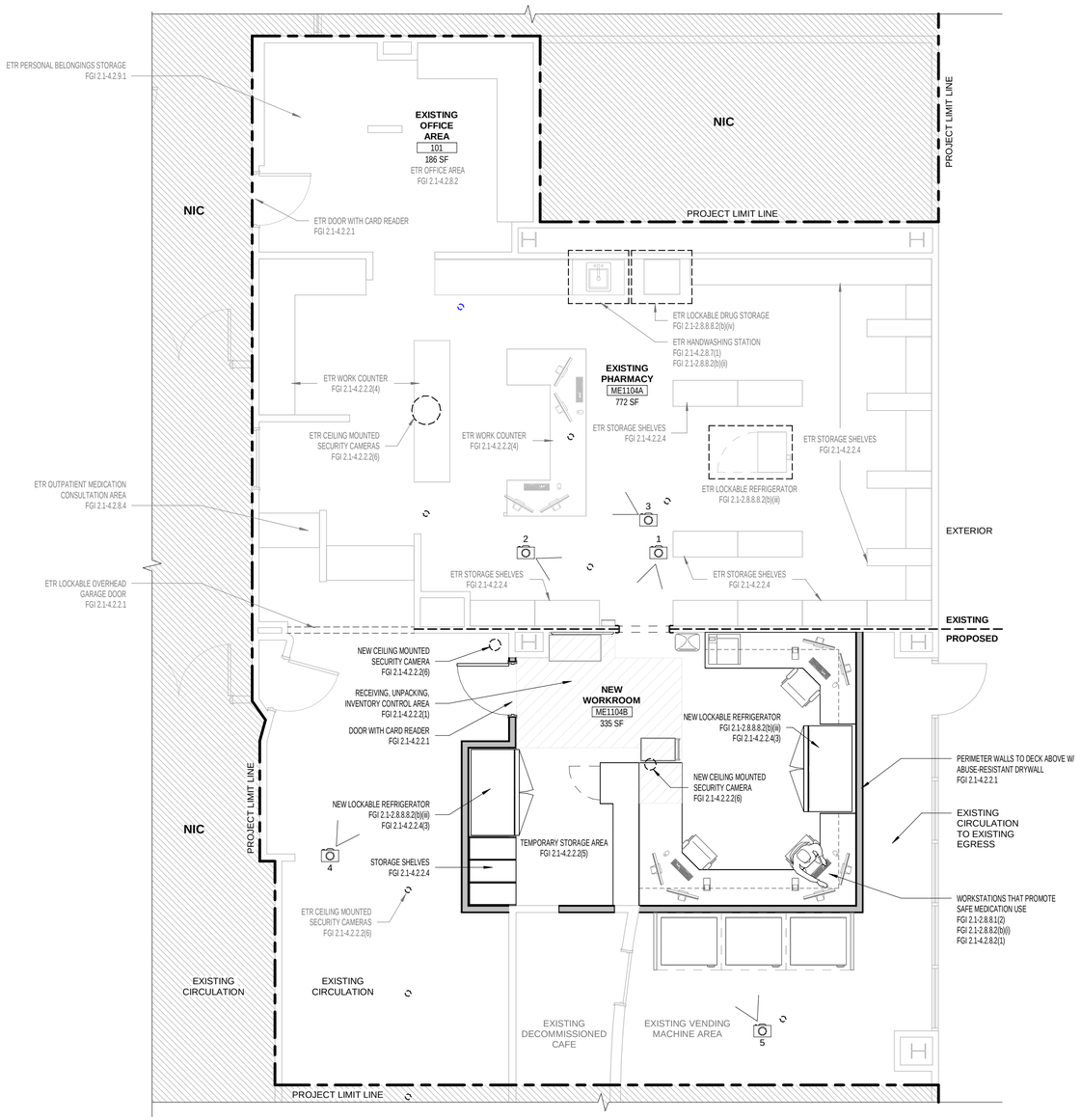
DRAWN BY: CP
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.

DRAWING NAME:
CODE SUMMARY & EGRESS PLAN

DRAWING NO.
G101

Plot Date: 7/15/2024 9:38:28 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt



1 **DPH PLAN**
1/4" = 1'-0"

LICENSURE INFORMATION

LICENSED NAME	NORWALK HOSPITAL
FACILITY ADDRESS	34 MAPLE STREET, NORWALK, CT 06856
FACILITY MANAGER CONTACT:	DAVID KEITH
	EMAIL: david.keith@nuvancehealth.org
	PHONE: 845.224.6389
CLINICAL MANAGER CONTACT:	AMY KURZATKOWSKI, RPh
	EMAIL: amy.kurzatkowski@nuvancehealth.org
ARCHITECT CONTACT:	NICHOLAS FUCCI, PROJECT MANAGER
	EMAIL: NFucci@phasezerodesign.com
	PHONE: (860) 578-2049

FGI REFERENCE INFORMATION

HEALTHCARE CODE	2022 FACILITY GUIDELINE INSTITUTE FOR HOSPITALS
PROJECT TYPE	PHARMACY WORK ROOM
	EXISTING RENOVATION / PHARMACY ADDITION

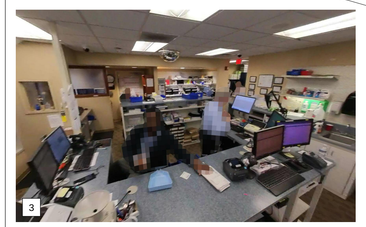
PROJECT NARRATIVE

THE PROJECT SCOPE INCLUDES THE ADDITION OF A WORKROOM IN THE PHARMACY UNIT. THIS PROJECT WILL ALSO INCLUDE THE MINOR RENOVATION OF THE EXISTING CAFE AREA AS REQUIRED TO ACCOMODATE THE ADDITION.

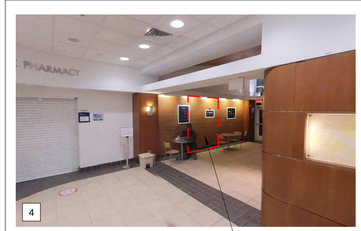
THE ADDITIONAL WORKROOM WILL SERVE TO PROVIDE MORE SPACE FOR THE PHARMACY DEPARTMENT TO RECEIVE, PACKAGE, AND STORE COLD PATIENT MEDICATION.

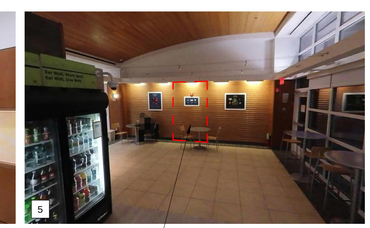
PER THE FACILITY'S CURRENT WORKFLOW, IT IS INTENDED THAT THE PHARMACY WILL RECEIVE ORDERS FOR PATIENT PRESCRIPTIONS AND WILL FILL THE PRECRIPTION AS REQUIRED. AFTER PACKAGING THE PRESCRIPTION, IT WILL BE STORED IN THE NEW WORKROOM ADDITION UNTIL THE CARRIER PICKUP, SCHEDULED DAILY.

± LOCATION OF NEW OPENING



EXISTING PHARMACY AND WALL TO BE MODIFIED





± LOCATION OF NEW OPENING

EXISTING CAFE AREA TO BE MODIFIED

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

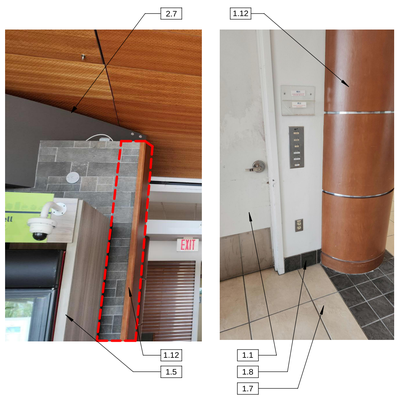
DPH REQUIREMENTS

DRAWING NO.

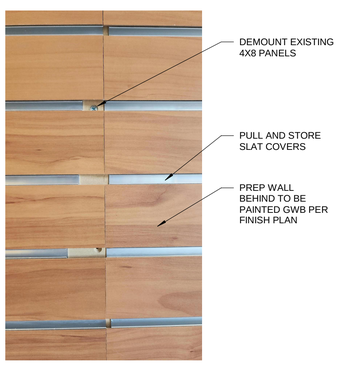
G102

Plot Date: 7/15/2024 9:38:30 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

4 DEMOLITION AT EXG CAFE
1" = 1'-0"



5 DEMOLITION AT EXG CAFE
1" = 1'-0"



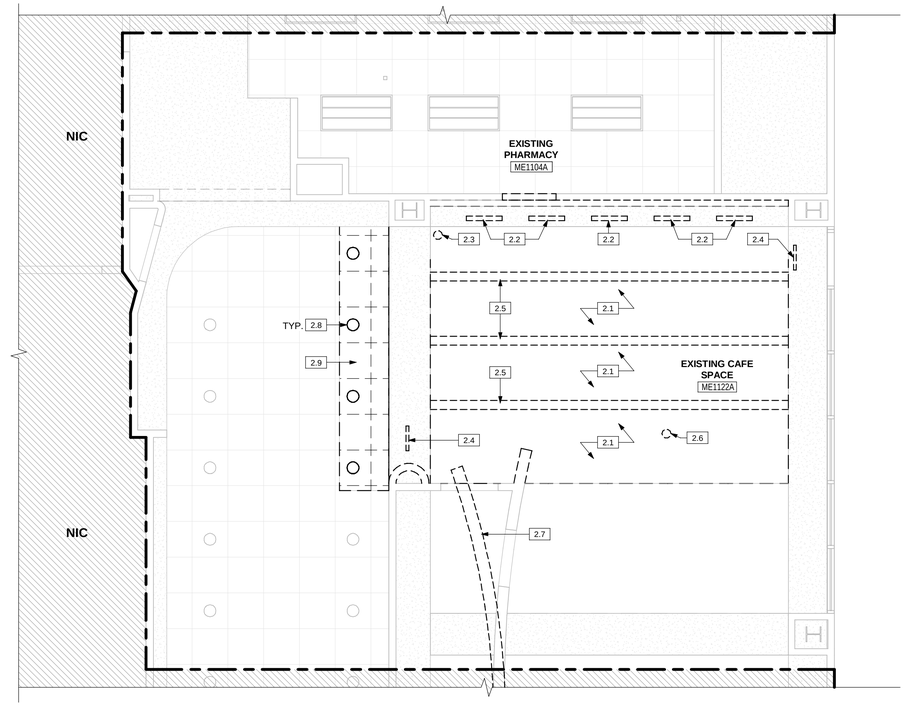
3 EXG SLAT WALL REMOVAL FOR REUSE
1" = 1'-0"

DEMOLITION RCP KEYNOTES

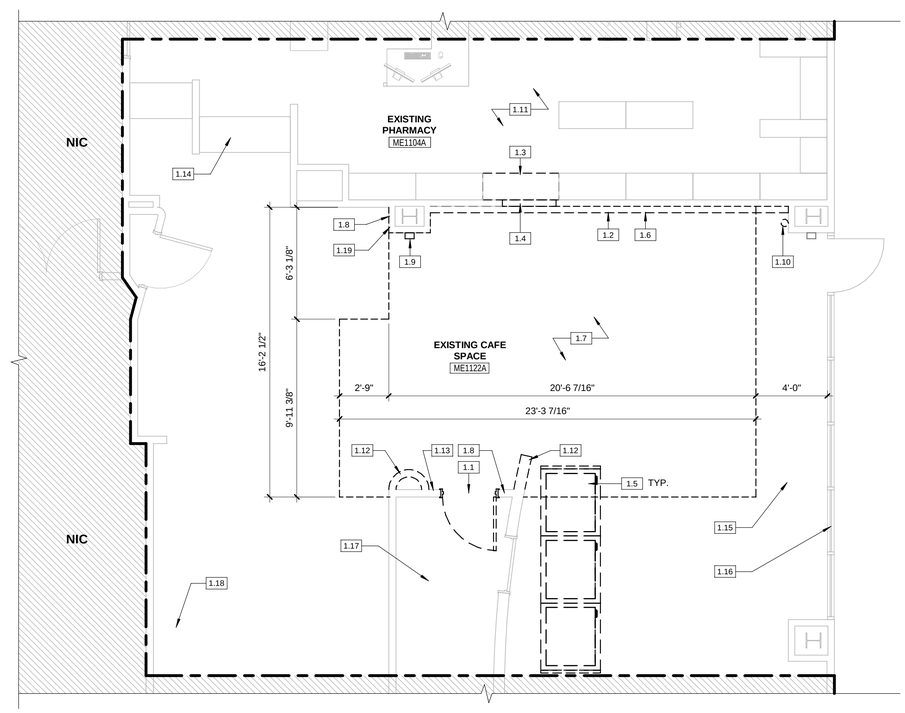
#	DESCRIPTION
2.1	REMOVE EXISTING METAL DROP CEILING AND ASSOCIATED COMPONENTS AND TURN OVER TO OWNER FOR ATTIC STOCK STORAGE.
2.2	REMOVE AND EXISTING RECESSED LIGHTING AND ASSOCIATED COMPONENTS AND TURN OVER TO OWNER FOR ATTIC STOCK STORAGE. PATCH AND REPAIR SOFFIT AS REQ'D TO MATCH EXISTING.
2.3	REMOVE AND STORE EXISTING SECURITY CAMERA AND ASSOCIATED COMPONENTS FOR REUSE IN NEW CONSTRUCTION.
2.4	REMOVE AND DISPOSE OF EXISTING EXIT SIGN AND ASSOCIATED COMPONENTS. PATCH AND REPAIR SOFFIT TO REMAIN.
2.5	REMOVE OF EXISTING STRING LIGHTS AND ASSOCIATED COMPONENTS AND TURN OVER TO OWNER FOR ATTIC STOCK STORAGE. PATCH AND REPAIR SOFFIT AS REQ'D.
2.6	REMOVE AND STORE EXISTING SMOKE DETECTOR AND ASSOCIATED COMPONENTS FOR REUSE IN NEW CONSTRUCTION.
2.7	EXISTING SIGNAGE COMPONENT OF CAFE CAN BE CUT BACK TO TERMINATE AT NEW GWB WALL, OR BE LEFT IN PLACE AND FRAMED AROUND.
2.8	RELOCATE EXISTING CAN LIGHTS, REFER TO PROPOSED RCP.
2.9	MODIFY EXISTING GRID AS REQ'D TO ACCOMODATE NEW GWB CEILING. REFER TO PROPOSED RCP.

DEMOLITION KEYNOTES

#	DESCRIPTION
1.1	REMOVE AND DISPOSE OF EXISTING DOOR, HARDWARE, AND ASSOCIATED COMPONENTS.
1.2	REMOVE AND PALLETIZE EXISTING WOOD SLAT WALL FINISH FOR FUTURE USE IN NEW CONSTRUCTION. SEE 3/AD101 FOR REFERENCE IMAGE OF SYSTEM.
1.3	REMOVE EXISTING SHELVING AND TURN OVER TO OWNER FOR STORAGE OR REUSE.
1.4	DEMO AREA OF EXISTING WALL AND PREP FOR CASED OPENING IN NEW CONSTRUCTION. PROVIDE NEW HEADER IF WALL IS DISCOVERED TO BE LOAD BEARING. MODIFY EXISTING TILE WALL BASE AS REQ'D TO ACCOMODATE NEW CASED OPENING FRAME
1.5	RELOCATE EXISTING VENDING MACHINES AND ASSOCIATED COMPONENTS FOR USE DURING NEW CONSTRUCTION.
1.6	REMOVE AND STORE EXISTING FIRE ALARM STROBE LIGHT FOR REUSE IN NEW CONSTRUCTION.
1.7	TILE FLOOR & WALL BASE ETR. CONTRACTOR TO CLEAN AND PREP FLOOR AS REQ'D FOR NEW CONSTRUCTION IN DASHED LINE AREA.
1.8	REMOVE AND DISPOSE OF EXISTING WALL BASE. PATCH AND REPAIR AS NEEDED FOR NEW WALL BASE PER FINISH PLAN.
1.9	REMOVE EXISTING SCONCE LIGHT AND ASSOCIATED COMPONENTS AND TURN OVER TO OWNER FOR STORAGE OR REUSE. PATCH AND REPAIR WALL AS NEEDED.
1.10	REMOVE AND STORE EXISTING FIRE EXTINGUISHER AND ASSOCIATED COMPONENTS, INCLUDING WALL MOUNTED FE SIGN FOR REUSE IN NEW CONSTRUCTION.
1.11	CONTRACTOR TO ISOLATE DEMOLITION AND PROTECT EXISTING SHELVING, WORKSURFACES, ETC. FROM DEBRIS OF DEMO AND NEW CONSTRUCTION.
1.12	CLEANLY CUT BACK EXISTING PORTIONS OF CAFE WALL TO TERMINATE INTO FUTURE NEW WALL.
1.13	REMOVE WOOD CAP ON TOP OF WALL FOR FUTURE WALL CONSTRUCTION.
1.14	MAINTAIN PATIENT AND CARRIER ACCESS TO RETAIL OUTPATIENT REGISTER AND CONSULTATION COUNTER FOR ENTIRE DURATION OF CONSTRUCTION. COORDINATE SITE LOGISTICS PLAN WITH OWNER PRIOR TO START OF DEMOLITION.
1.15	PROTECT EXISTING EGRESS PATH FOR DURATION OF CONSTRUCTION, OR PROVIDE TEMPORARY EGRESS PLAN AS PART OF YOUR SITE LOGISTICS COORDINATION WITH THE OWNER.
1.16	PROTECT EXISTING EXTERIOR STOREFRONTS, SOFFITS, AND UPLIGHTING FOR DURATION OF CONSTRUCTION. COORDINATE TEMPORARY VISION CONTROL WITH OWNER.
1.17	POTENTIAL LAY-DOWN AREA FOR CONSTRUCTION MATERIALS. COORDINATE WITH OWNER. COORDINATE DEMOLITION OF DOOR AS REQ'D TO MAINTAIN SECURE STORAGE.
1.18	COORDINATE PATH OF CONSTRUCTION DELIVIERIES WITH REFUSE REMOVAL WITH OWNER. FOR BIDDING PURPOSES, ASSUME THAT THE USE OF COVERED BINS WILL BE REQ'D DURING FACILITY OPERATING HOURS.
1.19	REMOVE EXISTING WOOD PANELING FROM COLUMN ENCLOSURE. PATCH AND REPAIR WALL AS REQ'D.



2 FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN
1/4" = 1'-0"



1 FIRST FLOOR DEMOLITION PLAN
1/4" = 1'-0"

DEMOLITION GENERAL NOTES

A. THESE DEMOLITION DIAGRAMS ARE INTENDED TO PROVIDE A SCHEMATIC REPRESENTATION OF DEMOLITION. INFORMATION SHOWN ON THESE DIAGRAMS SHALL NOT LIMIT THE SCOPE OF DEMOLITION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY DEMOLITION AS REQUIRED TO COMPLETE SCOPE OF WORK AS INDICATED BY THE CONTRACT DOCUMENTS. REFER TO G-002 FOR ADDITIONAL DEMOLITION NOTES.

B. G.C. TO FIELD VERIFY ALL DIMENSIONS USING THE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES EXIST. G.C. TO MARK UP DRAWINGS THAT REFLECT THE ACTUAL CONDITION AND FORWARD TO THE ARCHITECT WITH (3) DAYS FOR REVIEW AND CLARIFICATION AS REQUIRED

C. PROTECT EXISTING STRUCTURE AND OTHER BUILDING ELEMENTS TO REMAIN DURING CONSTRUCTION

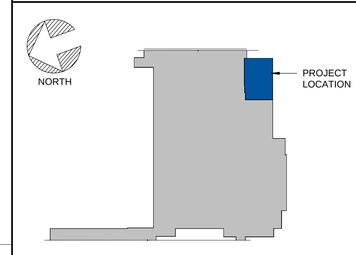
D. REMOVE EXISTING PARTITIONS SHOWN WITH DASHED LINES. PROVIDE NEW FINISHES AS SCHEDULED AT ALL AREAS OF REMOVAL AND REPAIRS. WALL, CEILING AND FLOOR FINISHES TO MATCH ADJACENT SURFACES

E. PATCH/REPAIR SURFACES AS REQUIRED FOR NEW FINISHES AS SCHEDULED, INCLUDING AREAS THAT WERE PREVIOUSLY OUT OF VIEW THAT ARE EXPOSED BY THIS PROJECT. MATCH EXISTING FINISHES, THIS INCLUDES WORK BY ALL TRADES.

DEMOLITION LEGEND

KEYNOTE	#
COMPONENT TO BE REMOVED	
COMPONENT TO REMAIN	
AREA NOT IN CONTRACT	NIC

KEY PLAN
NTS



ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:
Nuvance Health

CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: CP
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
DEMOLITION PLAN & RCP

DRAWING NO.
AD101

Plot Date: 7/15/2024 9:38:32 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

LIGHTING FIXTURE SCHEDULE

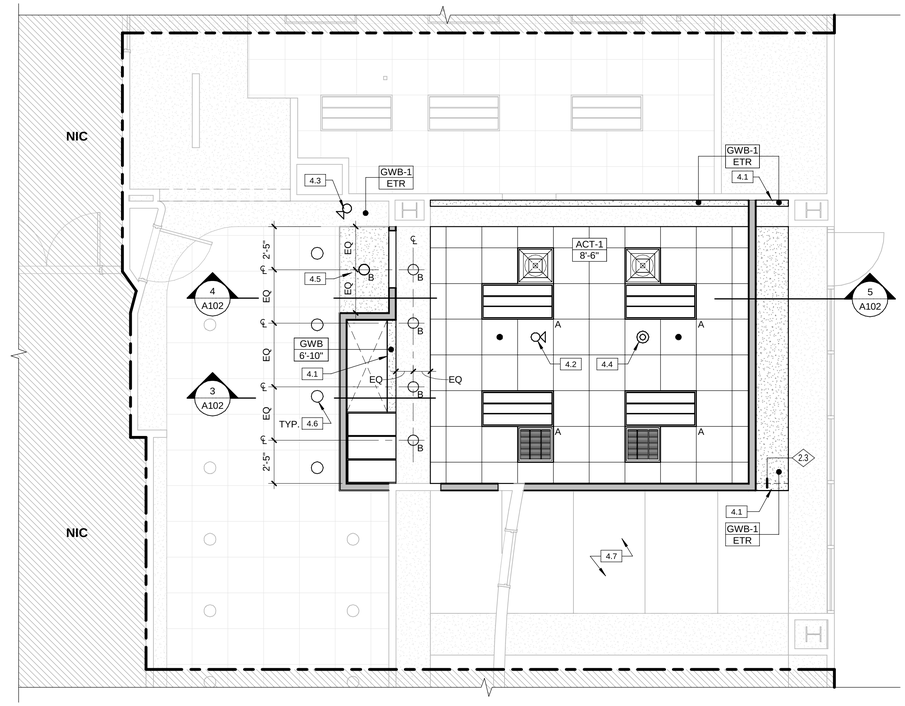
TYPE	DESCRIPTION	MANUFACTURER	PART NUMBER	MOUNTING	COMMENTS
A	2X4 FLAT PANEL LIGHT	COLUMBIA	CBT24-LS35	RECESSED	OR EQUAL, SEE ELEC. DWGS.
B	6" CAN LIGHT	PRESCOLITE	LFR-6RDS-M-10L35K8WD-DM1_LFR-6RDS-T-S	RECESSED	OR EQUAL, SEE ELEC DWGS.

CONSTRUCTION PLAN KEYNOTES

#	DESCRIPTION
3.1	NEW SEMI-RECESSED FE CABINET PER DETAIL 5/A102. NOTIFY ARCHITECT OF ANY DIMENSIONAL CLASHES WITH ADJACENT SHELVING AND CASED OPENING.
3.2	ALIGN NEW WALL WITH EXISTING.
3.3	UPGRADE EXISTING WALL TO COMPLY WITH ASSEMBLY 1.3 - METAL STUD GYP BOTH SIDES SMOKE PARTITION TO DECK ABOVE.
3.4	NEW CORNERGUARD, SEE FINISH SCHEDULE
3.5	NEW ACROVYN WALL PROTECTION AND CRASH RAIL. SEE INTERIOR ELEVATIONS

CEILING PLAN KEYNOTES

#	DESCRIPTION
4.1	INFILL/PATCH EXISTING OPENINGS IN CEILING WITH GWB TO MATCH ADJACENT SOFFIT.
4.2	NEW 360° SECURITY CAMERA. CAMERA TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO COORDINATE INSTALLATION WITH OWNER'S SECURITY TEAM AS REQ'D.
4.3	REUSE AND INSTALL EXISTING SECURITY CAMERA AND ASSOCIATED COMPONENTS. CONTRACTOR TO COORDINATE INSTALLATION WITH OWNER'S SECURITY TEAM.
4.4	REUSE EXISTING SMOKE DETECTOR AND ASSOCIATED COMPONENTS. CONTRACTOR TO COORDINATE CONNECTION TO OWNER'S FIRE DETECTION SYSTEM.
4.5	NEW GWB CEILING TO BE ± 1" PROUD OF SLAT WALL. ALIGN HEIGHT WITH ADJACENT EXISTING SOFFIT.
4.6	RELOCATED EXISTING DOWNLIGHT. CONTRACTOR TO REINSTALL LIGHT AND ASSOCIATED COMPONENTS AS REQ'D.
4.7	REINSTALL PORTION OF EXISTING DROP METAL CEILING. MODIFY CEILING AS REQ'D TO FIT INTO NEW CONSTRUCTION.



2 **PROPOSED REFLECTED CEILING PLAN**
1/4" = 1'-0"

INTERIOR PARTITION TYPES

NOTES:
1. CONTRACTOR TO PROVIDE STAMPED SHOPE DRAWINGS FOR METAL STUD FRAMING
2. SEE LIFE SAFETY DRAWINGS FOR LOCATIONS OF RATED PARTITIONS
3. ALL GYPSUM WALL BOARD TO BE TYPE "X" UNLESS OTHERWISE SPECIFIED
4. WALL FINISHES VARY, REFER TO FINISH SCHEDULE, INTERIOR ELEVATIONS, AND DETAILS FOR ALL PARTITIONS
5. MAINTAIN FIRE RATING AND ACOUSTICAL RATING OF PARTITIONS AROUND FIRE EXTINGUISHER CABINETS, ELECTRICAL BOXES, AND OTHER RECESSED ITEMS
6. FIRE-RATED PARTITIONS SHALL HAVE FIRE STOP SEALANTS AT THE HEAD, SILL, THROUGH PENETRATIONS, OPENINGS, AND JUNCTIONS WITH DISSIMILAR MATERIALS
7. NON-RATED PARTITIONS SHALL HAVE SEALANTS AT THE HEAD, SILL, THROUGH PENETRATIONS, OPENINGS AND JUNCTURES WITH DISSIMILAR MATERIALS.
8. ALL STUD WALLS CONSTRUCTED TO DECK SHALL HAVE A DEFLECTION TRACK TO ACCOMMODATE MOVEMENT OF THE STRUCTURE. ALL DEFLECTION TRACK SHALL ACCOMMODATE A MINIMUM OF 1" DEFLECTION OF THE STRUCTURE.

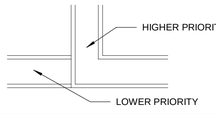
PARTITION DESIGNATION CODES

SECOND DIGIT: PARTITION THICKNESS AS FOLLOWS

- #.0 **7/8"** MTL STUD
- #.1 **1-5/8"** MTL STUD, OR **1x** WD STUD
- #.2 **2 1/2"** MTL STUD, OR **2 1/2"** C-H MTL STUD, OR **2x3** WD STUD
- #.3 **3 5/8"** MTL STUD
- #.4 **4"** MTL STUD, OR **4"** C-H MTL STUD, OR **2x4** WD STUD, OR **4"** CMU
- #.6 **6"** MTL STUD, OR **2x6** WD STUD, OR **6"** CMU
- #.8 **8"** MTL STUD, OR or **2x8** WD STUD, OR **8"** CMU

SEE WALL SCHEDULE, AND CONSTRUCTION PLAN FOR LOCATIONS

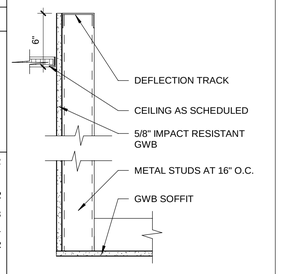
PARTITION PRIORITY LEGEND



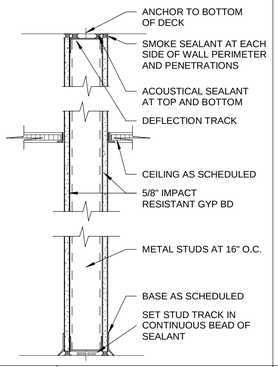
- TWO HOUR FIRE AND SMOKE PARTITION — PRIORITY 1 HIGHER
- TWO HOUR FIRE PARTITION — PRIORITY 2
- TWO HOUR SHAFTWALL — PRIORITY 2
- ONE HOUR FIRE AND SMOKE PARTITION — PRIORITY 3
- ONE HOUR FIRE PARTITION — PRIORITY 4
- NON-RATED PARTITION — PRIORITY 5 LOWER

WALL SCHEDULE

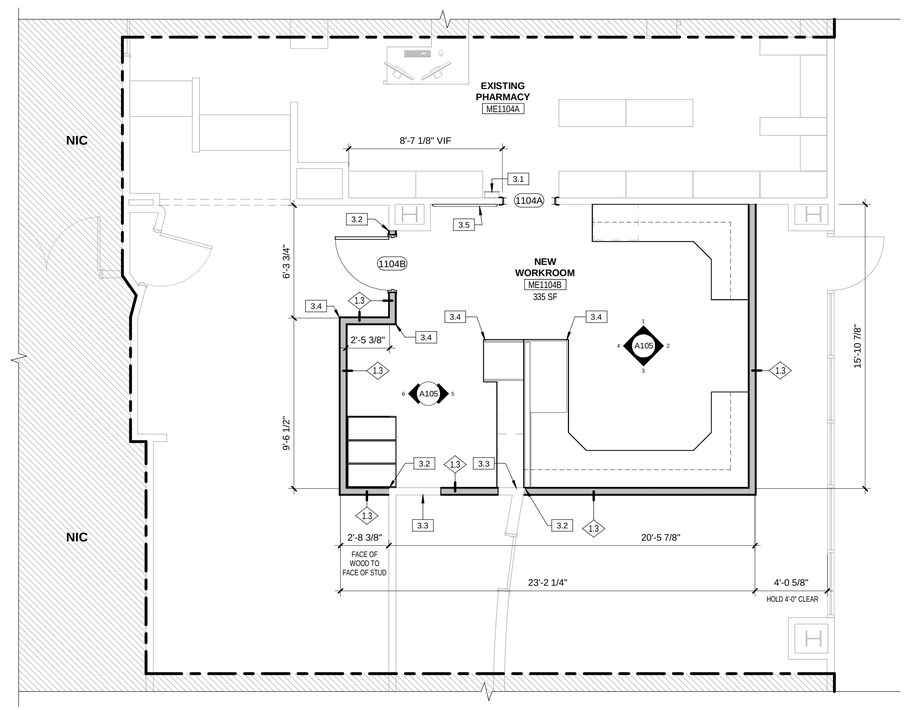
WALL TYPE	STUD WIDTH	WALL WIDTH	FIRE RATING	STC	UL ASSEMBLY	WALL COMMENTS
(1.0) - METAL STUD GYP BOTH SIDES INSULATED TO DECK						
1.3	3 5/8"	4 7/8"	-	-	-	CONTRACTOR TO PROVIDE STAMPED SHOP DRAWINGS FOR METAL STUD FRAMING. SMOKE PARTITION.
(2.0) - METAL STUD GYP ONE SIDE INSULATED TO DECK						
2.3	3 5/8"	4 1/4"	-	-	-	



2.0 **METAL STUD GYP ONE SIDE TO DECK**
1 1/2" = 1'-0"



1.0 **METAL STUD GYP BOTH SIDES SMOKE PARTITION**
1 1/2" = 1'-0"



1 **PROPOSED PLAN**
1/4" = 1'-0"

OVERALL PLAN GENERAL NOTES

A. COORDINATE FINAL PLACEMENT OF ALL WALL MOUNTED EQUIPMENT WITH SIGNAGE.

B. PRIOR TO GYPSUM BOARD INSTALLATION AND ELECTRICAL ROUGH-IN INSPECTION, GENERAL CONTRACTORS, ELECTRICAL/DATA CONTRACTORS, ARCHITECT, AND CONSTRUCTION MANAGER SHALL REVIEW IN-PLACE LOCATIONS OF ALL SWITCH BOXES, RECEPTACLE BOXES, FIRE ALARM BOXES, ETC. FINAL LOCATIONS MAY BE ADJUSTED AT THIS TIME TO ALIGN OR COORDINATE WITH DESIGN INTENT.

C. OPEN AND CLOSE EXISTING WALLS AS REQ'D FOR NEW UTILITIES. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION.

GENERAL CEILING NOTES

A. HVAC SHOWN ON THIS PLAN IS DIAGRAMATICAL. REFER TO MEP DRAWINGS FOR FULL SCOPE OF WORK.

B. ALL CEILING EQUIPMENT AND LIGHTING TO BE INSTALLED IN ACT CEILINGS TO BE CENTERED IN CEILING GRID (UNO).

C. GC SHALL VERIFY ALL CEILING HEIGHTS, AND CONFIRM THAT THE WORK CAN BE BUILT AS SHOWN. IN THE EVENT OF ANY CONFLICTS OR OMISSIONS WITHIN THE DRAWINGS, GC TO CONTACT ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.

D. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES.

E. CENTER AND ALIGN ALL CEILING GRIDS WITHIN ROOM UNLESS OTHERWISE NOTED.

F. SEE FINISH SCHEDULE FOR ADDITIONAL CEILING INFO.

REFLECTED CEILING PLAN LEGEND

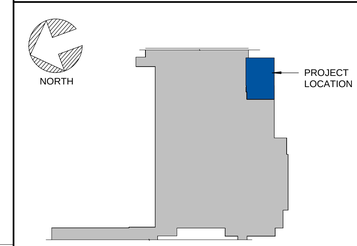
CEILING INFORMATION	ACT-1 — CEILING TYPE; X'-X" — DIMENSION A.F.F TO FINISH FACE OF CEILING
ACT ACOUSTICAL CEILING TILE	2x2 2x4
GWB GYPSUM CEILING	
LIGHT FIXTURES	## — LIGHT FIXTURE SCHEDULE ID; REFER TO LIGHT FIXTURE SCHEDULE FOR SYMBOL INDICATIONS AND FIXTURE INFORMATION
CEILING ITEMS	SUPPLY, RETURN, SPRINKLER, SMOKE DETECTOR, EXIT SIGN, SECURITY CAMERA; REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION

PLAN LEGEND

KEYNOTE	#
PROPOSED WALLS	NEW STUD WALL; NEW CMU WALL; NEW BRICK WALL
EXISTING COMPONENT TO REMAIN	EXISTING WALL
AREA NOT IN CONTRACT	NIC

KEY PLAN

NTS



ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

PROPOSED CONSTRUCTION PLAN & RCP, AND WALL ASSEMBLIES

DRAWING NO.

A101

Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

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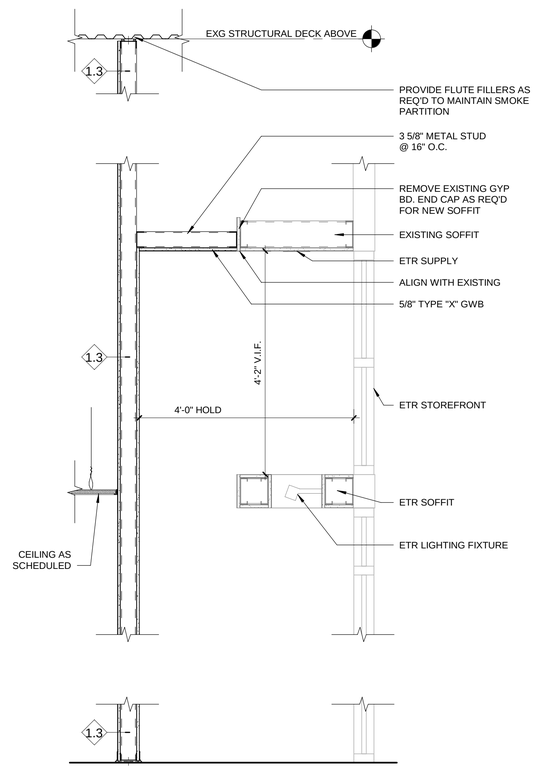
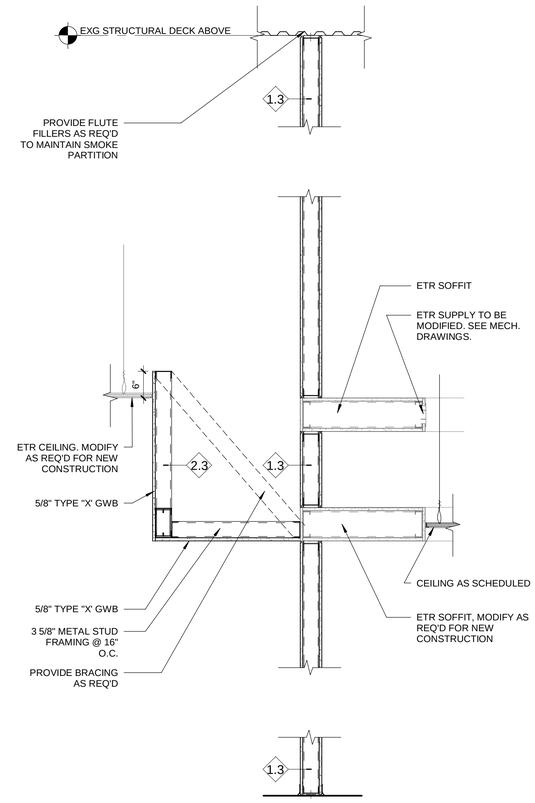
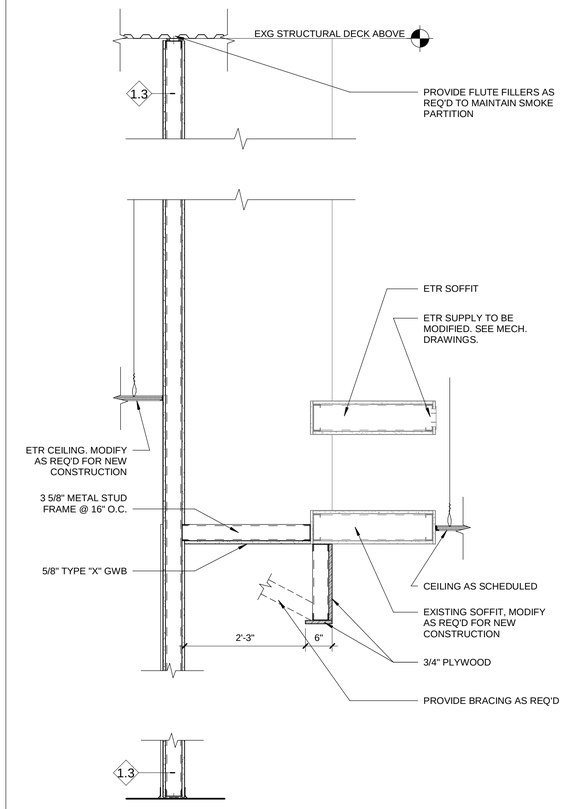


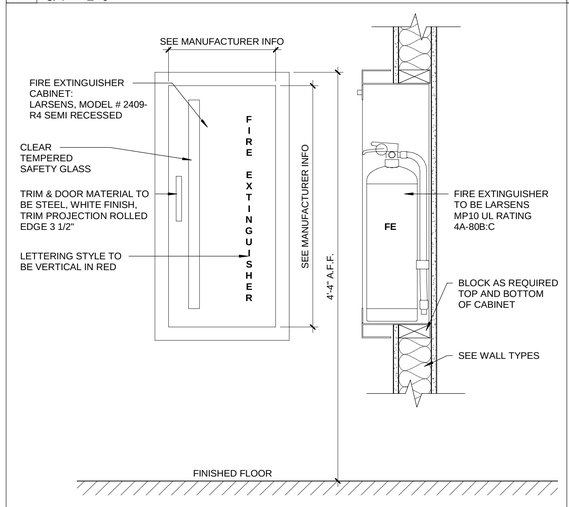
5 GYP BD SOFFIT DETAIL
3/4" = 1'-0"



4 GYP BD SOFFIT DETAIL
3/4" = 1'-0"

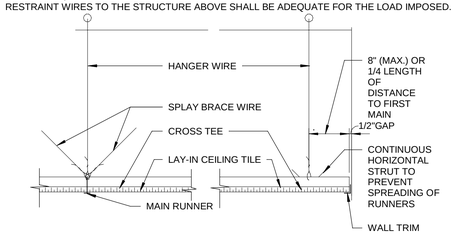


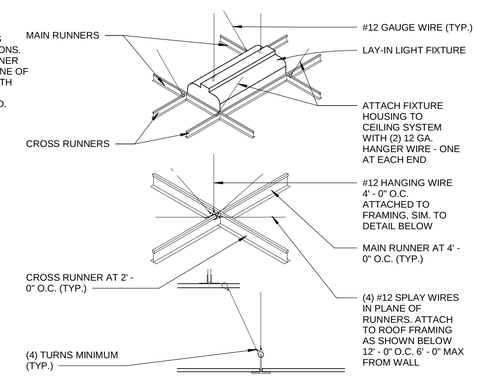
3 GYP BD SOFFIT DETAIL
3/4" = 1'-0"



2 SEMI-RECESSED - FIRE EXTINGUISHER DETAIL
1 1/2" = 1'-0"

LATERAL BRACING FOR SUSPENDED CEILING MUST BE PROVIDED PER CODE REQUIREMENTS WHERE CEILING LOADS ARE LESS THAN 5# PER FT. AND NOT SUPPORTING INTERIOR PARTITIONS. CEILING BRACING SHALL BE PROVIDED BY (4) #12 GAUGE WIRES SECURED TO THE MAIN RUNNER WITHIN 2" OF THE CROSS RUNNER INTERSECTION AND SPLAYED 90 DEGREES FROM THE PLANE OF THE CEILING. THESE HORIZONTAL RESTRAINT POINTS SHALL BE PLACED AT 12' - 0" O.C. IN BOTH DIRECTIONS, WITH THE FIRST POINT WITHIN 4' - 0" FROM EACH WALL. ATTACHMENT OF THE RESTRAINT WIRES TO THE STRUCTURE ABOVE SHALL BE ADEQUATE FOR THE LOAD IMPOSED.





1 SUSPENDED ACOUSTICAL CEILING DETAIL
1" = 1'-0"

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

DETAILS

DRAWING NO.

A102

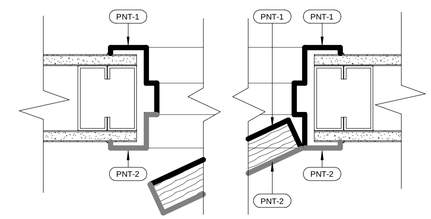
Plot Date: 7/15/2024 9:38:35 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

DOOR SCHEDULE (MISC. HARDWARE)

ROOM			DOORS								FRAME		FRAMES						FIRE CODE REQ.	ADA REQ.			ELECTRIC.				MISC. HARDWARE																	
							SIZE							DETAILS (A603)																														
ROOM #	ROOM NAME	DOOR #	TYPE (SEE ELEVATIONS)	DOOR MATERIAL	DOOR FINISH	GLASS (SEE LEGEND)	# OF LEAF	WIDTH	HEIGHT	THICKNESS	TYPE (SEE ELEVATIONS)	FRAME FINISH	MATERIAL	HEAD	JAMB	THRESHOLD	LOCKSETS	FIRE RATING (HOURS)	AUTOMATIC CLOSER	PANIC RELEASE OPERATOR	POSITIVE LATCHING	ADA LEVER HANDLES	ADA PUSH BUTTON OP.	ADA TACTILE WARN.	ELECTRIC STRIKE	ELECTRIC HINGES	MAG HOLD OPEN	CARD READER	STRIKE	HINGES (PAIRS)	SILENCERS	FLOOR STOP	ARMOR PLATE (BOTH SIDES)	PUSH PLATE	PULL HANDLES	PUSH BAR	HOLD OPEN	VERTICAL RODS	TOP & BOTTOM BOLTS	LATCH SECURITY PLATE	GASKETING	DOOR #	REMARKS	DESIGN INTENT
FIRST FLOOR New Construction																																												
ME1104A	EXISTING PHARMACY	1104A	B	-	-	-	0	36"	84"		HMF2	PNT-1	HM	H2	J2	S2	-	-																									1104A		
ME1104B	NEW WORKROOM	1104B	A	WD	PNT-1 PNT-2	-	1	36"	84"	1 3/4"	HMF1	PNT-1 PNT-2	HM	H1	J1	S1	OFFICE	-	X		X	X			X			X		1.5		X	X							X	X	1104B	HARDWARE TO BE PROVIDED BY 'BUILDER'S HARDWARE'. PROVIDE CORBIN RUSSWIN LARGE FORMAT INTERCHANGEABLE CORE. CONTRACTOR TO PROVIDE CARD READER BOX W/ CONDUIT, PULL STRING, AND 90° ELBOW ABOVE CEILING. OWNER SECURITY VENDOR (JCI) TO INSTALL CARD READER.	DOOR NORMALLY CLOSED AND LOCKED. PRSENTING PROPER CREDENTIAL UNLOCKS OUTSIDE LEVER FOR AUTHORIZED ENTRY. COORDINATE WITH OWNER SECURITY VENDOR (JCI) FOR DOOR STATUS SENSORS. LOCK IS FAILSAFE. FREE EGRESS AT ALL TIMES.

PHARMACY SIDE
PAINT PHARMACY SIDE OF DOOR & FRAME PER LINE — PNT-1

ME1104B

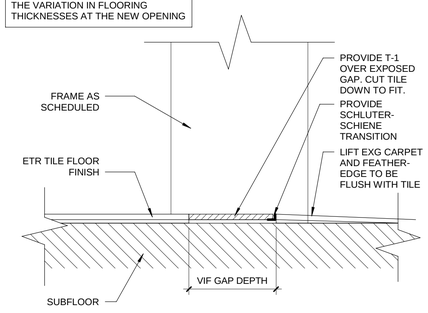


CORRIDOR

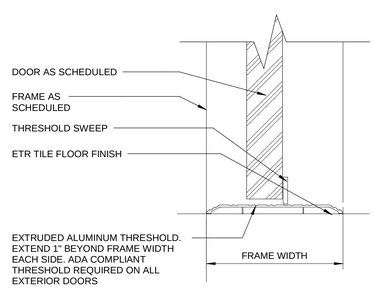
CORRIDOR SIDE
PAINT CORRIDOR SIDE OF DOOR & FRAME PER LINE — PNT-2

DP-1 DUAL PAINT ON DOORS
3" = 1'-0"

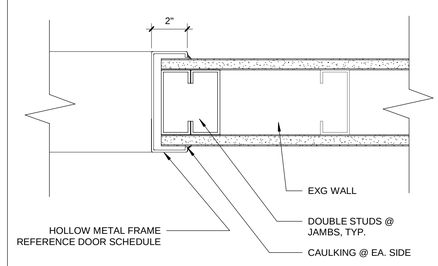
DESIGN INTENT: PROVIDE AS FLUSH OF A CONDITION AS POSSIBLE GIVEN THE VARIATION IN FLOORING THICKNESSES AT THE NEW OPENING



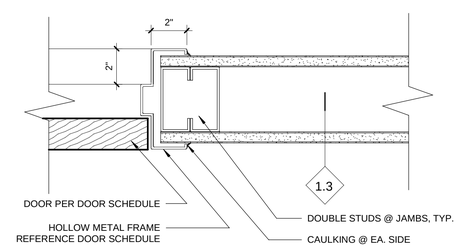
S2 EXG SILL ALUMN THRESHOLD
3" = 1'-0"



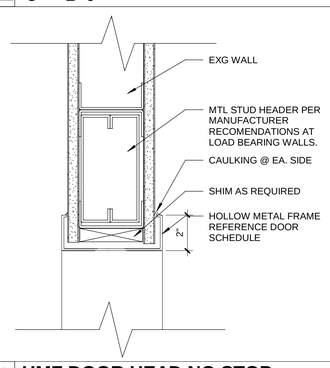
S1 DOOR SILL ALUMN. THRESHOLD
3" = 1'-0"



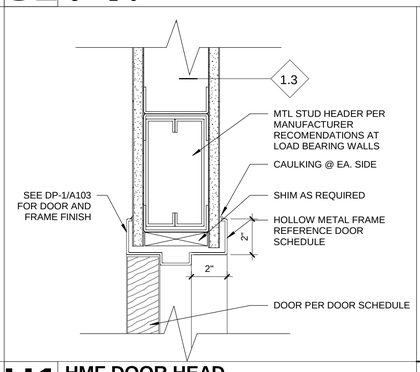
J2 HMF DOOR JAMB NO STOP
3" = 1'-0"



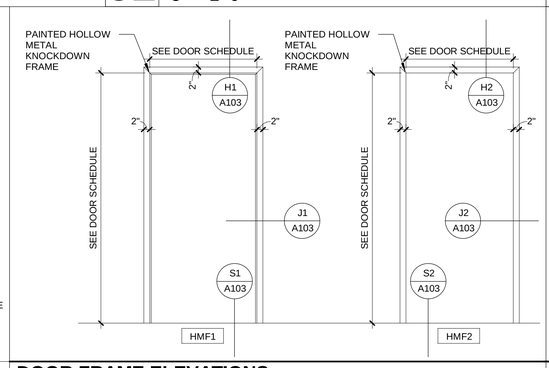
J1 HMF DOOR JAMB
3" = 1'-0"



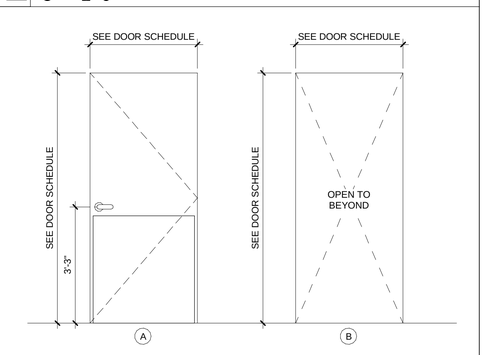
H2 HMF DOOR HEAD NO STOP
3" = 1'-0"



H1 HMF DOOR HEAD
3" = 1'-0"



DOOR FRAME ELEVATIONS
1/2" = 1'-0"



DOOR TYPES ELEVATIONS
1/2" = 1'-0"

DOOR GENERAL NOTES

A. GC TO PROVIDE SHOP DRAWINGS / DATA SUBMITTALS FOR ALL DOORS, DOOR FRAMES, AND DOOR HARDWARE FOR ARCHITECT'S APPROVAL, PRIOR TO FABRICATION / ORDERING. DOOR SCHEDULE DOES NOT INDICATE QUANTITIES OF DOORS. G.C. SHALL BE RESPONSIBLE FOR QUANTIFYING THE NUMBER OF DOORS.

B. G.C. SHALL REVIEW AND VERIFY ALL HARDWARE FUNCTIONS WITH THE OWNER PRIOR TO PLACING ORDER. COORDINATE ALL KEYING & MASTERS WITH OWNER PRIOR TO FABRICATION.

C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK PARTITION DETAILS @ FIELD CONDITIONS FOR JAMB SIZES.

D. ALL DOOR THRESHOLDS SHALL BE HANDICAP ACCESSIBLE WITH A 1:2 SLOPED BEVEL AT EACH EDGE.

E. ALL EXIT DOORS TO BE OPERABLE FROM INSIDE WITHOUT USE OF A KEY, SPECIFIC KNOWLEDGE OR EFFORT.

F. OPERATING FORCE TO OPEN DOORS SHALL NOT EXCEED 5 POUNDS.

G. ALL WOOD DOORS TO BE SOLID CORE. SEE DOOR SCHEDULE FOR FIRE RATINGS.

H. UNLESS OTHERWISE SPECIFIED, ALL DOOR HARDWARE FINISH SHALL BE SATIN NICKEL.

I. ALL ACCESS CONTROL CARD READERS AND DOOR STATUS SENSORS SHALL BE SUPPLIED AND INSTALLED BY OWNERS SECURITY VENDOR (JCI). GC TO COORDINATE INSTALLATION OF DOOR & FRAME PREP.

J. ALL DOOR HARDWARE SHALL COMPLY WITH FEDERAL & STATE ACCESSIBILITY REQUIREMENTS.

1. DOOR LOCKSET AND LATCH SETS SHALL COMPLY WITH ANSI/BHMA A156.2.
2. DOOR CLOSERS SHALL COMPLY WITH ANSI BHMA A156.4.
3. ALL HINGES SHALL COMPLY WITH ANSI/BHMA A156.1 AND BE STAINLESS STEEL WITH STAINLESS STEEL PINS, HEAVY DUTY BALL BEARINGS, AND HAVE NON-REMOVABLE PINS.
4. ALL DOOR STOPS SHALL COMPLY WITH ANSI/BHMA A156.16, GRADE 1.
5. G.C. TO COORDINATE CARD READERS AND POWER SUPPLY @ ALL DOORS REQUIRING, ACCESS CONTROL WITH OWNERS SECURITY VENDER.

K. PROVIDE TEMPERED GLASS WHEN:

1. GLASS UNITS ARE WITHIN 18" OF FINISH FLOOR.
2. GLASS UNITS ARE WITHIN 24" OF A VERTICAL EDGE OF A DOOR TO A HEIGHT 60" MIN ABOVE FINISHED FLOOR.
3. GLASS UNITS ARE WITHIN 36" HORIZONTALLY OF A WALKING SURFACE; WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
4. GLASS UNITS ARE WITHIN 60" HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION; WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60" ABOVE THE NOSE OF THE TREAD.

N. DOOR HINGES

QUANTITY: PROVIDE THE FOLLOWING, UNLESS OTHERWISE INDICATED:

1. TWO HINGES: FOR DOORS WITH HEIGHTS UP TO 60 INCHES.
2. THREE HINGES: FOR DOORS WITH HEIGHTS 61 TO 90 INCHES
3. FOUR HINGES: FOR DOORS WITH HEIGHTS 91 TO 120 INCHES

O. ALL GASKETING SHALL INCLUDE FULL PERIMETER STRIPPING WITH DOOR THRESHOLD.

DOOR SCHEDULE KEY

X = NEW ITEM, REPLACE EXISTING ITEMS WHERE NOTED AT EXISTING CONDITIONS

EX = EXISTING ITEM TO REMAIN. GC SHALL VERIFY ALL EXISTING CONDITIONS AND CONFIRM WORKING ORDER.

AL = ALUMINUM
ALF = ALUMINUM FRAME
HM = HOLLOW METAL
HMF = HOLLOW METAL FRAME
WD = WOOD
WDF = WOOD FRAME
FGF = FIBER GLASS FRAME

* WHERE NOTED WITH TOP & BOTTOM BOLTS, BOLTS SHALL BE PROVIDED ON INACTIVE LEAF WITH DUMMY LEVER WITH ACTIVE LEAF LATCHING INTO INACTIVE DOOR.

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:
Nuvance Health

CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: CP
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
DOOR SCHEDULE & DOOR TYPE ELEVATIONS

DRAWING NO.
A103

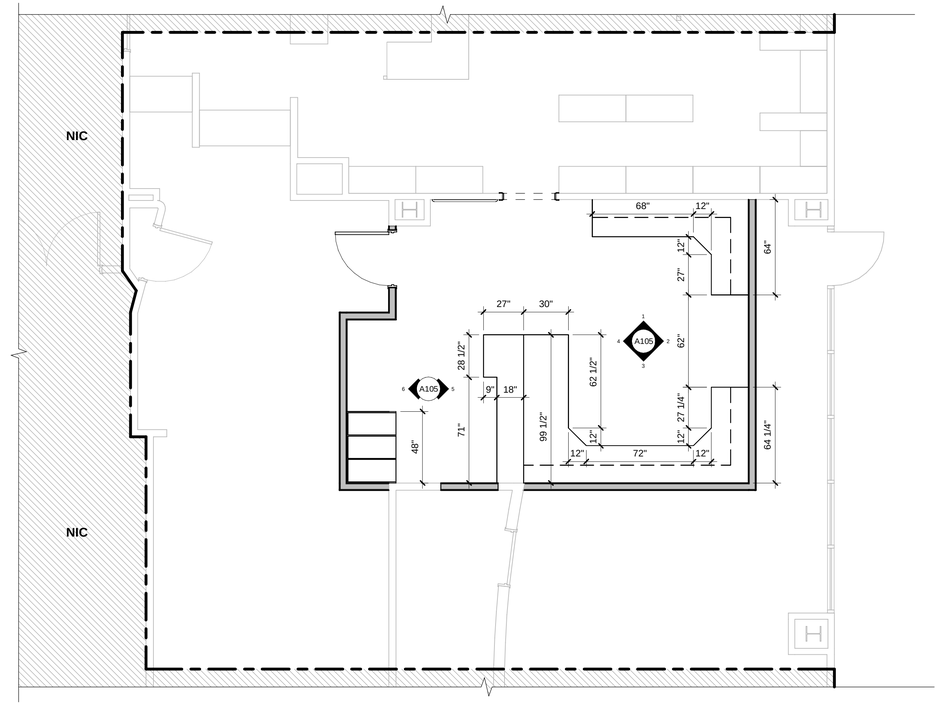
Plot Date: 7/15/2024 9:38:36 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

FINISH SCHEDULE

RM #	ROOM NAME	FLOOR	BASE	WALLS N.	WALLS E.	WALLS S.	WALLS W.	MILLWORK UPPER CABINETS OUTSIDE	MILLWORK UPPER CABINETS INSIDE	CEILING TYPE	CEILING COLOR	NOTES
ME1104B	NEW WORKROOM	WB-1	ETR	PNT-1	PNT-1	PNT-1	PNT-1	PL-1		ACT-1		

INTERIOR FINISH IDENTIFICATION LEGEND

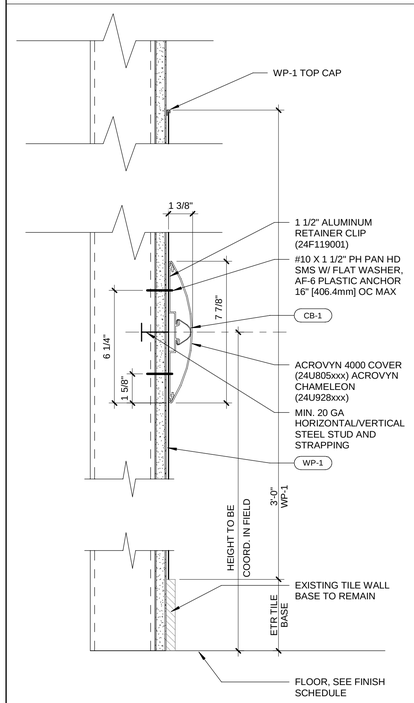
ID	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE COLOR	SIZE	SPECIAL INFO
CEILING						
ACT-1	CEILING	ACOUSTICAL CEILING TILE	ULTIMA HEALTHZONE 1445	WHITE	24"x24"x7/8"	NRC = 0.80 + CAC = 35; 15/16" SQUARE LAY-IN W/ PRELUDE XL 15/16" EXPOSED TEE GRID.
LAMINATE						
PL-1	LAMINATE	WILSONART	TBD	TBD		PLAM TO MATCH EXISTING COUNTERTOPS IN ADJACENT PHARMACY SPACE.
PL-2	LAMINATE	WILSONART	ANTIQUE WHITE	1572-60		
PAINT						
PNT-1	PAINT			BEIGE		PAINT COLOR TO MATCH EXISTING IN EXISTING PHARMACY INTERIOR.
PNT-2	PAINT			WHITE		PAINT COLOR TO MATCH EXISTING IN ADJACENT SPACE
WALL						
CB-1	CRASH BUMPER	C/S ACROVYN	SCR-80N	MISSION WHITE 933	36" HIGH, .040" THICK	SEE 4/A104 FOR DETAIL.
CG-1	CORNER GUARD	CAP INDUSTRIES	16 GAUGE STAINLESS STEEL CORNER GUARD	BRUSHED STAINLESS STEEL	2"x2"x36"	OR EQUAL
CG-2	CORNER GUARD	CAP INDUSTRIES	16 GAUGE STAINLESS STEEL CORNER GUARD	BRUSHED STAINLESS STEEL	3/4"x3/4"x36"	OR EQUAL
WP-1	WALL PROTECTION	C/S ACROVYN	WALL PROTECTION SYSTEM	MISSION WHITE 933	36" HIGH, .040" THICK	OR EQUAL. PROVIDE CURED COLORFLEX BACTERIA RESISTANT CAULK TO MATCH PANEL. SEE 3/A104 FOR DETAIL.
WS-1	WALL					REUSE EXISTING SLAT WALL AND CAP TO MATCH EXISTING FINISH.
WALL BASE						
RB-1	RUBBER BASE	TARKETT	STANDARD	TBD	4"	PROVIDE BEST COLOR MATCH WITH ADJACENT EXISTING TILE WALL BASE.



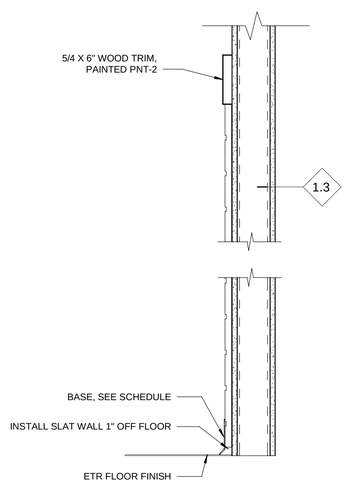
2 PROPOSED MILLWORK PLAN
1/4" = 1'-0"

FINISH PLAN GENERAL NOTES

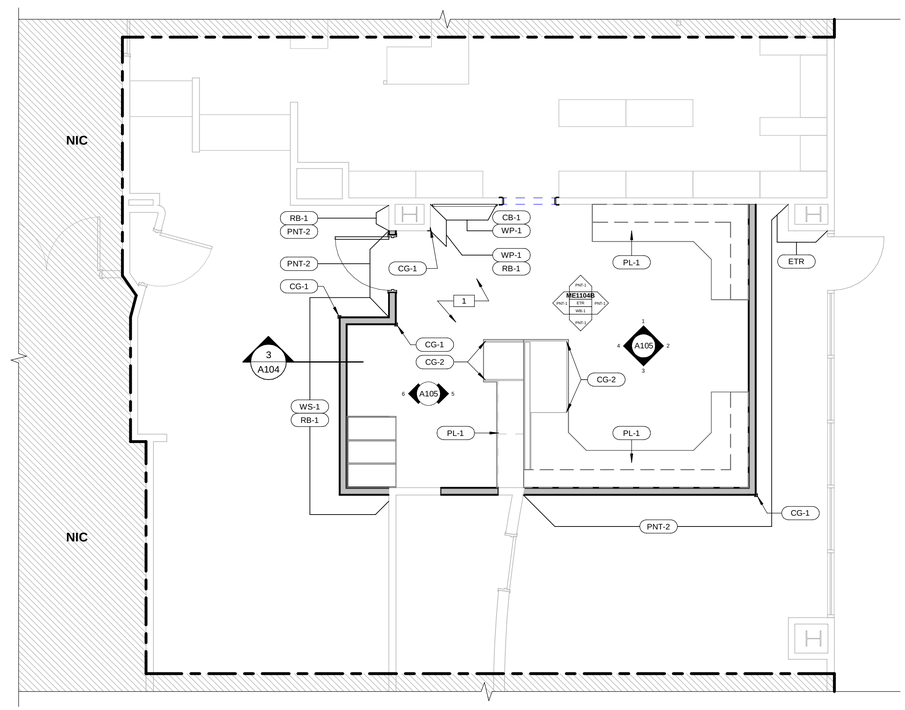
A. REFER TO SHEET A130 FOR FINISH SCHEDULE AND FINISHES LEGEND.



4 CRASH RAIL DETAIL
3" = 1'-0"



3 WALL PROTECTION DETAIL
1 1/2" = 1'-0"



1 PROPOSED FINISH FLOOR PLAN
1/4" = 1'-0"

FINISH PLAN KEYNOTES

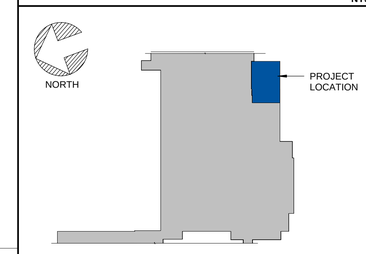
#	DESCRIPTION
1	EXISTING TILE FLOORING TO REMAIN, PROTECT FOR ENTIRE DURATION OF CONSTRUCTION. INSPECT SCOPE AREA FOR ANY FAILED TILE OR GROUT AND PATCH AS REQ'D. PROVIDE FINAL CLEANING OF FLOORING PRIOR TO TURNOVER.

FINISH PLAN SYMBOL LEGEND

KEYNOTE	1
FINISHES INDICATOR	PNT-1
FLOORING DIRECTION	
FLOORING SEAM	
AREA NOT IN CONTRACT	NIC

KEY PLAN

NTS



ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

FINISH & FF&E PLAN

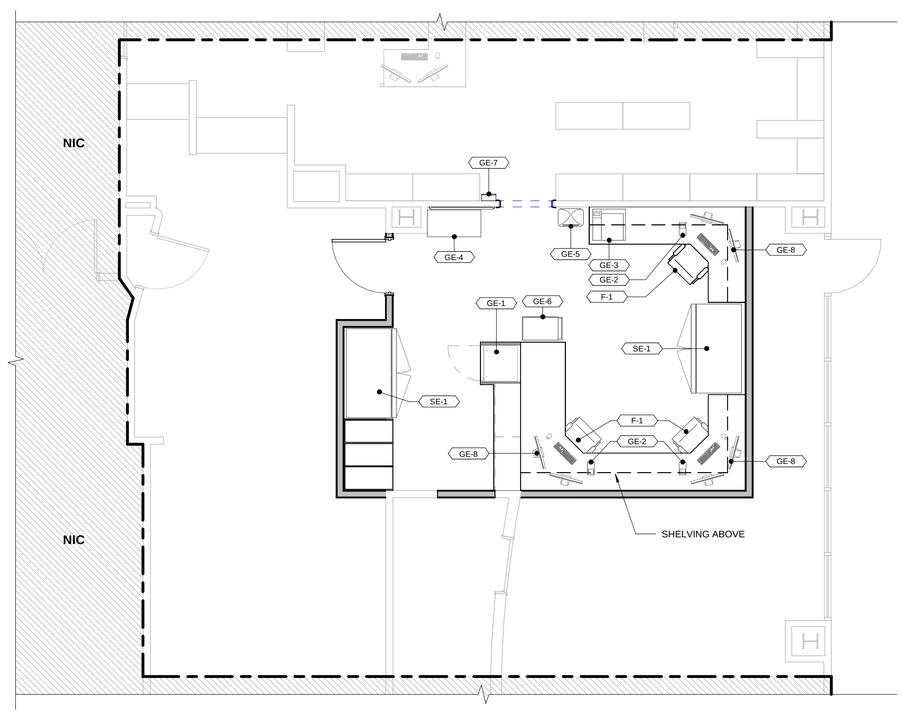
DRAWING NO.

A104

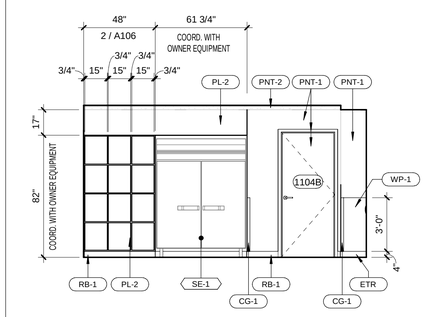
Plot Date: 7/15/2024 9:38:38 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

FF&E SCHEDULE

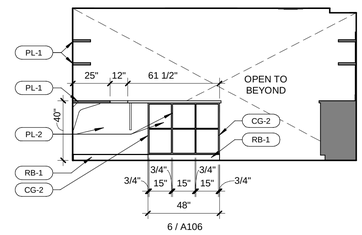
TAG	DESCRIPTION	MANUFACTURER	MODEL	PROVIDED BY	INSTALLED BY	REQUIREMENTS ELEC.	REQUIREMENTS DATA	REMARKS
Furniture								
F-1	TASK CHAIR	STEELCASE	STOOL 1	OWNER	OWNER			OWNER TO SELECT CHAIR FINISHES.
GENERAL EQUIPMENT								
GE-1	UNDERCOUNTER FREEZER	SUMMIT	ALFZ53	OWNER	OWNER	X		OR EQUAL.
GE-2	COLOR LABEL PRINTER	CLARISAFE	CLARISAFE-PRINTER	OWNER	OWNER	X	X	OR EQUAL.
GE-3	COUNTERTOP PRINTER	EPSON	WF-C4810 COLOR MFP	OWNER	OWNER	X	X	OR EQUAL.
GE-4	78" TALL MOBILE WIRE SHELF	ULINE	H-4254	OWNER	OWNER			OR EQUAL.
GE-5	PAPER SHREDDER	FELLOWES	PS-79Ci	OWNER	OWNER	X		OR EQUAL.
GE-6	STAINLESS STEEL CART	LAKESIDE	311	OWNER	OWNER			OR EQUAL.
GE-7	FE CABINET	LARSENS	2409-R4	OWNER	CONTRACTOR			OR EQUAL
GE-8	COMPUTER MONITOR, CPU, KEYBOARD, AND MOUSE	TO BE SELECTED BY OWNER.		OWNER	OWNER	X	X	TO BE PROVIDED BY OWNER
SPECIALTY EQUIPMENT								
SE-1	DOUBLE DOOR PHARMACY REFRIGERATOR	FOLLETT	REF45-PH-RHT00G	OWNER	OWNER	X	X	



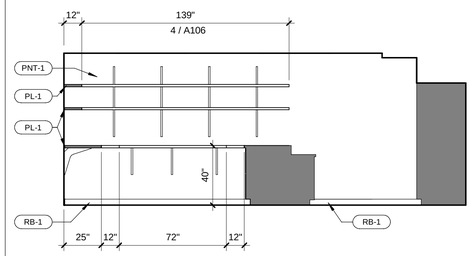
7 PROPOSED FF&E PLAN
1/4" = 1'-0"



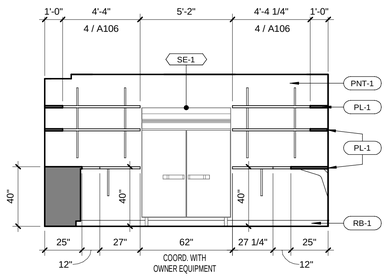
6 NEW WORKROOM
1/4" = 1'-0"



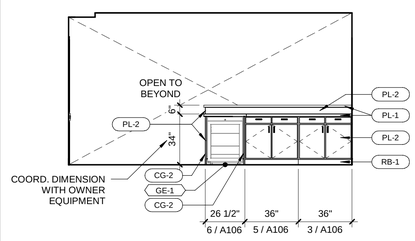
4 NEW WORKROOM
1/4" = 1'-0"



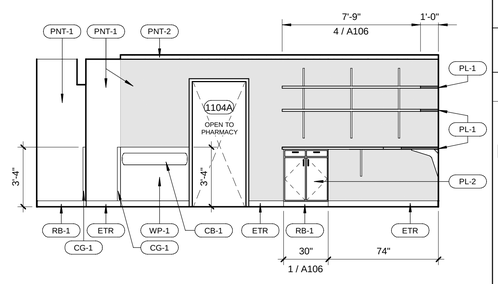
3 NEW WORKROOM
1/4" = 1'-0"



2 NEW WORKROOM
1/4" = 1'-0"



5 NEW WORKROOM
1/4" = 1'-0"



1 NEW WORKROOM
1/4" = 1'-0"

INTERIOR ELEVATION GEN. NOTES

A. COORDINATE CABINETRY & APPLIANCES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR ALTERATIONS. G.C. TO PROVIDE SHOP DRAWINGS OF ALL CASEWORK FOR ARCHITECT'S REVIEW AND COMMENT. FIELD VERIFY ALL DIMENSIONS.

B. ALL FINISH FLOORING AND WALL BASE SHALL EXTEND UNDER ALL AREAS NOT COVERED WITH BASE CABINETRY.

C. ALL FINISH FLOORING SHALL EXTEND UNDER ALL REMOVABLE BASE CABINETS.

D. ALL PLUMBING FIXTURES & WORK STATIONS TO MEET ADA REQUIREMENTS UNO. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR ALTERATIONS.

E. PROVIDE HOLES & GROMMETS AT EACH WORK STATION AS REQUIRED. COORDINATE WITH OWNER.

F. REFER TO REFLECTED CEILING PLAN FOR ALL CEILING HEIGHTS AND LIGHTING INFORMATION.

G. REFER TO FINISH PLAN & SCHEDULE FOR ADDITIONAL INFORMATION.

H. REFER TO GENERAL INFORMATION SHEET FOR TYPICAL MOUNTING HEIGHTS.

I. COUNTERTOP SUPPORT BRACKETS SHALL SPAN A MAXIMUM OF 36" O.C. PRIME AND PAINT BRACKETS TO MATCH ADJACENT WALL SURFACE.

INTERIOR ELEVATION LEGEND

KEYNOTE	#
FINISH TAG	PNT-1

CASEWORK KEY

WALL CABINETS

W # # X
- MODIFIER
- CABINET WIDTH (INCHES)
- CABINET HEIGHT (INCHES)
- CABINET TYPE

BASE CABINETS

B # X
- MODIFIER
- CABINET WIDTH (INCHES)
- CABINET TYPE

CABINET TYPE
W - WALL CABINET
B - BASE CABINET
P - TALL CABINET
DR - DRAWER BASE
S - SINK BASE
F - FILLER PANEL
K - WORKSTATION

MODIFIER
A - ADA
D - WITH DRAWER
L - LOCKABLE
X - DATA CABINET
TD - TRASH DRAWER
O - OPEN SHELF
FP - FINISH END PANEL

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:
Nuvance Health

CONSULTANT:

PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

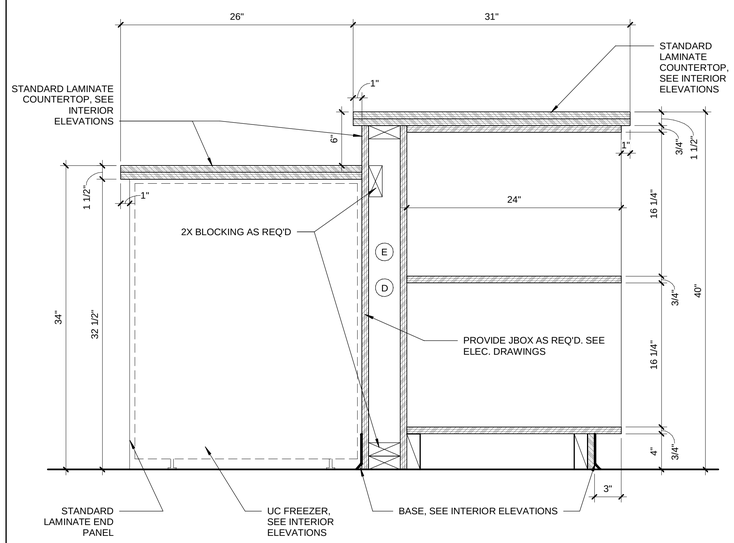
ISSUED FOR: BID
ISSUED DATE: 08/14/2024
DRAWN BY: CP
CHECKED BY: NF
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

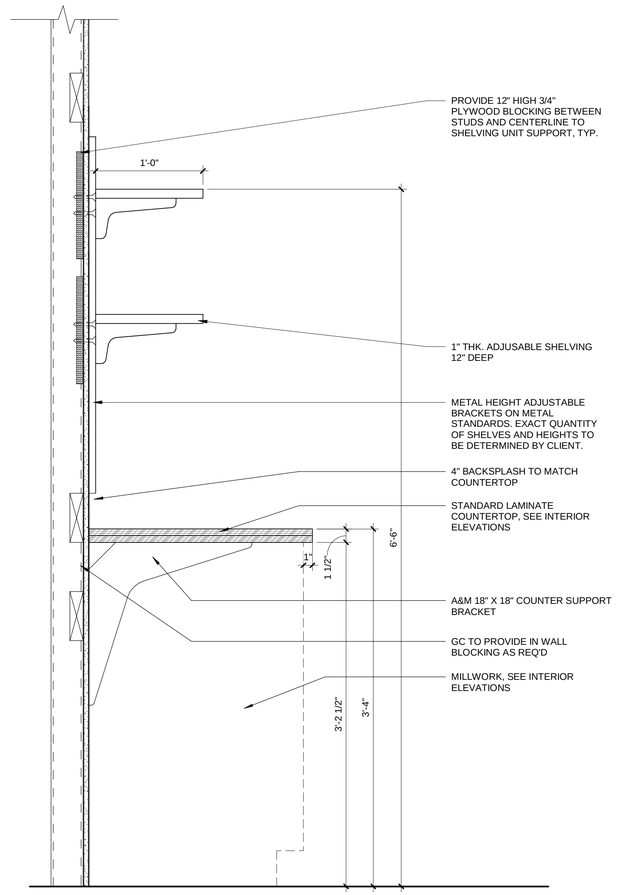
DRAWING NAME:
FF&E PLAN, FF&E SCHEDULE, & INTERIOR ELEVATIONS

DRAWING NO.
A105

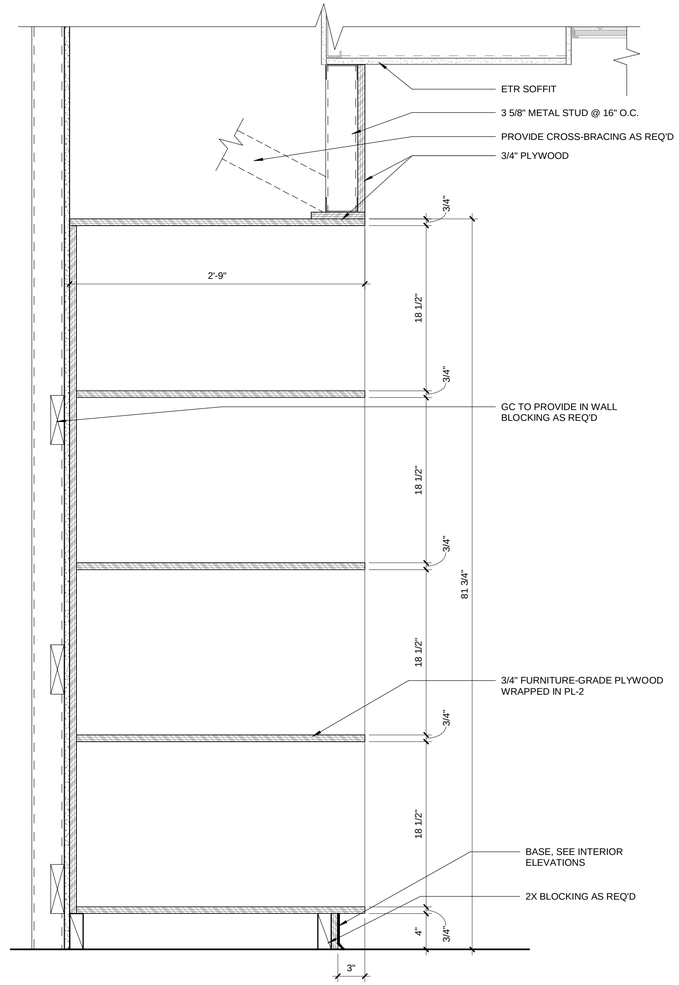
Plot Date: 7/15/2024 9:38:42 AM Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt



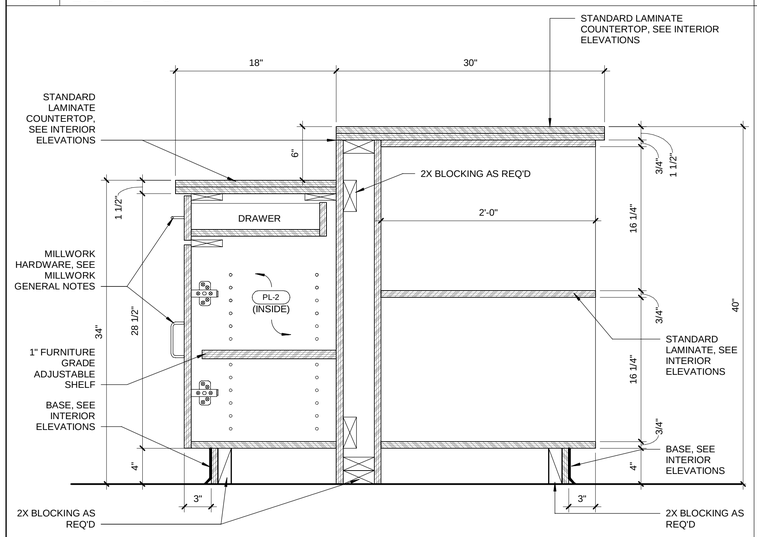
6 SHELF & FREEZER
1 1/2" = 1'-0"



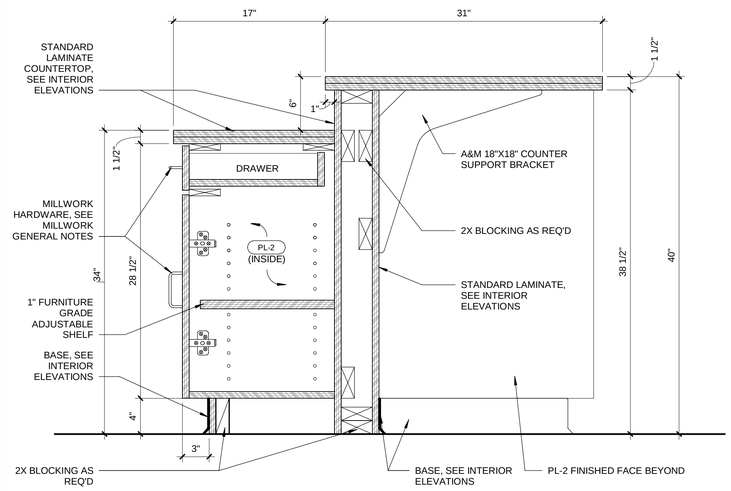
4 FLOATING SHELVES
1 1/2" = 1'-0"



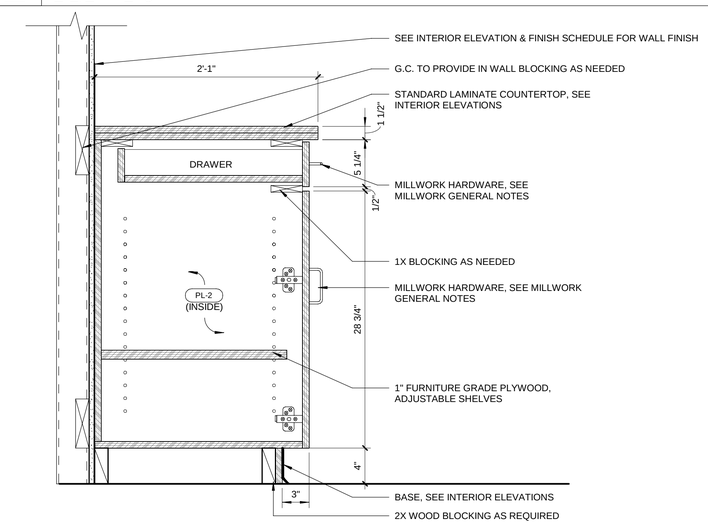
2 TALL STORAGE SHELF
1 1/2" = 1'-0"



5 SHELF & CAB
1 1/2" = 1'-0"



3 SHELF & BLANK
1 1/2" = 1'-0"



1 BASE CABINET W/ TOP DRAWER TALL
1 1/2" = 1'-0"

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN
MERGED WITH COLLIERS ENGINEERING & DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CP

CHECKED BY: NF

PROJECT NUMBER: 22559

Collins Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

MILLWORK DETAILS

DRAWING NO.

A106

Dwg Filename: C:\Users\c_pegg\Documents\R23_22559_Norwalk Hospital Retail Pharmacy Workroom_cpegg2GX2E.rvt

Plot Date: 7/15/2024 9:38:42 AM

DEMOLITION NOTES

1. DEMOLITION NOTES, SYMBOL LIST AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
2. ALL PIPING IN WALLS AND FLOORS NOT TO BE REUSED WILL BE PLUGGED OR CAPPED AND CUTTING AND PATCHING WILL BE PERFORMED TO RESTORE SURFACE TO ORIGINAL CONDITION BY THIS CONTRACTOR.
3. AFTER REMOVING PIPING THROUGH FLOOR SLABS, PENETRATIONS SHALL BE PATCHED WITH APPROVED FIRE–RATED MATERIAL.
4. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF HVAC WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE OWNER/ENGINEER.
5. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING HVAC SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
6. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
7. THE CONTRACTOR SHALL REMOVE ALL DUCT & PIPING SUPPORTS, ECT. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN. THE CONTRACTOR SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS NECESSARY.
8. ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERNATION WORK SHALL BE REROUTED CONCEALED BEHIND FINISHED SURFACES.
9. PORTIONS OF PIPING & DUCTWORK TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ACTIVE, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED.
10. 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 REQUIREMENTS.
11. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE HVAC CONTRACTOR, AS DIRECTED BY THE OWNER.
12. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
13. THE SHUTDOWN OF EXISTING BUILDING HVAC SERVICES SHALL BE COORDINATED WITH THE OWNER. MAKE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN.
14. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE & LOCAL REQUIREMENTS.

GENERAL NOTES

1. THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF WORK AS WELL AS INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTWORK AND PIPING. THE CONTRACTOR SHALL ADHERE TO THESE DRAWINGS AS CLOSELY AS POSSIBLE. HOWEVER, THE RIGHT IS RESERVED TO VARY THE RUNS OF DUCTWORK AND PIPING AND TO MAKE OFFSETS, WHERE NECESSARY, TO ACCOMMODATE CONDITIONS ARISING AT THE JOB SITE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO WORK SHALL BE PERFORMED PRIOR TO RECEIPT OF EQUIPMENT, DUCTWORK AND PIPING FABRICATION DRAWING APPROVAL.
2. ANY MATERIAL, WORK OR INCIDENTAL ACCESSORIES OR MINOR DETAILS NOT SHOWN BUT NECESSARY TO MAKE THE WORK COMPLETE IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
3. DUCT SIZES SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS, WHERE ACOUSTICALLY LINED DUCT IS SPECIFIED. DUCT DIMENSIONS SHALL BE INCREASED TO ACCOMMODATE LINING.
4. ALL LOW PRESSURE TERMINAL BRANCH DUCTWORK (SUPPLY AND RETURN) SHALL BE PROVIDED WITH VOLUME CONTROL DAMPERS. ALL BRANCH DUCT VOLUME DAMPERS SERVING DIFFUSERS IN GYPSUM BOARD CEILINGS (OTHERWISE INACCESSIBLE) SHALL BE REMOTELY (CORD OR CABLE) OPERABLE THROUGH THE FACE OF THE DIFFUSER.
5. THERMOSTAT LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS, FINISHED PAINT COLOR TO BE SELECTED BY THE ARCHITECT. 48" ABOVE FINISHED FLOOR.
6. WHERE PIPING CONNECTIONS FOR EQUIPMENT SUCH AS PUMPS, AC UNITS, COIL, ECT, DIFFER FROM THE LINE SIZE PIPING. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH AND INSTALL THE NECESSARY REDUCER/EXPANDER FITTINGS TO ENABLE CONNECTION BETWEEN THE PIPING SYSTEM AND THE EQUIPMENT.
7. PROVIDE ONE THERMOSTAT FOR EACH FAN COIL UNIT, ATTIC VENT AIR FAN UNIT, VAV, FPB, CABINET UNIT HEATER AND ELECTRIC BASEBOARD RADIATION. THERMOSTAT LOCATIONS SHALL BE AS SHOWN ON PLANS AND/OR WHERE DIRECTED AND APPROVED BY THE ARCHITECTS AND ENGINEERS.
8. BORDER TYPES AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES AND REGISTERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
9. REFER TO SPECIFICATIONS FOR ACOUSTIC LINING REQUIREMENTS NOT SHOWN ON THE DRAWINGS.
10. ALL PIPING SHALL BE INSTALLED TIGHT TO THE BOTTOM OF STEEL AT ALL TIMES UNLESS OTHERWISE INDICATED OR REQUIRED BY FIELD CONDITIONS.
11. ALL PIPING OF DISSIMILAR MATERIALS SHALL HAVE DIELECTRIC FITTINGS.
12. ALL HVAC EQUIPMENT THAT CONTAINS A COILING COIL OR FUEL FIRED APPLIANCE WILL BE PROVIDED WITH A SECONDARY DRAIN PAN AND A MOISTURE SENSOR THAT WILL AUTOMATICALLY SHUT THE UNIT DOWN WHEN MOISTURE IS DETECTED.

MECHANICAL ABBREVIATIONS

ATC	AUTOMATIC TEMPERATURE CONTROL
CD–A	DIFFUSER TYPE – REFER TO SCHEDULE
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNITS
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CP	CONDENSATE PUMP
E	EXISTING
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ER	EXISTING TO REMAIN
ETR	EXISTING TO BE RELOCATED
FC	FAN COIL
FLA	FULL LOAD AMPS
GPM	GALLONS PER MINUTE
HZ	HERTZ
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OED	OPEN ENDED DUCT
PC	PUMPED CONDENSATE
PD	PUMPED DISCHARGE
PH	PHASE
PSI	POUNDS PER SQUARE INCH
SHC	SENSIBLE COOLING (IN MBH)
TC	TOTAL COOLING (IN MBH)
TYP	TYPICAL
V	VOLTS
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WMS	WIRE MESH SCREEN

MECHANICAL DUCTWORK SYMBOL LIST

	NEW SUPPLY DUCT
	EXISTING SUPPLY DUCT TO REMAIN
	EXISTING SUPPLY DUCT TO BE REMOVED
	NEW RETURN DUCT
	EXISTING RETURN DUCT TO REMAIN
	EXISTING RETURN DUCT TO BE REMOVED
	ACOUSTICALLY LINED DUCT
	NEW EQUIPMENT
	EXISTING EQUIPMENT TO BE REMOVED
ER	EXISTING EQUIPMENT TO REMAIN
ETR	EXISTING EQUIPMENT TO BE RELOCATED
18X12	DUCT SIZE (FIRST FIGURE INDICATES HORIZONTAL SIZE)
18ø	ROUND DUCT DIAMETER
	TRANSITION FROM RECTANGULAR TO ROUND OR OVAL DUCT
	FLEXIBLE CONNECTION
V.D.	VOLUME DAMPER
	SUPPLY REGISTER
	RETURN OR EXHAUST REGISTER OR GRILLE
	SUPPLY CEILING DIFFUSER
	RETURN CEILING GRILLE OR REGISTER
	SUPPLY LINEAR DIFFUSER W/ PLENUM
	RETURN LINEAR DIFFUSER W/ PLENUM
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN OR EXHAUST DUCT UP
	RETURN OR EXHAUST DUCT DOWN
	ELBOW WITH TURNING VANES
	RADIUS ELBOW
	DUCT SPLIT OR BRANCH TAKEOFF
T	THERMOSTAT – WALL OR DUCT MOUNTED
S	TEMPERATURE SENSOR – WALL OR DUCT MOUNTED
X	MECHANICAL PLAN NOTE TAG
X	REVISION SYMBOL
	POINT OF NEW CONNECTION TO EXISTING WORK
	REMOVE AND SAFE OFF EXISTING WORK FOR RECONNECTION

MECHANICAL DRAWING INDEX

DRAWING NO.	DRAWING TITLE
M001	MECHANICAL NOTES, LEGEND, AND DRAWING INDEX
M100	MECHANICAL DEMOLITION PLAN
M200	MECHANICAL FLOOR PLAN
M300	MECHANICAL SCHEDULES AND DETAILS
M400	MECHANICAL SPECIFICATIONS (SHEET 1 OF 2)
M401	MECHANICAL SPECIFICATIONS (SHEET 2 OF 2)

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PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: CH
CHECKED BY: TL
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

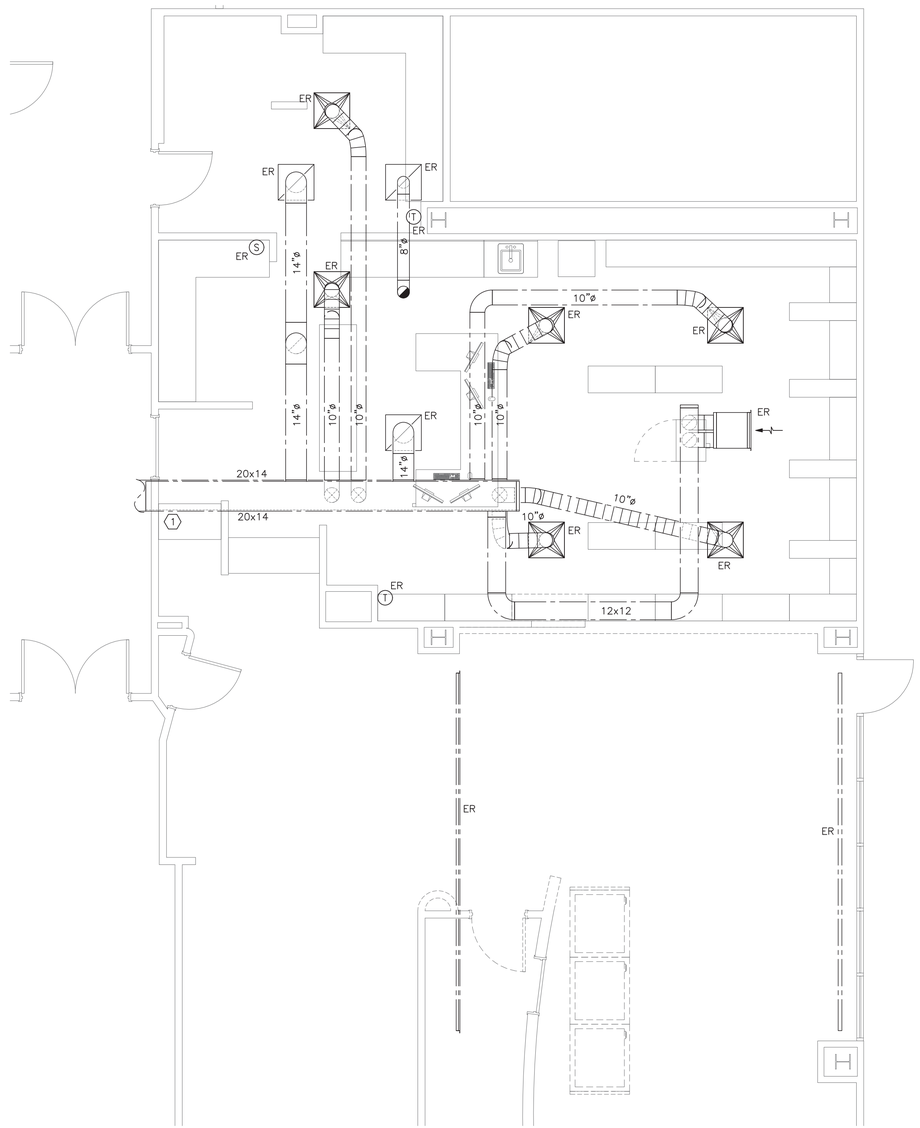
DRAWING NAME:
MECHANICAL NOTES, LEGEND, AND INDEX

DRAWING NO.
M001

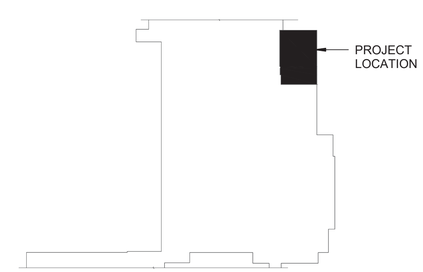
Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

MECHANICAL DEMOLITION PLAN NOTES

1. PERFORM PRE-CONTRUCTION AIR BALANCING OF EXISTING SYSTEM. FULLY OPEN ALL DIFFUSERS TO DETERMINE EXACT AIRFLOW AVAILABLE.



1 MECHANICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



2 KEY PLAN
SCALE: NONE

ARCHITECT:
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REVISIONS

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Colliers Engineering & Design,
Architecture, Landscape Architecture,
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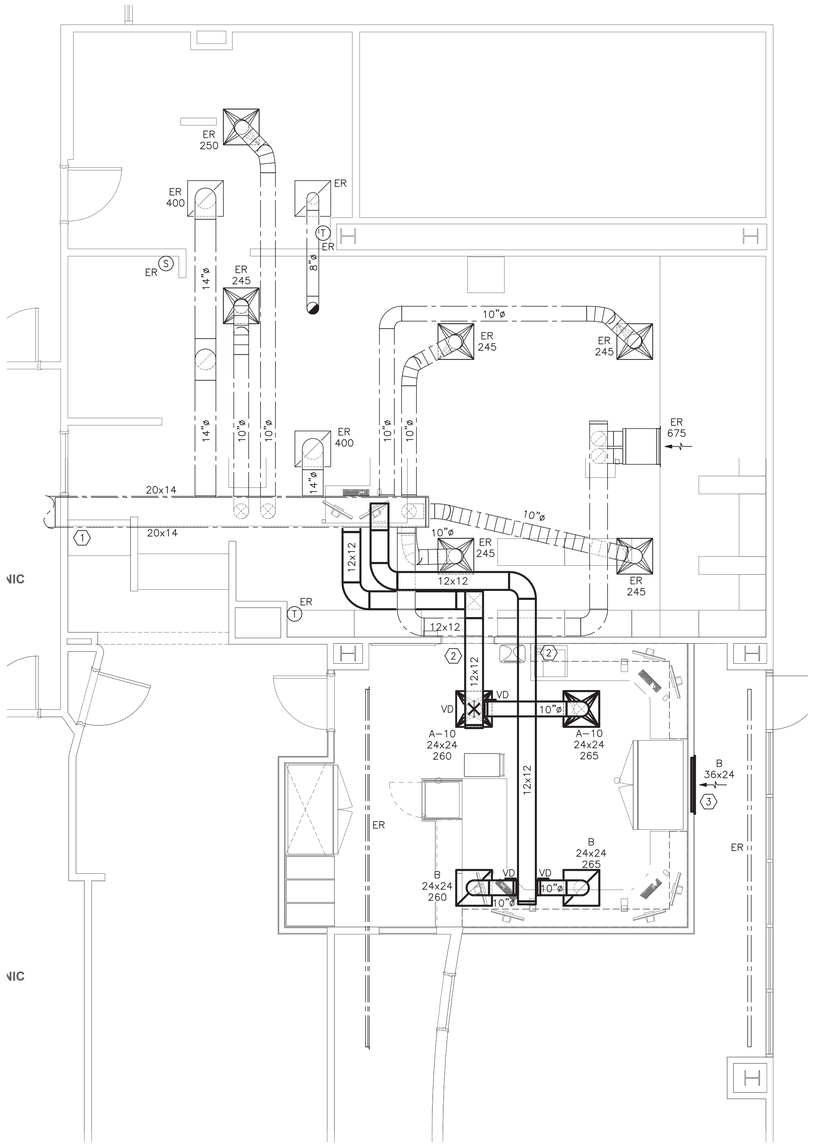
DRAWING NAME:
MECHANICAL DEMOLITION PLAN

DRAWING NO.
M100

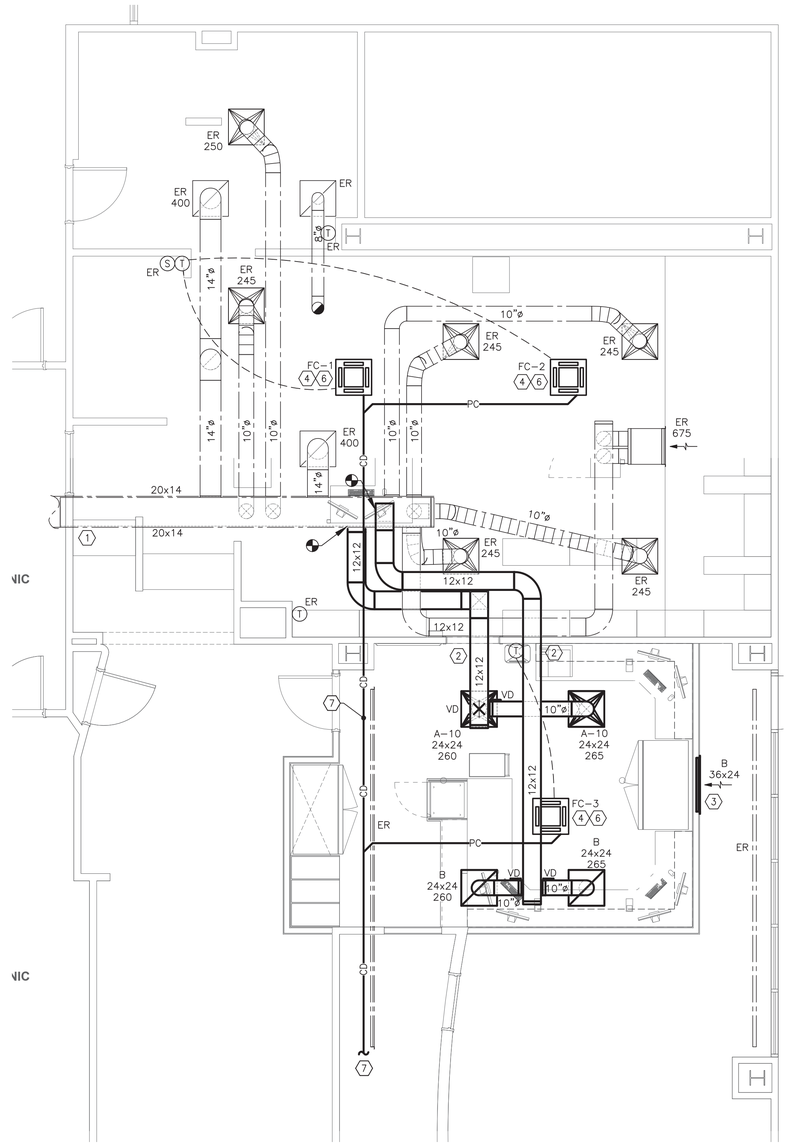
Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

MECHANICAL PLAN NOTES

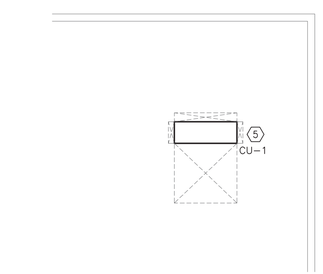
1. PROPORTIONALLY BALANCE SYSTEM PER PRE–CONSTRUCTION AIR BALANCE REPORT.
2. ROUTE NEW SUPPLY AND RETURN BRANCH DUCTWORK HIGH TO PENETRATE WALL ABOVE BRICK CONSTRUCTION. COORDINATE EXACT PENETRATION LOCATION IN FIELD.
3. PROVIDE NEW HIGH SIDEWALL RETURN GRILL OPEN TO CEILING PLENUM FOR RETURN PATH TO EXISTING LINEAR GRILL NOW LOCATED ABOVE NEW CEILING.
4. PROVIDE NEW DUCTLESS CASSETTE FAN COIL UNIT. PROVIDE WITH MANUFACTURER OPTIONAL MINI CONDENSATE PUMP AND 7–DAY PROGRAMMABLE THERMOSTAT WITH BACNET CAPABILITY FOR INTEGRATION INTO EXISTING BMS. ASSOCIATED HEAT PUMP CONDENSER TO BE LOCATED ON ROOF ABOVE PHARMACY. SIZE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
5. PROVIDE NEW HEAT PUMP CONDENSER ON ROOF TO SERVE ALL NEW INDOOR FAN COIL UNITS. MOUNT UNIT ON NEW 24" STAND FOR WINTER OPERATION. COORDINATE EXACT LOCATION IN FIELD. EXISTING ROOF PARAPET IS TALL ENOUGH TO ALLOW UNIT TO BE INSTALLED WITHIN 10'–0" OF ROOF EDGE. PROVIDE MANUFACTURER OPTIONAL JOINT PIPES FOR CONNECTION TO THREE INDOOR UNITS. SIZE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. NEW FAN COIL UNIT PROVIDED WITH INTEGRAL MINI–CONDENSATE PUMP. ROUTE NEW PUMPED CONDENSATE (PC) TO NEW CONDENSATE DRAIN LINE LOCATED IN CEILING.
7. NEW 1" CONDENSATE DRAIN LINE (CD) SHALL BE ROUTED TO EXISTING PANTRY AREA AND DISCHARGE TO EXISTING FLOOR SINK IN AREA. VERIFY EXACT ROUTING IN FIELD.



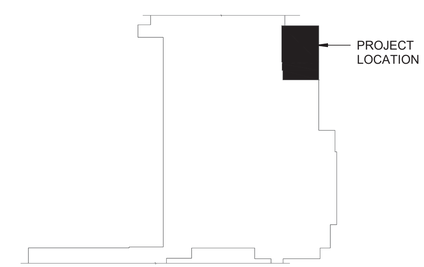
1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 MECHANICAL ADD/ALT FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 MECHANICAL ADD/ALT ROOF PART PLAN
SCALE: 1/4" = 1'-0"



4 KEY PLAN
SCALE: NONE

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PROJECT:
NUVANCE HEALTH
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REVISIONS

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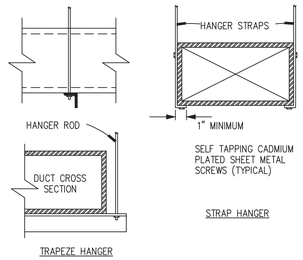
Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.

DRAWING NAME:
MECHANICAL FLOOR PLAN

DRAWING NO.
M200

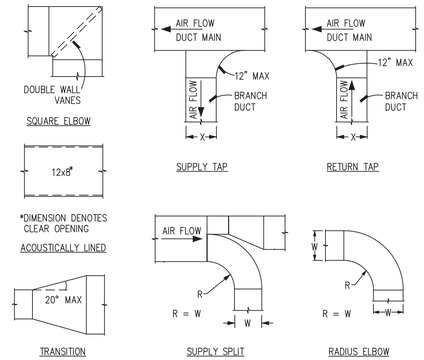
Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt



HANGER SIZES FOR RECTANGULAR DUCT			
MAX SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING
30"	1"x16 GAUGE STRAP	NONE	8'-0"
36"	1/4" ROUND ROD	1-1/2"x1-1/2"x1/8"	8'-0"
48"	1/4" ROUND ROD	2"x2"x1/8"	8'-0"
60"	5/16" ROUND ROD	2"x2"x1/8"	8'-0"
84"	3/8" ROUND ROD	2"x2"x1/8"	8'-0"

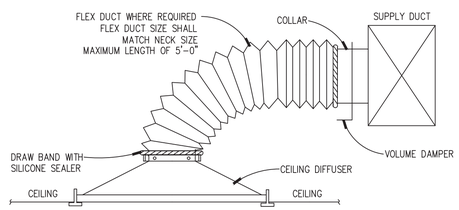
1 DUCT HANGER DETAIL

SCALE: NONE



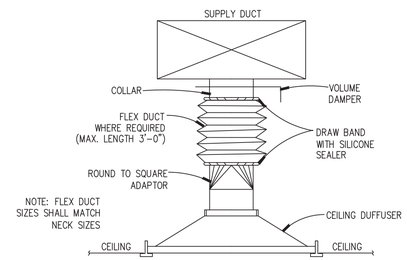
2 DUCT FITTING DETAIL

SCALE: NONE



3 TYPICAL SIDE DIFFUSER CONNECTION

SCALE: NONE



4 TYPICAL DIFFUSER CONNECTION

SCALE: NONE

ADD/ ALTERNATE OUTDOOR HEAT PUMP CONDENSING UNIT

UNIT TAG	SERVICE LOCATION	TOTAL COOLING	HEATING	OPERATING TEMP RANGE COOLING	OPERATING TEMP RANGE HEATING	#FANS #COMP	REFRIG	EER	WEIGHT	ELECTRICAL DATA MCA	ELECTRICAL DATA VOLTS	ELECTRICAL DATA PHASE	MANUFACTURER MODEL	REMARKS
CU-1	FC-1,FC-2,FC-3 ROOF	60 MBH	66 MBH	23°F-115°F	-13°F-59°F	2 1	R-410A	11.1	302 LBS	36.0	208	1	MITSUBISHI PUMY-P60NKMU3	NOTES 1-3

NOTES:

1. MOUNT UNIT ON NEW MANUFACTURER OPTIONAL 24" EQUIPMENT STAND.
2. SIZE AND INSTALL REFRIGERATION PIPING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. PROVIDE WITH (2) MANUFACTURER OPTIONAL CMY-Y62-G-E JOINT PIPES FOR CONNECTION TO THREE INDOOR UNITS.

ADD/ALTERNATE FAN COIL UNITS

UNIT TAG	LOCATION SERVICE	NOM TONS	TOTAL COOLING	HEATING	CFM	OA	SP	REFRIG	ELECTRICAL DATA MCA	ELECTRICAL DATA VOLTS	ELECTRICAL DATA PHASE	MANUFACTURER MODEL	QTY	REMARKS
FC-1	CEILING PHARMACY	1.5	18 MBH	20 MBH	460	–	–	R-410A	0.5	208	1	MITSUBISHI PLFY-P18NFMU-ER1	1	NOTES 1-2
FC-2	CEILING PHARMACY	1.5	18 MBH	20 MBH	460	–	–	R-410A	0.5	208	1	MITSUBISHI PLFY-P18NFMU-ER1	1	NOTES 1-2
FC-3	CEILING PHARMACY	1.0	12 MBH	13 MBH	335	–	–	R-410A	0.29	208	1	MITSUBISHI PLFY-P12NFMU-ER1	1	NOTES 1-2

NOTES:

1. PROVIDE WITH MANUFACTURER OPTIONAL MINI CONDENSATE PUMP MODEL X87-721.
2. PROVIDE WITH MANUFACTURER WIRED PROGRAMMABLE 7-DAY THERMOSTAT WITH BACNET CAPABILITY FOR MONITORING THROUGH EXISTING BMS.

DIFFUSERS, REGISTERS, GRILLES

UNIT TAG	SERVICE	MATERIAL FINISH	MANUFACTURER MODEL	REMARKS	UNIT TAG	SERVICE	MATERIAL FINISH	MANUFACTURER MODEL	REMARKS
A	SUPPLY	STEEL WHITE	PRICE SPD	NOTE 1	B	RETURN	STEEL WHITE	PRICE 530	NOTE 1

NOTES:

1. PROVIDE SIZE INDICATED IN DRAWINGS.

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

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CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

MECHANICAL SCHEDULES AND DETAILS

DRAWING NO.

M300

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

MECHANICAL SPECIFICATIONS

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS

A. INSTALL ALL NEW WORK IN A NEAT WORKMANLIKE MANNER READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR.

B. CODES, PERMITS AND INSPECTIONS:

1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF CONNECTICUT BUILDING CODE, NORWALK BUILDING DEPARTMENT, BUILDING MANAGEMENT, AND ALL AUTHORITIES HAVING JURISDICTION AND APPLICABLE NATIONAL, STATE AND LOCAL CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK SHALL BE INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. CONTRACTOR IS TO INFORM ENGINEER OF ANY EXISTING WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE BY THIS CONTRACTOR AND AT NO EXPENSE TO THE OWNER.

2. THIS CONTRACTOR SHALL OBTAIN ALL EQUIPMENT APPROVALS AS REQUIRED BY STATE AND LOCAL AUTHORITIES. PERMITS SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

C. SITE VERIFICATION:

1. PRIOR TO SUBMISSION OF THE BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE TO ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATE TO THE WORK INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN. DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO SUBMISSION OF THE BID, AND IF NOT RESOLVED TO SATISFACTION, SHALL BE SUBMITTED AS A WRITTEN QUALIFICATION OF THE BID. SUBMISSION OF A BID SHALL BE EVIDENCE THAT SITE VERIFICATION HAS BEEN PERFORMED AS DESCRIBED ABOVE.

D. CONTRACT DOCUMENTS:

1. PRIOR TO SUBMISSION OF A FORMAL BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTION, DEMOLITION, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SPRINKLER AND SHALL INCLUDE ANY WORK REQUIRED IN THE BID WHICH IS INDICATED OR IMPLIED TO BE PERFORMED BY THIS TRADE IN OTHER SECTIONS OF THE WORK.

2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND APPROXIMATE LOCATION OF EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND COORDINATE FINAL LOCATIONS OF DIFFUSERS, GRILLES, REGISTERS, THERMOSTATS, SENSORS, SWITCHES AND ANY WALL MOUNTED DEVICES. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT.

3. IF A CONFLICT OCCURS IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS, THE MORE STRINGENT SITUATION SHALL APPLY.

E. GUARANTEE:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THIS WORK. FINAL ACCEPTANCE SHALL BE DEFINED AS THE TIME AT WHICH THE MECHANICAL WORK IS TAKEN OVER AND ACCEPTED BY THE OWNER, AND IS UNDER CARE, CUSTODY, AND CONTROL OF THE OWNER. ENGAGE THE SERVICES OF VARIOUS MANUFACTURERS SUPPLYING THE EQUIPMENT FOR THE PROPER STARTUP AND OPERATION OF ALL SYSTEMS INSTALLED. INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND SERVICING OF THE SYSTEM.

2. THE CONTRACTOR SHALL GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL INCLUDE RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THIS CONTRACTOR.

3. THIS CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SYSTEMS UNTIL THE FINAL ACCEPTANCE OF THE WORK.

4. ALL AIR CONDITIONING UNIT COMPRESSORS AND REFRIGERATION COMPONENTS SHALL HAVE A 5–YEAR WARRANTY.

F. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AIA DOCUMENT A201, LATEST EDITION, OR AS REQUIRED BY THE ARCHITECT'S DOCUMENTS, AND/OR THE STRUCTURAL ENGINEER'S DOCUMENTS, AS APPLICABLE, ARE PART OF THIS CONTRACT.

G. DEFINITIONS:

1. MECHANICAL CONTRACTOR, "THIS CONTRACTOR" – THE PARTY OR PARTIES HAVE BEEN DULY AWARDED THE CONTRACT FOR AND ARE THEREBY MADE RESPONSIBLE FOR THE MECHANICAL WORK AS DESCRIBED HEREIN.

2. "THIS CONTRACT", "THE CONTRACT" – THE AGREEMENT COVERING THE WORK TO BE PERFORMED BY THIS CONTRACTOR.

3. "APPROVED", "EQUAL", "SATISFACTORY", "ACCEPTED", "ACCEPTABLE", "EQUIVALENT" – SUITABLE FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER BASED ON DOCUMENTS PRESENTED FOR SUCH DETERMINATION.

4. "THESE SPECIFICATIONS", "THIS SECTION, PART, DIVISION" (OF THE SPECIFICATION) – THE DOCUMENT SPECIFYING THE WORK TO BE PERFORMED BY "THIS CONTRACTOR".

5. "THE MECHANICAL WORK", "THIS WORK" – ALL LABOR MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES, AND OTHER ITEMS REQUIRED FOR A PROPER AND COMPLETE INSTALLATION BY THE MECHANICAL CONTRACTOR.

6. "ARCHITECT", "ENGINEER", "OWNER'S REPRESENTATIVE" – THE PARTY OR PARTIES RESPONSIBLE FOR INTERPRETING, ACCEPTING AND OTHERWISE RULING ON THE PERFORMANCE UNDER THIS CONTRACT.

7. "FURNISH" – PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THE MECHANICAL WORK.

8. "INSTALL" – UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING INSTALLATION AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE MECHANICAL WORK.

9. "PROVIDE" – "FURNISH" AND "INSTALL".

10. "NEW" – MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.

11. "RELOCATE" – MOVE EXISTING EQUIPMENT AND ALL ACCESSORIES AS REQUIRED.

12. "REMOVE" – DISMANTLE AND CART AWAY FROM SITE INCLUDING ALL RELATED ACCESSORIES. ALL ITEMS SHALL BE LEGALLY DISPOSED OF. ALL OTHER EQUIPMENT AND OPERATIONS IN ANY WAY AFFECTED BY THE REMOVAL IS TO REMAIN IN FULL OPERATION. PROVIDE ALL NECESSARY COMPONENTS TO MAINTAIN SUCH OPERATION.

1.02 SCOPE OF WORK

A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND CONTRACTOR'S SERVICES NECESSARY FOR COMPLETE, SAFE INSTALLATION OF ALL MECHANICAL WORK. THE SCOPE OF WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

1. DEMOLITION AND REMOVAL OF ITEMS AS REQUIRED.
2. DUCTWORK AND DUCTWORK ACCESSORIES.
3. INSULATION OF PIPING, EQUIPMENT AND DUCTWORK.
4. TESTING AND BALANCING.
5. CUTTING AND PATCHING.
6. SHOP DRAWINGS.
7. AS–BUILT DRAWINGS.
8. OPERATING AND MAINTENANCE MANUALS.
9. FULL COORDINATION WITH OTHER TRADES.
10. WARRANTY AND GUARANTY.
11. PHASING AS REQUIRED BY OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR OR BUILDING MANAGEMENT.
12. PREMIUM TIME FOR WORK TO BE PERFORMED AFTER–HOURS AS REQUIRED BY BUILDING MANAGEMENT AND/OR OWNER.
13. FILING, PERMITS, CONTROLLED INSPECTIONS.
14. FULL TESTING AND STARTUP OF ALL SYSTEMS.

B. SECURE CERTIFICATES, PAY ALL FEES AND CHARGES FOR ALL WORK INSTALLED, CERTIFYING COMPLIANCE WITH ALL AUTHORITIES. DELIVER CERTIFICATES TO OWNER FOR SIGNING BEFORE FILING

1.03 COORDINATION WITH BUILDING MANAGEMENT

A. THIS CONTRACTOR IS TO OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS PRIOR TO BID SUBMISSION TO DETERMINE THE REQUIREMENTS AND THE EXTENT OF PREMIUM TIME WORK REQUIRED BY THE BUILDING.

B. THIS CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE BUILDING OWNER'S RULES AND REGULATIONS. ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE BUILDING RULES AND REGULATIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER FOR REVIEW WITH BID SUBMISSION.

C. COORDINATE WITH BUILDING OWNER FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS, OR CONTRACTOR TO PROVIDE A MINIMUM OF TWO (2) DAYS NOTICE PRIOR TO ANY WORK BEING PERFORMED, WHICHEVER IS THE MORE STRINGENT. CONTRACTOR IS TO PERFORM WORK ON PREMIUM TIME, IF SO DIRECTED BY BUILDING OWNER, SO AS NOT TO DISTURB EXISTING TENANTS ON OTHER FLOORS.

1.04 SHOP DRAWINGS

A. SUBMIT SHOP DRAWINGS CERTIFIED BY ALL TRADES THAT COORDINATION HAS BEEN COMPLETED. SUBMIT ALL CERTIFIED EQUIPMENT CUTS WITH CONSTRUCTION WIRING DIAGRAMS AND AUTOMATIC TEMPERATURE CONTROL REQUIREMENTS. SHOP DRAWINGS SUBMISSION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. DUCTWORK – PROVIDE DUCT SHOP STANDARDS AND LEAKAGE TEST CERTIFICATION, AS REQUIRED, AND 1/4 SCALE DUCT LAYOUT.
2. PIPING LAYOUT AND APPURTENANCES – PROVIDE PIPING, VALVING, CHEMICAL TREATMENT, SHOP STANDARDS AND 1/4 SCALE PIPING LAYOUT WITH ALL VALVING.
3. INSULATION FOR DUCTWORK, PIPING AND EQUIPMENT.
4. EQUIPMENT CATALOG CUTS FOR ALL ITEMS TO BE UTILIZED ON PROJECT (FANS, PUMPS, AC UNITS, VARIABLE FREQUENCY DRIVES, VAV BOXES, ETC.).
5. AIR OUTLETS (DIFFUSERS, REGISTERS, GRILLES, ETC.).
6. AUTOMATIC TEMPERATURE CONTROL DIAGRAMS, DEVICES AND SEQUENCE OF OPERATION.
7. CERTIFIED AIR AND WATER BALANCING REPORT.
8. AS–BUILT DRAWINGS AT PROJECT COMPLETION OF THE INSTALLED CONDITION OF WORK.

B. THE QUANTITY OF SHOP DRAWINGS SHALL AS A MINIMUM BE FOUR (4) COPIES OF 8–1/2" X 11" SUBMISSIONS AND FIVE (5) PRINTS OF ALL DRAWINGS. SPECIFIC JOB REQUIREMENTS MAY BE MORE STRINGENT AND CONTRACTOR IS RESPONSIBLE TO OBTAIN REQUIREMENTS FROM OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR OR ARCHITECT.

1.05 MAINTENANCE MANUALS

A. SUBMIT FOUR (4) LOOSE–LEAF BOUND OPERATING AND MAINTENANCE MANUALS WITH INDEX AND INDEX TABS TO INCLUDE THE FOLLOWING:

1. OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL SYSTEMS.
2. MANUFACTURERS= CATALOG CUTS ON ALL EQUIPMENT.
3. AUTOMATIC TEMPERATURE CONTROL SYSTEMS WITH SEQUENCE OF OPERATIONS, CATALOG CUTS OF ALL DEVICES AND POINT–TO–POINT WIRING DIAGRAMS.
4. CERTIFIED FINAL AIR AND WATER BALANCING REPORT.
5. DUCT AND PIPING AS–BUILT DRAWINGS WITH VALVE CHART AND KEY PLAN DRAWINGS INSERTED IN BINDER.
6. ALL ITEMS SUBMITTED FOR REVIEW IN SHOP DRAWING SECTION.

1.06 ACCESS DOORS IN GENERAL CONSTRUCTION

A. THIS CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL A PLAN INDICATING THE SIZE AND LOCATION OF ALL ACCESS DOORS REQUIRED FOR OPERATION AND MAINTENANCE OF ALL CONCEALED EQUIPMENT, DEVICES, VALVES, DAMPERS AND CONTROLS. CONTRACTOR SHALL ARRANGE FOR FURNISHING AND INSTALLATION OF ALL ACCESS DOORS IN FINISHED CONSTRUCTION AND INCLUDE COSTS IN THE BID. ACCESS DOORS SHALL BE OF ADEQUATE SIZE TO PROVIDE ACCESS TO CONCEALED ITEMS FOR OPERATION AND MAINTENANCE, WITH A MINIMUM SIZE OF 18" X 18".

PART 2 – PRODUCTS/APPLICATIONS

2.01 DUCTWORK AND ACCESSORIES

A. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE, LATEST EDITION, SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL, LATEST EDITION, NFPA 90A LATEST EDITION, AND CONNECICUT MECHANICAL CODE. THE MORE STRINGENT REQUIREMENT OF ANY CODES SHALL APPLY.

B. PROVIDE ALL SUPPORTING AND HANGING DEVICES IN ACCORDANCE WITH CONNECTICUT BUILDING CODE AND SMACNA.

C. DUCTWORK LAYOUT AND ROUTING IS SCHEMATIC AND THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL DUCT SIZE CHANGES AND RELOCATIONS TO ACCOMMODATE SPACE AND STRUCTURAL CONDITIONS. OFFSETS AND TRANSFORMATIONS SHALL PRESERVE THE FULL INSIDE CROSS–SECTIONAL AREA OF DUCTWORK SHOWN ON THE DRAWINGS.

D. DUCTWORK (NEW AND EXISTING TO BE REUSED) SHALL HAVE PRESSURE CLASSIFICATION, SEALING REQUIREMENTS AND LEAKAGE TESTING IN ACCORDANCE WITH SMACNA AND AS LISTED BELOW UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS.

1. 2" CLASS: ALL OTHER LOW PRESSURE DUCTWORK. SEAL CLASS C, LEAKAGE CLASS 24 (RECTANGULAR) OR CLASS 12 (ROUND).
2. LEAKAGE TESTING:

   ALL TESTING SHALL BE DONE IN THE PRESENCE OF THE ENGINEER OR OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL COLLARS, CAPS, ELECTRIC POWER, ETC. NECESSARY TO PERFORM THE TESTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR SCHEDULING THE TEST NO LESS THAN THREE (3) BUSINESS DAYS PRIOR TO ITS INTENDED OCCURRENCE. LOW PRESSURE DUCTWORK (2" CLASS) SHALL BE TESTED ON AN AS–NEEDED BASIS AT THE ENGINEER'S DIRECTION. LEAKAGE TEST PROCEDURES SHALL FOLLOW THE OUTLINES AND CLASSIFICATIONS IN THE SMACNA HVAC DUCT LEAKAGE TEST MANUAL. IF SPECIMEN FAILS TO MEET ALLOTTED LEAKAGE LEVEL, THE CONTRACTOR SHALL MODIFY TO BRING IT INTO COMPLIANCE AND SHALL RETEST IT UNTIL ACCEPTABLE LEAKAGE IS DEMONSTRATED. TESTS AND NECESSARY REPAIR SHALL BE COMPLETED PRIOR TO CONCEALMENT OF DUCTS.

E. MATERIALS:

1. SHEETMETAL: UNLESS OTHERWISE SPECIFIED OR INDICATED, DUCTS SHALL BE CONSTRUCTED OF HOT–DIPPED GALVANIZED SHEETMETAL WITH 60 COMMERCIAL COATING ACCORDING TO ASTM 653 AND A924.
2. FLEXIBLE CONNECTIONS AT FANS SHALL BE NEOPRENE COATED, FLAME RETARDANT GLASS FABRIC (COMPLYING WITH NFPA 90 AND 96), 30 OZ./SQ. YD. WITH SOWN AND CEMENTED SEAMS.

F. FABRICATION:

1. CONFORM TO SMACNA REQUIREMENTS FOR METAL THICKNESS, REINFORCING, JOINTS, AND SEALING FOR MAXIMUM STATIC PRESSURES INVOLVED. ALL SEAMS AND JOINTS SHALL BE SEALED AND TAPED.

G. VOLUME DAMPERS:

1. GALVANIZED STEEL OR SAME AS DUCT CONSTRUCTION. CONFORM TO LATEST EDITION SMACNA HVAC DUCT CONSTRUCTION STANDARDS, OPPOSED BLADE TYPE. PROVIDE BEARING AT BOTH ENDS OF DAMPER ROD AND QUADRANT, WITH LEVER AND LOCKSCREW, AT ONE END. INSTALL WITH LEVERS ACCESSIBLE THROUGH INSULATION. SPLITTER DAMPER OR AIR EXTRACTORS SHALL NOT BE USED ON THIS PROJECT.
2. PROVIDE MANUAL BALANCING VOLUME DAMPERS AS REQUIRED TO PROPERLY BALANCE THE AIR DISTRIBUTION SYSTEM. IF THE LOCATION OF BALANCING DAMPERS ARE NOT DEFINED ON THE DRAWINGS, THE FOLLOWING MINIMUM STANDARDS SHALL GOVERN:

   A) LOW PRESSURE: ALL SUPPLY AIR MAIN BRANCHES FROM TRUNK, EACH SPLIT, AND ALL SUB–BRANCHES FROM MAINS SHALL BE PROVIDED WITH BALANCING DAMPERS.

   B) LOW PRESSURE: ALL EXHAUST AND RETURN BRANCHES FROM TRUNK, EACH SPLIT AND ALL SUB–BRANCHES FROM MAINS SHALL BE PROVIDED WITH BALANCING DAMPERS.

   C) MEDIUM PRESSURE: ALL BRANCHES AND TAKEOFFS DOWNSTREAM OF TERMINAL BOXES (VAV OR FAN POWERED) SHALL BE PROVIDED WITH BALANCING DAMPERS.

   D) AS NOTED ON PLANS.

H. DUCT ACCESS DOORS:

1. CONFORM TO SMACNA WITH PIANO HINGES, TWO SASH LOCKS AND DOOR GASKETS. SCREWED ACCESS PANELS ARE NOT PERMITTED. PROVIDE REMOVABLE ACCESS DOORS WHERE DOOR SWING CANNOT BE ACCOMMODATED.
2. SIZE: MINIMUM 20"X14" EXCEPT DUCTS LESS THAN 16", ONE DIMENSION 20" AND THE OTHER DIMENSION, 2" LESS THAN THE DUCT WIDTH.
3. PROVIDE ACCESS DOORS: AT ENTERING AND LEAVING SIDES OF COILS IN DUCTS; AUTOMATIC DAMPERS ON LINKAGE SIDE, MANUAL VOLUME DAMPERS 2 SQ. FT. AND LARGER, FIRE DAMPERS, SMOKE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS, SMOKE DETECTION HEADS, FAN BEARINGS ENCLOSED IN DUCTS, SUCTION AND DISCHARGE SIDES OF CEILING MOUNTED FANS, FILTERS, REHEAT COILS, AT ALL EQUIPMENT REQUIRING ACCESS AND AS INDICATED ON DRAWINGS.

I. SEAL OPENINGS AROUND DUCTS THROUGH WALLS WITH MINERAL WOOL OR OTHER NON–COMBUSTIBLE MATERIAL. SEAL ALL DUCT PENETRATIONS THROUGH WALLS AIRTIGHT.

J. ALL DUCTS EXPOSE TO MOISTURE SHALL BE ALUMINUM, SLOPED AND DRAINED AND SHALL NOT BE INTERNALLY LINED.

K. EXISTING DUCTWORK TO BE REUSED:

1. THIS CONTRACTOR SHALL INSPECT, SEAL PER SMACNA REQUIREMENTS, LEAK TEST, AND INSULATE ALL EXISTING DUCTWORK TO BE REUSED. EXISTING DUCTWORK TO BE REUSED SHALL CONFORM TO SPECIFICATIONS FOR NEW DUCTWORK LISTED HEREIN. ALL REQUIRED WORK SHALL BE PART OF BID.

2.02 INSULATION

A. ALL INSULATION SHALL MEET THE REQUIREMENTS OF ASTM, NFPA, 2021 INTERNATIONAL ENERGY CONSERVATION CODE AND ALL AUTHORITIES HAVING JURISDICTION. ALL MECHANICAL INSULATION (JACKETING, COVERINGS, ADHESIVES, MASTICS, FACINGS, TAPES, ETC.), SHALL HAVE RATINGS NOT EXCEEDING A AFLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF 50 OR LESS.

B. BEFORE APPLYING INSULATION, ALL PRESSURE AND LEAK TESTS SHALL BE COMPLETED AND APPROVED. FURNISH AND INSTALL AS PER MANUFACTURER'S REQUIREMENTS.

C. INSULATION FOR FITTINGS OaR ACCESSORIES REQUIRING SERVICING OR INSPECTION SHALL HAVE INSULATION REMOVABLE AND REPLACEABLE WITHOUT DAMAGE.

D. DUCT INSULATION:

1. GENERAL

   A) INSULATION SHALL BE APPLIED WITH MASTICS, ADHESIVES, COATINGS, WITH COVERS, WEATHER–PROTECTION AND OTHER WORK AS REQUIRED BY MANUFACTURER'S RECOMMENDATIONS. DO NOT INSULATE SOUND LINED DUCTWORK. MATERIALS SHALL MEET REQUIREMENTS OF ADHESIVE AND SEALANT COUNCIL STANDARDS AND SMACNA.

   B) ALL SUPPLY AND RETURN DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R–6 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES, A MINIMUM OF R–8 INSULATION SHALL BE INSTALLED WHEN LOCATED OUTSIDE OF THE BUILDING. WHEN A DUCT OR PLENUM IS LOCATED WITHIN THE BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPERATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED SPACES BY A MINIMUM OF R–8 INSULATION.

2. CONCEALED DUCTWORK

   A) INSULATE SUPPLY AND FRESH AIR DUCTS AND PLENUMS IN CONCEALED SPACES AND RETURN DUCT NOT IN CEILING PLENUM WITH AT LEAST 1–1/2" THICK FIBROUS GLASS DUCT WRAP, WITH A MINIMUM R VALUE OF R–6 AND FOIL–KRAFT FLAME RESISTANT VAPOR BARRIER.

3. EXPOSED DUCTWORK

   A) INSULATE EXPOSED SUPPLY, RETURN AND FRESH AIR DUCTS AND EXPOSED PLENUM WITH 2" THICK, SEMI–RIGID FIBROUS GLASS BOARDS WITH A MINIMUM R VALUE OF R–8 AND A FACTORY APPLIED FIRE RETARDANT FOIL REINFORCED KRAFT VAPOR BARRIER FACING. PROVIDE WELD PINS AND VAPOR SEAL ALL JOINTS WITH TAPE.

2.03 TESTING AND BALANCING

A. GENERAL:

1. TESTING AND BALANCING WORK SHALL BE PERFORMED BY AN INDEPENDENT COMPANY (NOT ASSOCIATED WITH THE HVAC CONTRACTOR), AABC CERTIFIED OR AS APPROVED BY THE ENGINEER BEFORE COMMENCEMENT OF WORK. APPROVED COMPANIES INCLUDE MERENDINO ASSOCIATES, R.H. MCDERMOTT, INTERNATIONAL TESTING AND BALANCING OR AS APPROVED BY THE ENGINEER AND BUILDING MANAGEMENT.
2. AFTER ALL PROJECT HVAC WORK IS COMPLETE, TESTED, AND IN FULL WORKING ORDER, THE AGENCY SHALL PERFORM THE BALANCING AND TESTING OF THE PROJECT HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS.
3. UPON THE COMPLETION OF THE AIR CONDITIONING SYSTEM, THE BALANCING AGENCY SHALL PERFORM TESTING AND BALANCING AND COMPILE ALL TEST DATA IN A CERTIFIED REPORT AND SUBMIT FOUR (4) COPIES FOR REVIEW AND APPROVAL TO THE ENGINEER.
4. THE REPORT SHALL INCLUDE DESIGN AND ACTUAL READINGS FOR ALL EQUIPMENT AND LOCATION PLAN INDICATING WHERE ALL WORK HAS BEEN PERFORMED, AND METHODS OF BALANCING AND DETAILS OF INSTRUMENTS USED.
5. IF DISCREPANCIES EXIST IN THE REPORT THAT REQUIRE FIELD VERIFICATION, THE TESTING AND BALANCING COMPANY IN THE PRESENCE OF THE ENGINEER SHALL VISIT THE JOBSITE FOR FIELD VERIFICATION OF THE REPORT.
6. AFTER SUBMISSION OF THE FIELD VERIFIED BALANCING REPORT, THE AIR BALANCING COMPANY SHALL RETURN TO THE JOB SITE TO PERFORM TWO (2) OCCUPANT COMFORT BALANCES AS DIRECTED BY THE OWNER OR ENGINEER.
7. THE FINAL REPORT AFTER THE COMFORT BALANCE IS TO BE INCLUDED IN PROJECT OPERATING AND MAINTENANCE MANUAL.
8. THE TESTING AND BALANCING AGENCY SHALL INCLUDE AS PART OF THEIR WORK AN EXTENDED WARRANTY OF 90 DAYS AFTER COMPLETION OF TEST AND BALANCE WORK. THE ENGINEER AT HIS DISCRETION DURING THE WARRANTY PERIOD MAY REQUEST A RECHECK OR RESETTING OF ANY EQUIPMENT. THE MECHANICAL CONTRACTOR AND THE BALANCING CONTRACTOR SHALL PROVIDE THE NECESSARY TECHNICIANS TO FACILITATE THIS WORK.
9. THE BALANCING AGENCY SHALL PERMANENTLY MARK ALL ADJUSTMENT DEVICES (VALVES, DAMPERS, ETC.) TO ENABLE THE SETTING TO BE RESTORED.

B. AIR BALANCING

1. PRE–CONSTRUCTION AIR TESTING:

   MEASURE PRESSURE, TEMPERATURE, AND VOLUME OF AIR FROM THE EXISTING BASE BUILDING SYSTEM BEFORE STARTING WORK. TRAVERSE MAIN SUPPLY AND RETURN DUCTS BEFORE WORK TO OBTAIN TOTAL FLOW. SUBMIT REPORT TO THE ENGINEER IMMEDIATELY AFTER COMPLETION OF THE TEST.

2. HVAC CONTRACTOR SHALL ENSURE THAT A FIRST SET OF AIR FILTERS ARE IN PLACE, WHENEVER FANS ARE RUNNING AND REPLACED WITH A NEW CLEAN SET OF FILTERS BEFORE TESTING IS COMMENCED.
3. TEST, ADJUST, REPLACE SHEAVES, AND BALANCE ALL EQUIPMENT AND AIR DISTRIBUTION SYSTEMS TO PROVIDE AIR QUANTITIES INDICATED ON PLANS WITHIN PLUS OR MINUS 10 PERCENT.
4. TEST REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

   A) FLOW, LEAKAGE CLASS, TEMPERATURE, STATIC PRESSURE OF AIR AT ALL TRUNK DUCTS SERVING AREAS OF WORK.

ARCHITECT:
Colliers Engineering & Design
PHASE ZERO DESIGN

CLIENT:
Nuvance Health

CONSULTANT:
LONG CONSULTING
107 Federal Rd., Bldg. A, Ste. 310
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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: CH

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

MECHANICAL SPECIFICATIONS (SHEET 1 OF 2)

DRAWING NO.

M400

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

B) TEMPERATURE OF AIR LEAVING OUTLETS AT TWO (2) TYPICAL AIR OUTLETS.

C) QUANTITY OF AIR AT EACH AIR INLET AND OUTLET AFTER BALANCING.

D) PROVIDE FOR ALL FANS, FAN MOTOR HP, AMPS, VOLTS, FAN RPM, CFM, INLET AND DISCHARGE STATIC PRESSURE, SHEAVE POSITION.

E) PROVIDE FOR ALL AIR CONDITIONING UNITS, SUPPLY CFM, OUTSIDE AIR CFM, RETURN AIR CFM, MIXED AIR CFM. PROVIDE OUTSIDE AIR, MIXED AIR AND SUPPLY AIR TEMPERATURES (DRY BULB – COOLING AND HEATING, WET–BULB–COOLING). INDICATE UNIT OPERATING MODE DURING TEST.

F) CALIBRATE ALL NEW AND EXISTING TO BE REUSED TERMINAL BOXES (VAV, FAN POWERED OR DUAL DUCT)AS REQUIRED TO MEET SPECIFIED MINIMUM/MAXIMUM CFM.

G) LISTING OF DESIGN AND ACTUAL READINGS AS WELL AS ALL MANUFACTURER'S DATA FOR EQUIPMENT.

2.04 EQUIPMENT

A. PROVIDE ALL EQUIPMENT AND ACCESSORIES OF THE SIZES AND CAPACITIES AS SCHEDULED AND AS INDICATED ON THE DRAWINGS.

B. INSTALL EQUIPMENT IN ACCORDANCE WITH APPROVED SHOP DRAWINGS, MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS, AND ALL AUTHORITIES HAVING JURISDICTION.

C. PROVIDE EQUIPMENT SUPPORTS AND/OR MOUNTINGS AS INDICATED ON THE DRAWING, IN VIBRATION SPECIFICATION AND AS FOLLOWS:

1. CEILING MOUNTED EQUIPMENT – PROVIDE SUPPORTS WITH APPROVED SUITABLE ANCHORS SUSPENDED DIRECTLY FROM BUILDING STEEL STRUCTURE.

D. EQUIPMENT SHALL BE INSTALLED WITH VIBRATION ISOLATION

E. RE–USE OF EXISTING EQUIPMENT:

1. EXISTING SYSTEM SURVEY

A) PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL PERFORM EXISTING CONDITIONS SURVEY OF SYSTEMS TO BE RE–USED AND PREPARE COMPLETE REPORT INDICATING PHYSICAL CONDITION OF UNITS AND ACCESSORIES AND NOTE ANY REPAIRS REQUIRED BEYOND ITEMS INCLUDED IN DESIGN DOCUMENTS TO RESTORE EQUIPMENT TO A FULLY OPERATIONAL CONDITION. REPORT TO BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ANY CORRECTIVE ACTION. COORDINATE THIS WORK WITH ANY NEW OR REFURBISHMENT WORK LISTED IN THE SPECIFICATIONS OR PLANS.

B) PROVIDE A UNIT PRICE LIST TO BE SUBMITTED WITH YOUR BID FOR THE REPAIR OF ALL INTERNAL COMPONENTS OF ALL EQUIPMENT TO BE RE–USED AS WELL AS ALL ACCESSORIES.

C) UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL WARRANTY ALL RE–USED EQUIPMENT FOR ONE (1) YEAR.

F. DIFFUSERS, GRILLES AND REGISTERS

1. GENERAL

A) GRILLES, REGISTERS AND DIFFUSERS SHALL BE TESTED IN ACCORDANCE WITH LATEST EDITION ASHRAE STANDARD 70. THE MANUFACTURER SHALL PROVIDE PUBLISHED PERFORMANCE DATA FOR ALL AIR INLETS AND OUTLETS TO BE USED ON PROJECT AS PART OF THE SUBMISSION.

B) THE MECHANICAL CONTRACTOR TO COORDINATE THE LOCATION OF DIFFUSERS, GRILLES AND REGISTERS WITH OTHER TRADES AND WITH CEILING AND WALL CONSTRUCTION. THE MECHANICAL CONTRACTOR IS TO VERIFY THAT ALL DIFFUSERS, GRILLES AND REGISTERS ARE COMPATIBLE WITH CEILING CONSTRUCTION TO WHICH THEY ARE TO BE INSTALLED.

C) COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION, LENGTHS AND FOR FRAMING AND MITERING ARRANGEMENTS THAT MAY DIFFER FROM THOSE SHOWN ON HVAC DRAWINGS. PROVIDE ALL REQUIRED GENERAL CONSTRUCTION, FRAMING, BLOCKING, PLASTERING AND SUPPORTS TO MATCH CEILING, SOFFIT OR WALL CONSTRUCTION AS PART OF THE PROJECT.

D) INLETS AND OUTLETS SHALL HANDLE AIR QUANTITIES INDICATED AT OPERATING VELOCITIES WITH SOUND PRESSURE LEVEL NOT TO EXCEED NC–30, UNLESS NOTED OTHERWISE.

E) DIFFUSERS, GRILLES AND REGISTERS SHALL BE INSTALLED WITH FACES SET LEVEL AND PLUM AND MOUNTED TIGHTLY AGAINST MOUNTING SERVICE.

F) ALL AIR INLETS AND OUTLETS TO BE STEEL OR ALUMINUM IF EXPOSED TO MOISTURE UNLESS OTHERWISE INDICATED. FINISHES TO BE SELECTED BY THE ARCHITECT.

G) DIFFUSERS, GRILLES AND REGISTERS SHALL BE MANUFACTURED BY TITUS, ANEMOSTAT OR APPROVED EQUAL.

H) SUBMIT FOR APPROVAL A COMPLETE SCHEDULE OF ALL AIR INLETS AND OUTLETS TO BE USED ON PROJECT INCLUDING MANUFACTURER'S MODELS, SIZES, PERFORMANCES, ACCESSORIES, ACOUSTIC INFORMATION, FINISHES, ETC., BEFORE RELEASE FOR FABRICATION. NOTE ANY DEVIATIONS FROM SPECIFICATIONS AND SCHEDULES SHALL BE INDICATED ON SUBMITTAL.

2. AIR INLET AND OUTLET DEVICES:

A) PROVIDE DIFFUSERS, GRILLES AND REGISTERS FOR SUPPLY, RETURN AND EXHAUST INLETS AND OUTLETS, OF THE SIZE, TYPE AND DESIGN INDICATED ON DRAWINGS.

B) ALL SUPPLY RETURN AND EXHAUST AIR INLETS AND OUTLETS SHALL BE PROVIDED WITH AN OPPOSED BLADE DAMPER AND GRID (ADJUSTABLE THROUGH THE FACE) FOR TRIM BALANCING.

C) SUPPLY REGISTERS SHALL HAVE TWO SETS OF DIRECTIONAL CONTROL BLADES.

D) ONLY 4–WAY DIFFUSERS SHALL BE USED. PROVIDE BLANK–OFF SHEETMETAL BAFFLE FOR ALL 1–WAY, 2–WAY AND 3–WAY DIFFUSERS.

E) ALL LINEAR DIFFUSERS SHALL BE PROVIDED WITH CABLE OPERATED OPPOSED BLADE DAMPER ADJUSTABLE THROUGH THE FACE OF THE DIFFUSER. DAMPERS AND PLENUM TAPS SHALL BE SPACED AT A MAXIMUM OF 4 FEET ON CENTER. PROVIDE DIFFUSERS WITH ADJUSTABLE AIR PATTERN CONTROL VALVES.

2.05 AUTOMATIC TEMPERATURE CONTROLS

A. GENERAL:

1. FURNISH AND INSTALL AS HEREIN SPECIFIED, A COMPLETE AUTOMATIC TEMPERATURE CONTROL SYSTEM AS REQUIRED FOR THE OPERATION OF ALL HVAC EQUIPMENT. ALL CONTROLS SHALL BE MANUFACTURED AND INSTALLED BY BASE BUILDING CONTROLS VENDOR. CONTACT CHRIS SCHOONERMAN AT JOHNSON CONTROLS – CHRISTOPHER.D.SCHOONERMAN@JCI.COM, (860) 604–2014.

2. ALL TEMPERATURE CONTROL SYSTEMS AND COMPONENTS UNDER THIS SUBCONTRACT ARE TO BE FULLY MODULATING TYPE, EXCEPT WHERE NOTED OTHERWISE. THE SYSTEM SHALL BE COMPLETE IN ALL RESPECTS INCLUDING ALL ASSOCIATED CONTROL EQUIPMENT, THERMOSTATS, CONTROL VALVES, VALVE ACTUATORS, DAMPER OPERATORS, RELAYS, PILOT POSITIONERS, CONTROL WIRING, CONTROL AIR PIPING, SWITCHES, INTERLOCK WIRING, ELECTRICAL OR PNEUMATIC CONTROL COMPONENTS AND ASSOCIATED PIPING OR WIRING, APPURTENANCES, ETC., TO PROVIDE THE FUNCTIONS DESCRIBED IN THESE SPECIFICATIONS AND PLANS, REGARDLESS OF WHETHER OR NOT SAID DEVICE RELAY, ETC. IS SPECIFICALLY MENTIONED HEREAFTER.

3. THE SYSTEM SHALL BE SUPERVISED AND CHECKED OUT COMPLETELY IN ALL RESPECTS BY COMPETENT MECHANICS, REGULARLY EMPLOYED BY THE MANUFACTURER.

4. THE CONTROL SYSTEMS SHALL BE IN ACCORDANCE WITH THE FOLLOWING DESCRIPTION OF SYSTEM OPERATIONSAND/OR DETAIL INFORMATION SHOWN ON THE PLANS AND AS DESCRIBED HEREIN.

A) THE MANUFACTURER OF THE AUTOMATIC CONTROL EQUIPMENT SHALL SUBMIT THE FOLLOWING FOR APPROVAL: A SCHEMATIC DIAGRAM OF EACH CONTROL SYSTEM WHICH SHALL INDICATE THE PROPER SEQUENCE OF OPERATION AND RANGE OF THE CONTROLS FOR ALL CYCLES. A COMPLETE DESCRIPTION OF THE AUTOMATIC OPERATION OF EACH SYSTEM. THE DESCRIPTION SHOULD INCLUDE THE DUTY OF EACH THERMOSTAT, VALVE, SWITCH, ETC., INCORPORATED IN THE CONTROL SYSTEM WITH A SCHEDULE AND ILLUSTRATION OF ALL CONTROL INSTRUMENTS AND EQUIPMENT INCLUDING CONTROL PANELS AND DEVICES FOR EACH SYSTEM.

B. ELECTRIC WIRING:

1. ALL ELECTRICAL WORK (EXCEPT FOR MOTOR FEEDERS, WIRING BETWEEN MOTORS, MOTOR CONTROLLERS, FEEDER PANELS, FUSES, CIRCUIT BREAKERS AND BUS BARS) REQUIRED FOR THE AUTOMATIC TEMPERATURE CONTROL SYSTEM SHALL BE PROVIDED BY THIS CONTRACTOR. WORK SHALL INCLUDE BUT NOT BE LIMITED TO TIME SWITCHES, DAMPER MOTORS, DAMPER SWITCHES, ELECTRIC THERMOSTATS, ELECTRIC RELAYS, E/P SWITCHES, INTERLOCKING WIRING, WIRE, CONDUIT, ETC.

2. ALL 115 VOLT POWER REQUIRED FOR CONTROL PURPOSES SHALL BE PROVIDED BY THE CONTROL CONTRACTOR FROM A SOURCE ESTABLISHED BY THE ELECTRICAL CONTRACTOR.

3. THE CONTROL MANUFACTURER SHALL INCLUDE WIRING DIAGRAMS IN HIS SHOP DRAWINGS SUBMITTALS FULLY COORDINATED WITH THE ELECTRICAL CONTRACTOR'S WORK. IT SHALL BE THE AUTOMATIC TEMPERATURE CONTROL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL WIRING AND CONDUIT AS REQUIRED TO ACHIEVE THE FUNCTION CALLED FOR IN THESE SPECIFICATIONS, CONFORMING WITH LOCAL CODES FOR MATERIAL AND INSTALLATION. THE ELECTRICAL SPECIFICATION FOR THE PROJECT'S ELECTRICAL WORK IS TO BE FOLLOWED.

4. FURNISH A CERTIFICATE INDICATING THE METHOD OF WIRING COMPLIANCE WITH LOCAL CODES AS PART OF THE FIRST SHOP DRAWING SUBMITTAL.

C. ROOM THERMOSTAT AND SWITCH LOCATIONS:

1. ALL ROOM THERMOSTATS AND SWITCH LOCATIONS (WHETHER SHOWN ON PLANS OR NOT) SHALL BE SELECTED AND SUBMITTED BY THE TEMPERATURE CONTROL MANUFACTURER FOR APPROVAL BY THE ARCHITECT AND ENGINEER PRIOR TO ACTUAL INSTALLATION.

D. AUTOMATIC DAMPERS:

1. PROVIDE CONTROLS FOR ALL THE AUTOMATIC DAMPERS, AS SPECIFIED IN THE DUCTWORK SECTION, AND SHOWN ON THE DRAWINGS.

2. CONTROL MOTORS OR ACTUATORS SHALL BE OF THE ELECTRONIC OR PNEUMATIC TYPE, UNLESS OTHERWISE NOTED, OR APPROPRIATE SIZE AND QUANTITIES TO PROVIDE TWO–POSITION OR PROPORTIONING CONTROL ACTION AS SPECIFIED. PROPORTIONING TYPE SHALL BE EQUIPPED WITH PILOT TYPE POSITIONERS. PILOT POSITIONERS SHALL BE SELECTED FOR VARIED SPRING RANGES AND ADJUSTABLE WITHOUT DISMANTLING POSITIONER AND CONTROL MOTOR.

3. AUTOMATIC DAMPERS EXPOSED TO THE ELEMENTS SHALL HAVE ELECTRIC ACTUATORS WITH ALL REQUIRED ACCESSORIES.

E. CONTROL PANELS:

1. FURNISH AND INSTALL IN THE MECHANICAL ROOM, AS HEREIN SPECIFIED, CONTROL PANELS OF STEEL, WITH WELDED ANGLE IRON BRACKETS, FOR WALL OR FLOOR MOUNTING.

2. THE BASIC BACKGROUND COLOR OF THE PANEL SHALL BE AS APPROVED BY THE ARCHITECT AND ENGINEER.

3. PANELS SHOULD BE FULLY ENCLOSED WITH HINGED LOCKING FRONT DOOR FOR EACH PANEL. THE PANEL SHALL CONTAIN ALL CONTROLLERS, RELAYS, SWITCHES, ETC. PROVIDE ENGRAVED NAMEPLATES TO LABEL THE CONTROLLED EQUIPMENT AND FOR EACH PANEL MOUNTED CONTROL DEVICE. PLASTIC LAMINATED CONTROL SCHEMATIC DRAWINGS FOR THE SYSTEM SHALL BE HUNG AT EACH LOCAL CONTROL PANEL.

4. DETAILS OF EACH OF THESE PANELS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. LOCATIONS OF EACH PANEL ARE TO BE CONVENIENT FOR ADJUSTMENT AND SERVICE AND ALL SUCH LOCATIONS ARE TO BE APPROVED PRIOR TO INSTALLATION.

F. SEQUENCE OF OPERATIONS:

1. ALL HVAC SYSTEMS SHALL BE CONTROLLED ACCORDING TO THE POINT LIST CONTAINED IN THE SECTION OF THE SPECIFICATIONS AND SHALL BE STAND–ALONE. ADDITIONAL POINTS OR SOFTWARE PROGRAMMING NOT LISTED IN THE POINT LIST BUT WHICH ARE REQUIRED TO MEET THE FOLLOWING SEQUENCES OF OPERATION SHALL BE PROVIDED.

PART 3 – EXECUTION

3.01 DEMOLITION, REMOVAL AND RELOCATION

A. REMOVAL, TEMPORARY CONNECTIONS AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE INSTALLATION OF THE NEW SYSTEMS. ALL EXISTING CONDITIONS ARE NOT TO BE COMPLETELY DETAILED ON THE DRAWINGS. THE CON–TRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK.

B. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT, AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.

C. EQUIPMENT REQUIRED TO BE TEMPORARILY DISCONNECTED AND RELOCATED SHALL BE CAREFULLY REMOVED, STORED, CLEANED, REINSTALLED, RECONNECTED, AND MADE OPERATIONAL.

D. ALL EXISTING WORK NOT INDICATED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE. WHERE EXISTING WORK TO REMAIN IS DAMAGED OR DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE TO OWNER'S AND BUILDING MANAGER'S SATISFACTION AT NO COST TO THE OWNER OR BUILDING MANAGEMENT.

E. GENERAL CONTRACTOR REMOVE ALL CEILING IN AREAS WHERE NEW DUCTWORK OR PIPING IS TO BE INSTALLED OR EXISTING IS ALTERED, AS PER ARCHITECT'S INSTRUCTIONS.

F. ALL NECESSARY CUTTING AND PATCHING TO ACCOMMODATE THE NEW HVAC WORK SHALL BE PERFORMED BY THIS CONTRACTOR AND COORDINATED WITH BUILDING MANAGEMENT SO AS TO MINIMIZE DISRUPTION OF EXISTING TENANTS AND SERVICES. RESTORE ALL ITEMS TO MATCH EXISTING CONDITIONS.

G. ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED UNDER THIS CONTRACT WILL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE LEGALLY DISPOSED OF BY THIS CONTRACTOR AS DIRECTED BY THE ARCHITECT OR OWNER. REFRIGERATION CONTAINED IN EXISTING EQUIPMENT TO BE REMOVED SHALL BE RECLAIMED OR LEGALLY DISPOSED OF IN ACCORDANCE WITH EPA REQUIREMENTS AND ASHRAE.

H. PROVIDE FOR LEGAL REMOVAL AND DISPOSAL OF ALL RUBBISH AND DEBRIS FROM THE BUILDING AND SITE. COORDINATE ALL DEMOLITION AND REMOVALS WITH BUILDING MANAGEMENT.

3.02 CONNECTION TO EXISTING WORK

A. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH BUILDING MANAGEMENT. INSTALL ISOLATION VALVES AT POINT OF CONNECTION TO THE EXISTING PIPING. INSTALL ISOLATION DAMPERS AT CONNECTION TO EXISTING DUCTWORK. PROVIDE TEMPORARY DUCTWORK AND PIPING CONNECTIONS AS REQUIRED TO MINIMIZE SHUTDOWN TIME.

B. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ARCHITECT AND BUILDING MANAGER.

C. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES.

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NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

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PROJECT NUMBER: 22559

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MECHANICAL SPECIFICATIONS (SHEET 2 OF 2)

DRAWING NO.

M401

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

ELECTRICAL ABBREVIATIONS

A	AMPERE	GFI	GROUND FAULT INTERRUPTING
AFF	ABOVE FINISHED FLOOR	HP	HORSEPOWER
AHJ	AUTH. HAVING JURISDICTION	HZ	HERTZ
BLDG	BUILDING	IC	INTERRUPTING CAPACITY
C	CONDUIT	JB	JUNCTION BOX
CB	CIRCUIT BREAKER	KVA	KILOVOLT AMPERE
CKT	CIRCUIT	KW	KILOWATT
CLG	CEILING	LTG	LIGHTING
CLOS	CLOSET	MAX	MAXIMUM
CO	CONDUIT ONLY	MCB	MAIN CIRCUIT BREAKER
COMM	COMMUNICATION	MIN	MINIMUM
CONT	CONTINUATION	MLO	MAIN LUGS ONLY
CORR	CORRIDOR	MTD	MOUNTED
CP	CONDENSATE PUMP	MTG	MOUNTING
CU	COPPER	MW	MICROWAVE
DED	DEDICATED	N	NEW DEVICE
DISC	DISCONNECT	NEC	NATIONAL ELECTRICAL CODE
DN	DOWN	NTS	NOT TO SCALE
DW	DISHWASHER	OC	ON CENTER
DWG	DRAWING	P	POLE
E	EXISTING DEVICE	PB	PULL BOX
EC	ELECTRICAL CONTRACTOR	ø	PHASE
ELEC	ELECTRICAL	PNL	PANEL
ELEV	ELEVATOR	PWR	POWER
EMERG	EMERGENCY	R	RELOCATED DEVICE
EP	ELECTRICAL PANEL	RECEPT	RECEPTACLE
EQPT	EQUIPMENT	RM	ROOM
ER	EXISTING TO BE RELOCATED	SECT	SECTION
EXIST	EXISTING	SW	SWITCH
FA	FIRE ALARM	TELE	TELEPHONE
FBO	FURNISHED BY OTHERS	TYP	TYPICAL
FCO	FUSED CUTOUT	UON	UNLESS OTHERWISE NOTED
FDR	FEEDER	V	VOLT OR VOLTAGE
FL	FLOOR	W	WATT
G, GRD	GROUND	WM	WIREMOLD
GC	GENERAL CONTRACTOR	WP	WATER PROOF

ELECTRICAL GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (NEC), NATIONAL FIRE CODE (NFPA), STATE BUILDING CODES, CODES AND REQUIREMENTS OF THE LOCAL CITY, AND OWNERS REQUIREMENTS.
2. ALL CONDUITS AND EQUIPMENT SHALL BE INSTALLED AND GROUND IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE APPLICABLE LOCAL AND NATIONAL CODES.
3. ALL MATERIAL SHALL BE UNDERWRITERS' LABORATORIES LISTED FOR ITS APPLICATION WHERE SUCH LISTING IS APPLICABLE.
4. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM AND SPACE CONDITIONS.
5. SECURE ALL SUPPORTS TO BUILDING STRUCTURE UTILIZING TOGGLE BOLTS (HOLLOW MASONRY), EXPANSION SHIELDS OR INSERTS (CONCRETE AND BRICK), MACHINE SCREWS (METAL), BEAM CLAMPS (FRAMEWORK), WOOD SCREWS (WOOD) OR PAN THRU STRAPS (METAL DECK). NAILS, RAWL PLUGS AND WOOD PLUGS ARE NOT PERMITTED. WHERE REQUIRED BY STRUCTURE, PROVIDE THRU BOLTS AND FISH PLATES. SUPPORT HORIZONTAL RUNS OF METALLIC RACEWAYS NOT MORE THAN 10 FT APART. SUPPORT RACEWAY RISERS AT EACH FLOOR LEVEL. RUN EXPOSED RACEWAYS PARALLEL WITH OR AT RIGHT ANGLES TO WALLS.
6. PASS RACEWAYS OVER WATER, STEAM OR OTHER PIPING WHEN PULL BOXES ARE NOT REQUIRED. NO RACEWAY WITHIN 3 INCHES OF STEAM OR HOT WATER PIPES OR APPLIANCES (EXCEPT PIPE CROSSINGS WHERE RACEWAY SHALL BE AT LEAST 1 INCH FROM PIPE COVERS).
7. VERIFY LOCATIONS OF OUTLETS AND SWITCHES IN FINISHED ROOMS WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISH. IN CENTERING OUTLETS AND LOCATING BOXES AND OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS AND MECHANICAL EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING, HUNG CEILINGS AND THE LIKE.
8. NO CONDUIT SMALLER THAN 3/4", NOR WIRE SIZE SMALLER THAN NO. 12 A.W.G. FOR POWER SHALL BE USED UNLESS OTHERWISE NOTED.
9. ALL 120V BRANCH CIRCUITS GREATER THAN 100 LINEAR FEET SHALL BE #10 AWG MIN. TO ACCOUNT FOR VOLTAGE DROP. UPGRADE ALL 120V/208V AND 277/480V CIRCUIT WIRING AS NEEDED FOR NO MORE THAN 3% VOLTAGE DROP.
10. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS. RACEWAYS OVER 10 FT LONG IN WHICH WIRING IS NOT INSTALLED: FURNISH FISH WIRE.
11. SET BOXES SQUARE AND TRUE WITH BUILDING FINISH. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRONS.
12. PROVIDE ELECTRICAL OUTLET PLATE GASKET SEALS AT RECEPTACLES, SWITCHES, AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND ON INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.
13. COVERS OF JUNCTION AND PULLBOXES SHALL BE READILY ACCESSIBLE.
14. PROVIDE PULLBOXES WHERE INDICATED, WHERE REQUIRED BY CODE AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE. COORDINATE PULLBOX LOCATIONS WITH OTHER TRADES.
15. PROVIDE SEPARATE RACEWAYS FOR CONDUCTORS OF NORMAL AND EMERGENCY CIRCUITS. COMMON BOXES: PROVIDE BARRIERS BETWEEN EMERGENCY AND NORMAL WIRING.
16. SUPPORT PANEL, JUNCTION AND PULLBOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON RACEWAYS.
17. INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS: ONLY WITH WRITTEN CONSENT OF OWNER. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES. ALARM AND EMERGENCY SYSTEMS ARE NOT TO BE INTERRUPTED.
18. FIRESTOPPING SHALL BE INSTALLED WHENEVER WIRING OR RACEWAYS CROSS FIRE RATED CONSTRUCTION. PUTTY PADS SHALL BE INSTALLED AT RECEPTACLES IN FIRE RATED WALLS AS REQUIRED BY CODE.
19. ALL CIRCUIT NUMBERS INDICATED ON PLANS ARE FOR CLARITY ONLY, FIELD CONDITIONS PREVAIL.
20. ALL TERMINATION LUGS SHALL BE SIZED ACCORDINGLY TO ACCOMMODATE INDICATED CONDUCTORS.
21. CONTRACTOR SHALL TEST AND BALANCE ELECTRICAL PANELS ASSOCIATED WITH NEW WORK TO A MAXIMUM IMBALANCE OF 10%.
22. ALL CUTTING AND PATCHING SHALL BE FULLY COORDINATED WITH THE GENERAL CONTRACTOR.
23. PANEL DIRECTORIES SHALL BE UPDATED TO CONFORM TO WORK COMPLETED UNDER THIS CONTRACT. UPDATED DIRECTORIES TO BE TYPE-WRITTEN.
24. UPON COMPLETION OF THE WORK, THREE MARKED UP SETS OF "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE OWNER.
25. ELECTRICAL CONTRACTOR SHALL VISIT AND EXAMINE CAREFULLY THE EXISTING AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK PRIOR TO SUBMISSION OF A PROPOSAL.
26. THE CONTRACTOR, BEFORE INSTALLING ANY OF THE WORK, SHALL SEE THAT IT DOES NOT INTERFERE WITH CLEARANCES REQUIRED FOR FINISHED COLUMNS, HUNG CEILINGS, PLASTER, PARTITIONS, WALLS, ETC., AS SHOWN IN THE ARCHITECTURAL DRAWINGS AND DETAILS.
27. CONTRACTOR SHALL PROVIDE ARC FLASH WARNING LABELING ON ELECTRICAL EQUIPMENT AS REQUIRED BY NEC 2020 ARTICLE 110.16 AND 110.24.

ELECTRICAL LIGHTING LEGEND

a 'a' – FIXTURE CONTROLLED BY SWITCH/OCCPANCY SENSOR 'a'
1 '1' – DENOTES CIRCUIT NUMBER

REFER TO THIS DRAWING FOR LIGHTING SPECIFICATIONS FOR ALL FIXTURES. COORDINATE ALL WORK INCLUDING ALL LIGHT FIXTURE SPECIFICATIONS WITH ARCHITECTURAL DRAWINGS.

NEW WALL MOUNTED EDGE-LIT LED EXIT SIGN WITH BATTERY PACK. DIRECTIONAL ARROWS AS INDICATED ON PLANS. SHADED AREAS INDICATE ILLUMINATED FACE/FACES. DUAL-LITE EVE SERIES MODEL#: EVE-U-R-W-E-I' OR MATCH EXISTING.

OS a — NEW CEILING MOUNTED VACANCY SENSOR INFRARED/ULTRASONIC DUAL TECHNOLOGY. HUBBELL #'OMNI DT' OR APPROVED EQUAL. 'a' – CONTROLS LIGHTING FIXTURES DESIGNATED 'a'

S a — NEW CEILING MOUNTED VACANCY SENSOR OVERRIDE SWITCH. PROVIDE ROOM CONTROLLER COMPATIBLE OVERRIDE SWITCH FOR ALL ROOMS EQUIPPED WITH A LIGHTING CONTROL ROOM CONTROLLER. 'a' – CONTROLS LIGHTING FIXTURES DESIGNATED 'a'

R $ — RELOCATED WALL SWITCH. EXTEND ALL ASSOCIATED WIRING TO NEW LOCATION.

E $ — EXISTING WALL SWITCH TO REMAIN.

LIGHTING FIXTURE SCHEDULE

A — RECESSED 2'X4' LED LIGHTING FIXTURE. DAYBRITE MODEL#: '2SBP3550L8CS-4-UN3-DIM'.

B — NEW 6" RECESSED LED DOWNLIGHT. ELITE MODEL#: 'RL675-900L-DIMTR-120-40K-90-WH'.

R — RELOCATED DOWNLIGHT. EXTEND ALL ASSOCIATED CONDUIT AND WIRING TO NEW LOCATION.

E — EXISTING 2'X4' RECESSED LINEAR LIGHT FIXTURE TO REMAIN.

ELECTRICAL POWER LEGEND

1 GFI +XX — NEW WALL MOUNTED TAMPER RESISTANT 20A, 120V DUPLEX RECEPTACLE.
'GFI' – DENOTES GROUND FAULT INTERRUPTER
'+XX' – DENOTES MOUNTING HEIGHT XX" AFF.
'1' – DENOTES CIRCUIT NUMBER

R — RELOCATED WALL MOUNTED 20A, 120V DUPLEX RECEPTACLE. EXTEND ALL ASSOCIATED WIRING TO NEW LOCATION.

E — EXISTING WALL MOUNTED 20A, 120V DUPLEX RECEPTACLE TO REMAIN.

1 GFI +XX — NEW WALL MOUNTED TAMPER RESISTANT 20A, 120V QUADRUPLEX RECEPTACLE.
'GFI' – DENOTES GROUND FAULT INTERRUPTER
'+XX' – DENOTES MOUNTING HEIGHT XX" AFF.
'1' – DENOTES CIRCUIT NUMBER

1 +XX — NEW DEDICATED WALL MOUNTED TAMPER RESISTANT 20A, 120V DUPLEX RECEPTACLE.
'+XX' – DENOTES MOUNTING HEIGHT XX" AFF.
'1' – DENOTES CIRCUIT NUMBER

+XX — NEW WALL MOUNTED VOICE/DATA DEVICE WITH 1"C. STUBBED UP TO 6" ABOVE NEAREST ACCESSIBLE FINISH CEILING.
'+XX' – DENOTES MOUNTING HEIGHT XX" AFF.

PANEL(X,X) — NEW BRANCH CIRCUIT HOMERUN TO ELECTRIC PANEL. HALF ARROWS INDICATE NUMBER OF CIRCUITS.

30/3 — NEW UNFUSED DISCONNECT SWITCH
30/3 – DENOTES 30 AMP/3-POLE SWITCH

CR — NEW CARD READER. PROVIDE ALL EMPTY CONDUIT REQUIRED FOR NEW SECURITY DEVICE. REFER TO DRAWING E200 FOR 'TYPICAL DOOR LAYOUT FOR SECURITY SYSTEM' DETAIL. COORDINATE ALL WORK WITH SECURITY VENDOR.

FIRE ALARM LEGEND

F — NEW FIRE ALARM SYSTEM HORN/STROBE ALARM; MOUNT AT 80" AFF.

F R — EXISTING FIRE ALARM HORN/STROBE DEVICE TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING BACK TO SOURCE.

F E — EXISTING FIRE ALARM PULL STATION TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING BACK TO SOURCE.

ELECTRICAL DRAWING INDEX

DRAWING NO.	DRAWING TITLE
E001	ELECTRICAL NOTES AND LEGEND
E100	ELECTRICAL DEMOLITION PLAN
E101	ELECTRICAL PLANS
E102	ADD/ALT ELECTRICAL POWER PLAN
E200	ELECTRICAL RISER DIAGRAM, PANEL SCHEDULES, AND DETAILS
E300	ELECTRICAL SPECIFICATIONS (SHEET 1 OF 2)
E301	ELECTRICAL SPECIFICATIONS (SHEET 2 OF 2)

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NO.	DATE	DESCRIPTION

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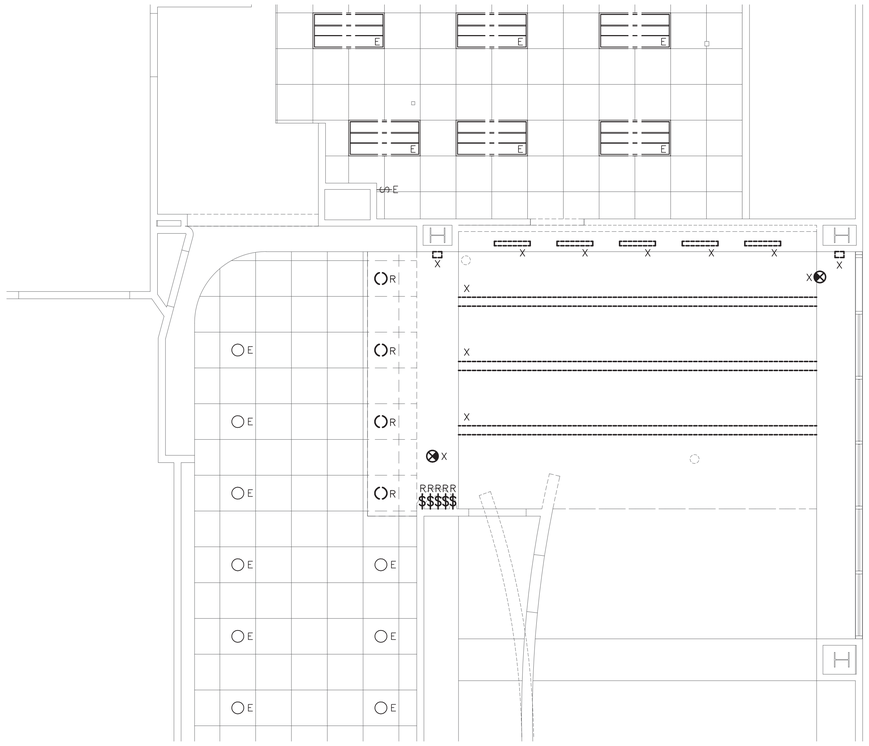
DRAWN BY: VH
CHECKED BY: TL
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
ELECTRICAL NOTES & LEGEND

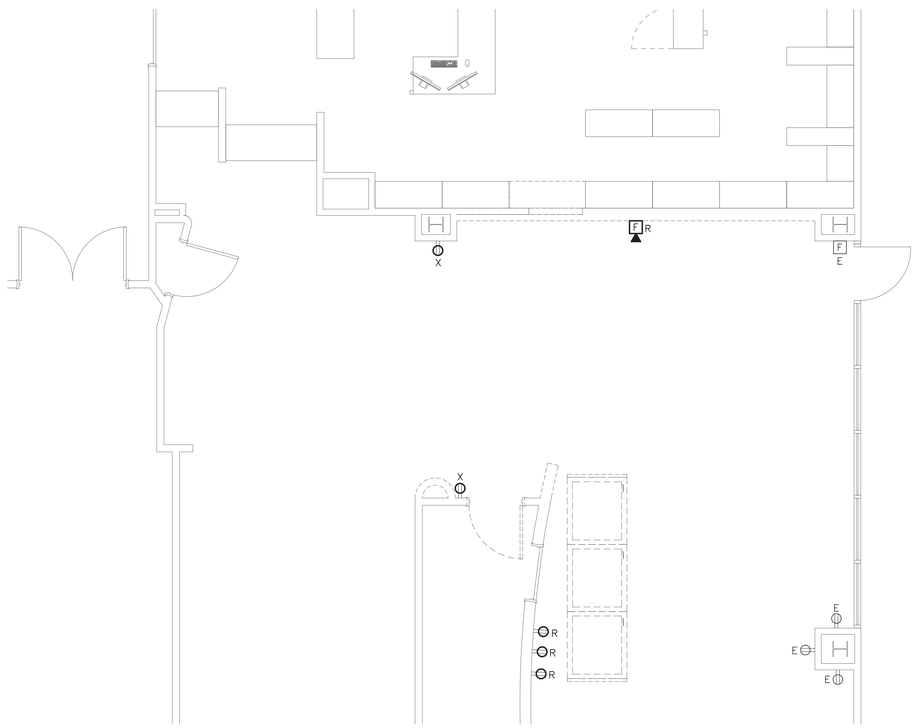
DRAWING NO.
E001

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt



1 ELECTRICAL LIGHTING DEMOLITION PLAN

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



2 ELECTRICAL POWER DEMOLITION PLAN

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

ELECTRICAL DEMOLITION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF ELECTRICAL WORK AS DESCRIBED IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORSEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT WHERE CONSIDERED JUSTIFIABLE BY THE ENGINEER.
2. 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 ENGINEER'S DEMOLITION PLANS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE DE–ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
3. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING ELECTRICAL SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
4. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED BUILDING SURFACE TO ITS ORIGINAL CONDITION.
5. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL LIGHTING, RECEPTACLES SWITCHES AND OTHER DEVICES, COMPLETE WITH ASSOCIATED WIRING, CONDUITS, ETC., FROM PARTITIONS OR CEILING THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS 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 SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO PANELBOARD.
6. ALL REUSED RACEWAYS WHICH BECOME EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
7. ALL UNUSED CONCEALED OUTLET BOXES OR FLOOR OUTLETS SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
8. EXISTING PANEL DIRECTORIES AFFECTED BY THE ALTERATION WORK SHALL BE MODIFIED TO REFLECT THE BRANCH CIRCUIT WIRING CHANGES.
9. PORTIONS OF FEEDER RUNS TO BE REMOVED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CABLE TYPE, CONDUCTOR AMPACITY, CONDUIT SIZES, ETC.
10. 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 REQUIREMENTS. THE CONTRACTOR SHALL FOLLOW CLOSELY THE ENGINEER'S DEMOLITION AND PHASING SCHEDULE AND PROCEED IN THE SPECIFIED SEQUENCE.
11. 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 ELECTRICAL CONTRACTOR, AS DIRECTED BY THE OWNER.
12. EXISTING CONDUITS ROUTED IN SLAB AND TURNING OUT OF SLAB SHALL BE CUT BACK TO 1" INTO SLAB AND OPENING PATCHED.
13. ALL EXISTING UNUSED WIRING SHALL BE DISCONNECTED AT EACH END AND REMOVED.
14. CONTRACTOR SHALL DISCONNECT POWER TO ALL MECHANICAL EQUIPMENT BEING TAKEN OUT OF OPERATION. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO DEMOLITION.

ELECTRICAL LIGHTING DEMOLITION LEGEND

X	EXISTING LINEAR WALL WASH LIGHTING FIXTURE TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
X	EXISTING TRACK LIGHT TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
X	EXISTING WALL SCONCE LIGHTING FIXTURE TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
R	EXISTING DOWNLIGHT TO BE RELOCATED. EXTEND ALL ASSOCIATED CONDUIT AND WIRING TO NEW LOCATION. REFER TO DRAWING E101 FOR NEW LOCATION.
E	EXISTING 2'X4' RECESSED LINEAR LIGHT FIXTURE TO REMAIN.
X	EXISTING EXIT SIGN TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
R $	EXISTING WALL SWITCH TO BE RELOCATED. EXTEND ALL ASSOCIATED WIRING TO NEW LOCATION. REFER TO DRAWING E101 FOR NEW LOCATION.
E $	EXISTING WALL SWITCH TO REMAIN.

ELECTRICAL POWER DEMOLITION LEGEND

R	EXISTING WALL MOUNTED 20A, 120V DUPLEX RECEPTACLE TO BE RELOCATED. EXTEND ALL ASSOCIATED WIRING TO NEW LOCATION. REFER TO DRAWING E101 FOR NEW LOCATION.
X	EXISTING WALL MOUNTED 20A, 120V DUPLEX RECEPTACLE TO BE REMOVED.
E	EXISTING WALL MOUNTED 20A, 120V DUPLEX RECEPTACLE TO REMAIN.
F E	EXISTING FIRE ALARM PULL STATION TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING BACK TO SOURCE.
F R	EXISTING FIRE ALARM HORN/STROBE DEVICE TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING BACK TO SOURCE.

ARCHITECT:

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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: VH

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

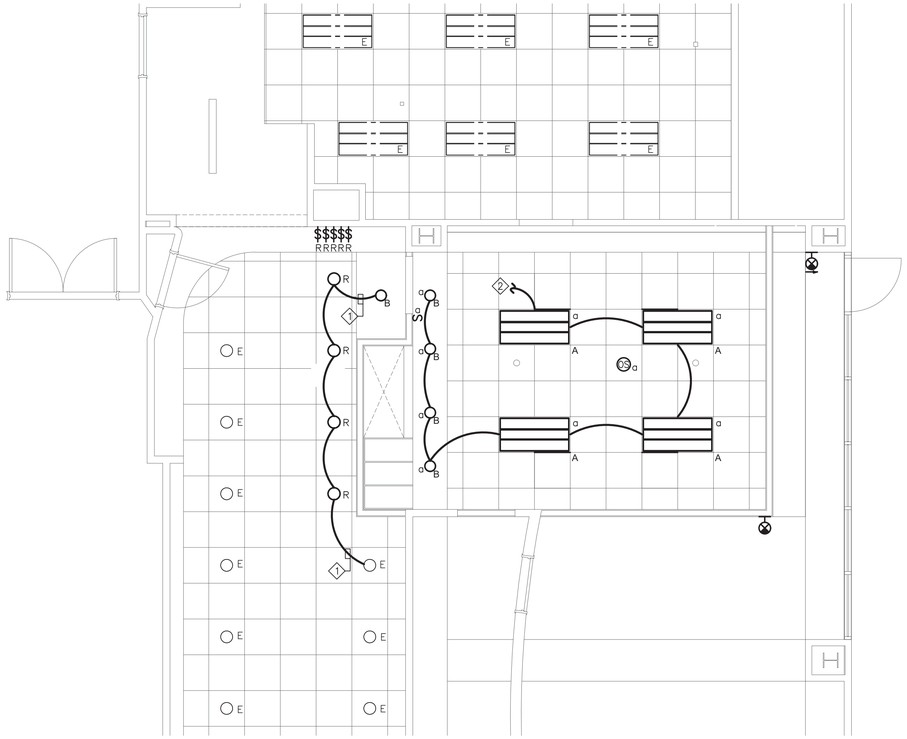
DRAWING NAME:

ELECTRICAL DEMOLITION PLANS

DRAWING NO.

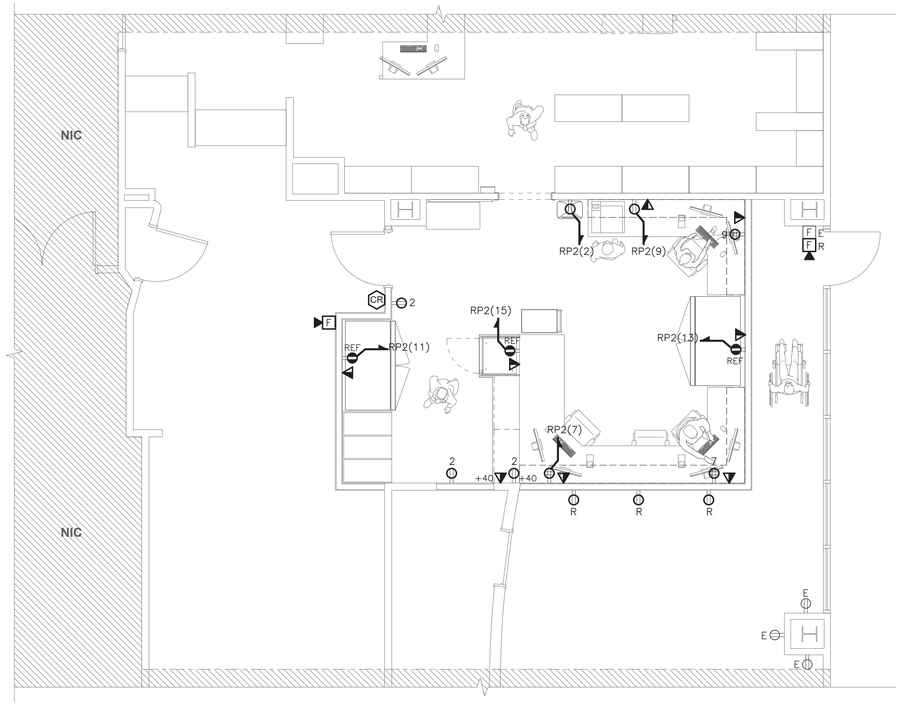
E100

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt



1 ELECTRICAL LIGHTING PLAN

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



2 ELECTRICAL POWER PLAN

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

ELECTRICAL NOTES

1. CONTRACTOR SHALL REFER TO DRAWING E100 FOR DEMOLITION WORK AND NOTES. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH ARCHITECTURAL DRAWINGS.
2. CIRCUIT NUMBERS SHOWN ARE FOR REFERENCE ONLY.
3. CONTRACTOR SHALL CIRCUIT (2)#12+#12 GRD. IN 3/4"C. TO PANEL AND CIRCUIT INDICATED, UNLESS OTHERWISE NOTED.
4. ALL LIGHTING FIXTURES OUTSIDE THE AREA OF WORK SHALL REMAIN AS IS, MAINTAIN CIRCUITS CONTINUITY AND FUNCTIONALITY.
5. ALL EXIT SIGNS SHALL BE WIRED TO NON–SWITCHED CIRCUIT. CONNECT ALL NEW EXIT SIGNS TO THE EXISTING LIFE SAFETY EMERGENCY CIRCUIT SERVING THIS AREA.
6. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND FREQUENCY OF ALL CEILING MOUNTED AND WALL MOUNTED VACANCY / OCCUPANCY SENSORS WITH MANUFACTURER PRIOR TO INSTALLATION. LOCATION OF SENSORS ARE DIAGRAMMATIC, CONTRACTOR SHALL LOCATE AND AIM SENSOR IN LOCATION REQUIRED FOR COMPLETE AND PROPERLY FUNCTIONING COVERAGE WITHIN RANGE OF SENSOR. PROVIDE ALL POWER RACKS, WIRE CONTROL HARDWARE AND EQUIPMENT TO PROVIDE OCCUPANCY SENSOR LIGHTING CONTROL SYSTEM. TYPICAL FOR ALL SENSORS INDICATED.
7. CEILING MOUNTED OR WALL MOUNTED VACANCY / OCCUPANCY SENSORS SHALL CONTROL LIGHTING IN THE ENTIRE ROOM, UNLESS OTHERWISE NOTED. LIGHTING CONTROLS IN COMMON AREAS AND COMMON CORRIDORS SHALL BE OCCUPANCY SENSORS. LIGHTING CONTROLS IN INDIVIDUAL ROOMS AND OFFICES SHALL BE VACANCY SENSORS.
8. ALL WIRING PROVIDING POWER TO LIGHTING AND RECEPTACLES IN EXAM ROOMS, ULTRASOUND ROOMS, BLOOD DRAW ROOMS, AND MEDICAL LABS ALONG WITH WIRING TO ALL OTHER AREAS REQUIRED BY CODE SHALL BE HOSPITAL GRADE WIRING AND SHALL BE ROUTED IN HCF CABLE.
9. ALL ELECTRICAL DEVICES SHALL BE MOUNTED 18" AFF, U.O.N.
10. ALL TELE/DATA DEVICE LOCATIONS SHALL BE FED BY A PLENUM RATED CAT 6A WIRE THAT SHALL BE RUN FROM THE DEVICE BACK TO THE LOCAL HUB. COORDINATE EXACT LOCATION OF LOCAL HUB IN FIELD. ALL LOW VOLTAGE WIRING SHALL BE PLENUM RATED.
11. ELECTRICAL CONTRACTOR SHALL MAINTAIN CONTINUITY OF ALL BRANCH CIRCUITING TO ELECTRICAL DEVICES TO REMAIN. ELECTRICAL CONTRACTOR SHALL EXTEND AND RECONNECT ANY BRANCH CIRCUITING THAT BECOME DISCONNECTED DUE TO DEMOLITION.
12. CONTRACTOR TO REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR LOCATION AND EXACT REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT. CONTRACTOR TO COORDINATE ALL WORK WITH MECHANICAL AND PLUMBING CONTRACTORS AND WITH EQUIPMENT SPECIFICATIONS.
13. CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING PANEL 'RP' ON 2ND FLOOR IN FIELD. NEW PANEL 'RP2' SHALL BE MOUNTED ADJACENT TO EXISTING PANEL 'RP' ON 2ND FLOOR UTILITY SPACE. COORDINATE EXACT LOCATION IN FIELD WITH FACILITY PERSONNEL.

ELECTRICAL KEYNOTES

1. CONNECT NEW AND RELOCATED LIGHTING FIXTURES TO THE EXISTING LIGHTING CIRCUIT AND SWITCHING IN THIS AREA.
2. CONNECT NEW LIGHTING FIXTURES TO THE EXISTING LIGHTING CIRCUIT IN THIS AREA. PROVIDE NEW SWITCHING AS SHOWN ON DRAWING.

FIRE ALARM NOTES

1. PROVIDE NEW FIRE ALARM DEVICES AND WIRING AS INDICATED ON FLOOR PLANS AND RISER. ALL FIRE ALARM WIRING SHALL BE #14 TWISTED FOR STROBES PANEL #16 TWISTED/SHIELDED FOR SPEAKERS. (PLENUM RATED.)
2. CONTRACTOR SHALL EXTEND FIRE ALARM WIRING AND CONDUIT TO NEW FIRE ALARM DEVICES. ALL NEW FIRE ALARM DEVICES SHALL BE ADA COMPLIANT. ALL FIRE ALARM DEVICES IN THE AREA OF WORK SHALL BE SYNCHRONIZED. WHERE EXISTING FIRE ALARM DEVICES DO NOT HAVE SYNCHRONIZING ABILITY THE FIRE ALARM DEVICE SHALL BE REPLACED WITH NEW.
3. THE NEW FIRE ALARM SYSTEMS SHALL BE AN EXTENSION OF THE EXISTING BASE BUILDING FIRE ALARM SYSTEM. ALL NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH THE BASE BUILDING FIRE ALARM SYSTEM. COORDINATE ALL WORK WITH THE BASE BUILDING FIRE ALARM VENDOR. ALL FIRE ALARM WIRING SHALL BE CONFIRMED WITH FIRE ALARM VENDOR PRIOR TO INSTALLATION.
4. CONTRACTOR IS RESPONSIBLE FOR PROGRAMING/MODIFYING, UPGRADING, CONTROL MODULES, ETC. AS REQUIRED TO PROVIDE A COMPLETE AND CODE COMPLIANT SYSTEM. ELECTRICAL CONTRACTOR SHALL HIRE BUILDING FIRE ALARM VENDOR TO DO FINAL FIRE ALARM CONNECTIONS. CONTRACTOR RESPONSIBLE TO INSTALL END OF LINE RESISTOR FOR NEW DEVICES. PROVIDE CONTROL PANEL PARTS AS REQUIRED.
5. CONTRACTOR IS RESPONSIBLE FOR ALL FIRE ALARM PERMIT AND INSPECTION COST.
6. CONTRACTOR TO CONFIRM THAT EXISTING FIRE ALARM PANEL IS ADEQUATE TO HANDLE NEW FIRE ALARM STROBES. IF INADEQUATE, CONTRACTOR SHALL PROVIDE AND INSTALL A NEW STROBE INTERFACE PANEL WITH (2) STROBE CIRCUITS TO ACCOMMODATE NEW FIRE ALARM STROBES.
7. BUILDING FIRE ALARM SYSTEM TO REMAIN ACTIVE DURING CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL NOTIFY BUILDING OWNER IF CONSTRUCTION FLOORS ARE TAKEN OFF SYSTEM. ELECTRICAL CONTRACTOR TO PAY ANY COST ASSOCIATED WITH ANY FIRE WATCH REQUIRED BY LOCAL OFFICIALS DURING THE TIME THAT SYSTEM IS OFF LINE.

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PHASE ZERO DESIGN

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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: VH

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.

DRAWING NAME:

ELECTRICAL PLANS

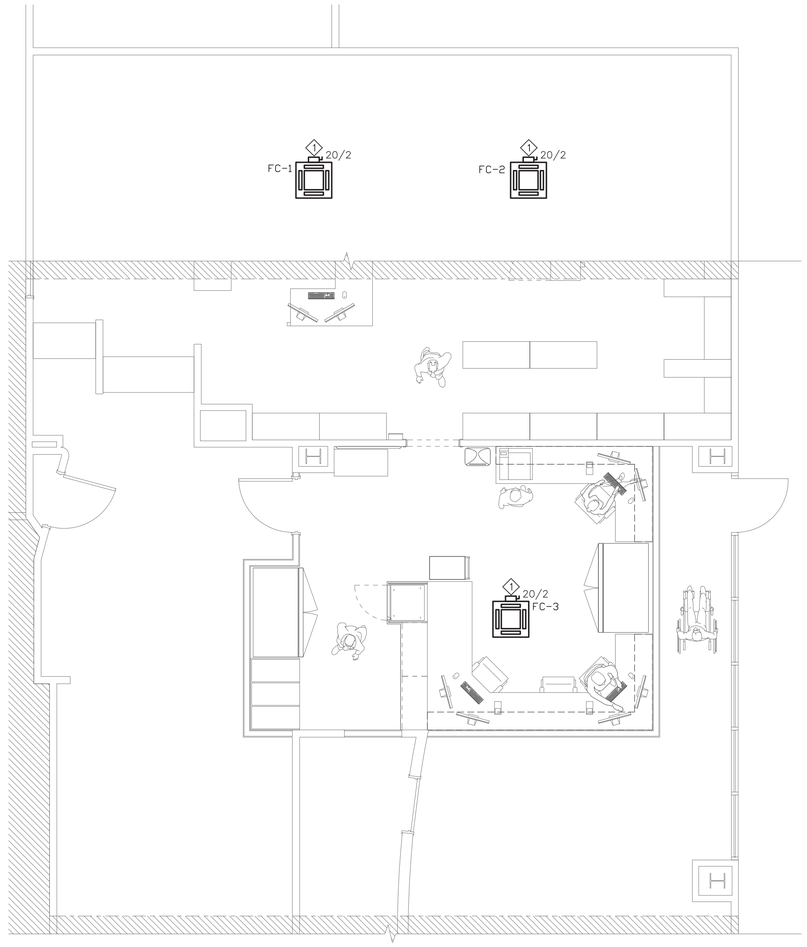
DRAWING NO.

E101

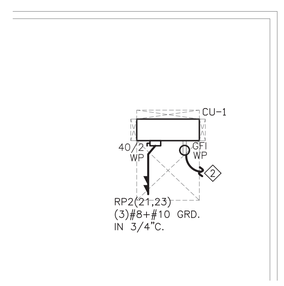
Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

PANEL: RP2 (NEW) (ADD/ALT)	120/208 VOLTS, 3 PHASE, 4 WIRE	MAIN BUS 100 AMPS
LOCATION: 2ND FL. UTILITY SPACE	MOUNTING : ■ SURFACE ☐ FLUSH	☐ MCB ■ MLO
BUILDING: 34 MAPLE ST.	BUS BARS: COPPER	MAIN BRK – AMPS – P
		KAIC RATING –

CKT. NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD (KVA)	PER PHASE (KVA) A	B	C	LOAD (KVA)	DESCRIPTION OF LOAD	TRIP AMPS	CKT. NO.
1	20	RELOCATED CIRCUIT	–	–			–	RECEPTACLES	20	2
3	20	RELOCATED CIRCUIT	–		–		–	SPACE	–	4
5	20	RELOCATED CIRCUIT	–			–	–	SPACE	–	6
7	20	RECEPTACLES	–	–			–	SPACE	–	8
9	20	RECEPTACLES	–		–		–	SPACE	–	10
11	20	REFRIGERATOR	–			–	–	SPACE	–	12
13	20	REFRIGERATOR	–	–			–	SPACE	–	14
15	20	REFRIGERATOR	–		–		–	SPACE	–	16
17	20 / 2P	FAN COIL UNITS	–			–	–	SPACE	–	18
19			–	–			–	SPACE	–	20
21	40 / 2P	CU–1	–		–		–	SPACE	–	22
23			–			–	–	SPACE	–	24
25	–	SPACE	–	–			–	SPACE	–	26
27	–	SPACE	–		–		–	SPACE	–	28
29	–	SPACE	–			–	–	SPACE	–	30
31	–	SPACE	–	–			–	SPACE	–	32
33	–	SPACE	–		–		–	SPACE	–	34
35	–	SPACE	–			–	–	SPACE	–	36
37	–	SPACE	–	–			–	SPACE	–	38
39	–	SPACE	–		–		–	SPACE	–	40
41	–	SPACE	–			–	–	SPACE	–	42
				–	–	–				
				–						



1 ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"



2 ROOF ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"

ADD/ALT ELECTRICAL NOTES

1. CONTRACTOR SHALL PROVIDE AN ADD/ALERNATVE PRICE FOR WORK ASSOCIATED WITH INSTALLING NEW SUPPLEMENTAL A/C EQUIPMENT. COORDINATE ALL WORK WITH MECHANICAL CONTRACTOR.

ADD/ALT ELECTRICAL KEYNOTES

1. CONTRACTOR SHALL PROVIDE POWER TO NEW FAN COIL UNITS FROM CIRCUIT RP2(17,19) BY (3)#12+#12 GRD. IN 3/4"C. PROVIDE A SEPARATE 3/4"C. BETWEEN EACH FAN COIL UNIT AND CONDENSING UNIT 'CU–1' LOCATED ON ROOF FOR CONTROL WIRING. COORDINATE ALL WORK AND REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS.

2. IF MAINTENANCE RECEPTACLE IS NOT LOCATED WITHIN 25 FT. OF NEW MECHANICAL UNIT, INSTALL NEW WEATHERPROOF GFI RECEPTACLE FROM MAINTENANCE RECEPTACLE CIRCUIT IN AREA BY (2)#12+#12 GRD. IN 3/4"C.

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PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS:

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

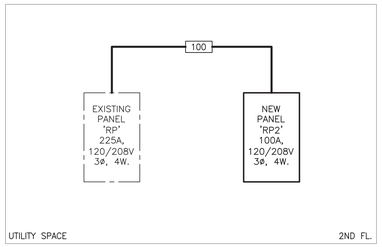
DRAWN BY: VH
CHECKED BY: TL
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
ADD/ALT ELECTRICAL POWER PLAN

DRAWING NO.
E102

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt



1 PARTIAL ELECTRICAL RISER DIAGRAM

NOT TO SCALE

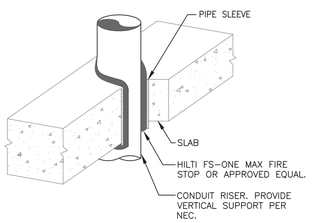
NOTE: PANELS LOCATED ON 2ND FLOOR UTILITY SPACE. NEW PANEL 'RP2' SHALL BE MOUNTED ADJACENT TO EXISTING PANEL 'RP' ON 2ND FLOOR UTILITY SPACE. COORDINATE EXACT LOCATION IN FIELD WITH FACILITY PERSONNEL.

FEEDER LEGEND

100	(4)#3+#8 GRD. IN 1-1/4"C.

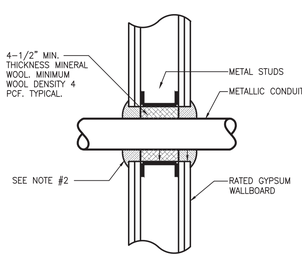
ALL WIRE SIZES ARE BASED ON COPPER FEEDERS UNLESS OTHERWISE SPECIFIED.

UPGRADE FEEDERS AS NEEDED FOR NO MORE THAN 2% VOLTAGE DROP.



2 VERTICAL CONDUIT PENETRATION DETAIL

NOT TO SCALE



NOTES:

1. CONDUIT SHALL BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE ANNULAR SPACE BETWEEN CONDUIT AND WALL OPENING SHALL BE 0" TO A MAXIMUM OF 1"
2. HILTI FS-ONE MAX FIRESTOP PUTTY OR APPROVED EQUAL. MIN. 5/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT POINT CONTACT LOCATION BETWEEN PENETRANT AND WALL, A 1/4" CROWN OF FILL MATERIAL SHALL BE APPLIED AT THE CONDUIT/WALL INTERFACE ON BOTH SIDES OF THE ASSEMBLY, LAPPING 1/4" ON THE CONDUIT AND 1/4" BEYOND THE PERIPHERY OF THE OPENING.
3. ASSEMBLY SHALL BE INSTALLED TO COMPLY WITH UL FIRESTOP ASSEMBY WL1175.

3 TYPICAL CONDUIT GYPSUM FIRE RATED WALL PENETRATION DETAIL

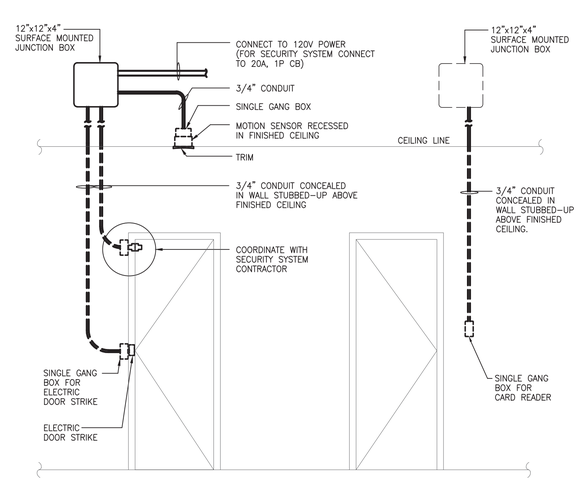
NOT TO SCALE

PANEL: RP (EXISTING) | LOCATION: 2ND FL. UTILITY SPACE | BUILDING: 34 MAPLE ST.
120/208 VOLTS, 3 PHASE, 4 WIRE | MOUNTING: ■ SURFACE ☐ FLUSH | BUS BARS: COPPER
MAIN BUS 225 AMPS | ☐ MCB ■ MLO | MAIN BRK – AMPS – P | KAIC RATING –

CKT. NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD (KVA)	PER PHASE (KVA) A	B	C	LOAD (KVA)	DESCRIPTION OF LOAD	TRIP AMPS	CKT. NO.
1	–	EXISTING	–	–			–	EXISTING	–	2
3	–	EXISTING	–		–		–	EXISTING	–	4
5	–	EXISTING	–			–	–	EXISTING	–	6
7	–	EXISTING	–	–			–	EXISTING	–	8
9	–	EXISTING	–		–		–	EXISTING	–	10
11	–	EXISTING	–			–	–	EXISTING	–	12
13	–	EXISTING	–	–			–	EXISTING	–	14
15	–	EXISTING	–		–		–	EXISTING	–	16
17	–	EXISTING	–			–	–	EXISTING	–	18
19	–	EXISTING	–	–			–	EXISTING	–	20
21	–	EXISTING	–		–		–	EXISTING	–	22
23	–	EXISTING	–			–	–	EXISTING	–	24
25	–	EXISTING	–	–			–	EXISTING	–	26
27	–	EXISTING	–		–		–	EXISTING	–	28
29	–	EXISTING	–			–	–	EXISTING	–	30
31	–	EXISTING	–	–			–	EXISTING	–	32
33	–	EXISTING	–		–		–	EXISTING	–	34
35	–	EXISTING	–			–	–	EXISTING	–	36
37	–	EXISTING	–	–			–	NEW PANEL 'RP2'	100 / 3P	38
39	–	EXISTING	–		–		–			40 *
41	–	EXISTING	–			–	–			42
				–	–	–				
				–						

NOTES:

* 1. RELOCATE THREE EXISTING 20A, 120V CIRCUITS FROM PANEL 'RP' TO NEW PANEL 'RP2' TO MAKE ROOM FOR NEW 100A, 208V, 3-POLE CIRCUIT BREAKER TO FEED NEW PANEL.



4 TYPICAL DOOR LAYOUT FOR SECURITY SYSTEM DETAIL

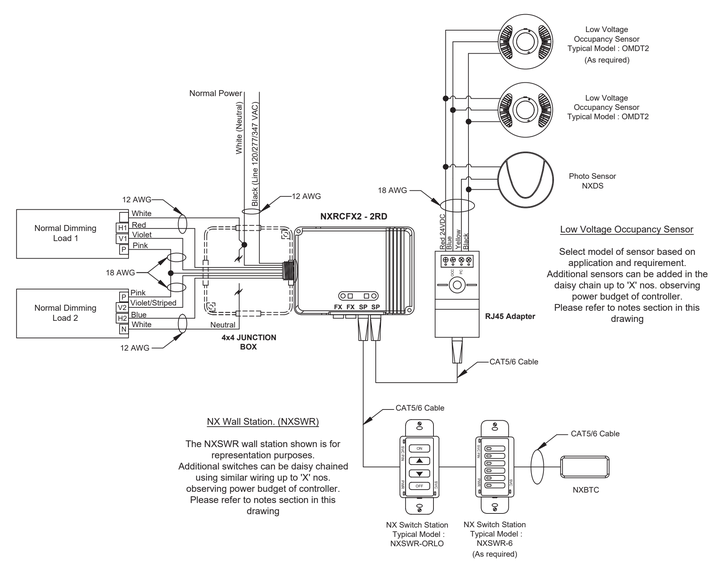
NOT TO SCALE

PANEL: RP2 (NEW) | LOCATION: 2ND FL. UTILITY SPACE | BUILDING: 34 MAPLE ST.
120/208 VOLTS, 3 PHASE, 4 WIRE | MOUNTING: ■ SURFACE ☐ FLUSH | BUS BARS: COPPER
MAIN BUS 100 AMPS | ☐ MCB ■ MLO | MAIN BRK – AMPS – P | KAIC RATING –

	CKT. NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD (KVA)	PER PHASE (KVA) A	B	C	LOAD (KVA)	DESCRIPTION OF LOAD	TRIP AMPS	CKT. NO.
*	1	20	RELOCATED CIRCUIT	–	–			–	RECEPTACLES	20	2
*	3	20	RELOCATED CIRCUIT	–		–		–	SPACE	–	4
*	5	20	RELOCATED CIRCUIT	–			–	–	SPACE	–	6
	7	20	RECEPTACLES	–	–			–	SPACE	–	8
	9	20	RECEPTACLES	–		–		–	SPACE	–	10
	11	20	REFRIGERATOR	–			–	–	SPACE	–	12
	13	20	REFRIGERATOR	–	–			–	SPACE	–	14
	15	20	REFRIGERATOR	–		–		–	SPACE	–	16
	17	–	SPACE	–			–	–	SPACE	–	18
	19	–	SPACE	–	–			–	SPACE	–	20
	21	–	SPACE	–		–		–	SPACE	–	22
	23	–	SPACE	–			–	–	SPACE	–	24
	25	–	SPACE	–	–			–	SPACE	–	26
	27	–	SPACE	–		–		–	SPACE	–	28
	29	–	SPACE	–			–	–	SPACE	–	30
	31	–	SPACE	–	–			–	SPACE	–	32
	33	–	SPACE	–		–		–	SPACE	–	34
	35	–	SPACE	–			–	–	SPACE	–	36
	37	–	SPACE	–	–			–	SPACE	–	38
	39	–	SPACE	–		–		–	SPACE	–	40
	41	–	SPACE	–			–	–	SPACE	–	42
					–	–	–				
					–						

NOTES:

* 1. RELOCATE THREE EXISTING 20A, 120V CIRCUITS FROM PANEL 'RP' TO NEW PANEL 'RP2' TO MAKE ROOM FOR NEW 100A, 208V, 3-POLE CIRCUIT BREAKER TO FEED NEW PANEL.



5 NX ROOM CONTROLLER WIRING DIAGRAM

NOT TO SCALE

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN

CLIENT:

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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS:

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: VH

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING TITLE: ELECTRICAL RISER DIAGRAM, PANEL SCHEDULES, & DETAILS

DRAWING NO.

E200

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

ELECTRICAL SPECIFICATIONS

PART 1– GENERAL

1. GENERAL REQUIREMENTS:

A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENT A201, LATEST EDITION, AND THESE SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.

B. ALL APPLICABLE CODES, LAWS, AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIAL WHICH VIOLATES ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR.

C. ITEMS AND SERVICES NOT SHOWN ON DRAWINGS BUT MENTIONED IN SPECIFICATIONS, OR VISE VERSA, OR ITEMS AND SERVICES NECESSARY TO RENDER THE WORK COMPLETE AND READY FOR OPERATION SHALL BE PROVIDED WITHOUT ADDITIONAL COST.

D. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE EXISTING BASE BUILDING CONSTRUCTION STANDARDS.

E. PRIOR TO SUBMISSION OF BID THE CONTRACTOR SHALL VISIT THE JOB SITE AND ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATE TO THE WORK AS INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN.

F. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH AFFECT THIS WORK, AND THE ACCESS TO SUCH SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO INDICATE ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO SUBMITTAL OF BID. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. THE ON-SITE INSPECTION SHALL VERIFY EXISTING CONDUIT (SIZES, CLEARANCES, ETC) AND CONDITIONS.

G. INVESTIGATE EACH SPACE THOROUGHLY TO DETERMINE WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM THE MANUFACTURER IN SECTIONS IN SIZES SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. DETERMINE FROM BUILDING OWNER AND/OR TENANT AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH ALL AREAS.

H. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. CONDUIT ROUTING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF CONDUIT TO AVOID OBSTRUCTIONS. COORDINATION WITH EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES, IS REQUIRED. MAINTAIN HEADROOM AND SPACE CONDITIONS.

I. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.

J. REMOVAL AND RELOCATION OF CERTAIN EXISTING WORK MAY BE NECESSARY FOR THE PERFORMANCE OF THE GENERAL WORK. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND INCLUDE ALL CHANGES AND CHARGES IN MAKING UP THE WORK PROPOSAL.

K. CONNECTIONS TO EXISTING WORK: INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS OF EXISTING SERVICES SHALL BE PERFORMED AT NO ADDITIONAL CHARGES, AT TIMES NOT TO NTERFERE WITH NORMAL OPERATION OF EXISTING FACILITIES AND ONLY WITH WRITTEN CONSENT OF OWNER. ALARM AND EMERGENCY SYSTEMS SHALL NOT BE INTERRUPTED. MAINTAIN ONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION, INCLUDING MAINTENANCE OF WIRING CONTINUITY AS REQUIRED.

L. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER ORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW WORK.

M. THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.

N. PROVIDE ALL NECESSARY FLASHING AND COUNTERFLASHING TO MAINTAIN THE WATERPROOFING INTEGRITY OF THE BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF CONDUIT AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AS REQUIRED.

O. ALL EXISTING MATERIAL, EQUIPMENT AND CONSTRUCTION DEBRIS TO BE REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION OF SPECIFIC EQUIPMENT AND APPARATUS REQUESTED BY THE BUILDING REPRESENTATIVE, ARCHITECT OR AS NOTED TO BE RELOCATED ON THE DRAWINGS. REMOVED EQUIPMENT SHALL BE PROPERLY DISPOSED OF BY THIS CONTRACTOR.

P. THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK DURING OVERTIME HOURS AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.

Q. UNLESS OTHERWISE SPECIFICALLY NOTED OR SPECIFIED, INCLUDE ALL CUTTING AND PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING. THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.

R. ALL MATERIAL AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

S. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.

T. THE FINAL ACCEPTANCE SHALL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

U. FINAL LOCATIONS AND MOUNTING ORIENTATIONS OF ALL SWITCHES, RECEPTACLES AND LIGHT FIXTURES SHALL BE VERIFIED WITH ARCHITECT.

V. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.

2. SCOPE OF WORK:

A. SCOPE OF WORK SHALL CONSIST OF PROVIDING LABOR, MATERIALS, EQUIPMENT, SERVICES AND FEES NECESSARY FOR COMPLETE AND SAFE INSTALLATION IN CONFORMITY WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE INDUSTRY, NATIONAL AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.

B. THE SCOPE OF WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1) DISCONNECTION AND REMOVAL OF ELECTRICAL EQUIPMENT AS REQUIRED FOR NEW INSTALLATION, INCLUDING ALL CONDUCTORS AND CONDUIT BACK TO THEIR SOURCE.

2) PROVIDING OF LIGHT FIXTURES AND LAMPS INCLUDING EXIT AND EMERGENCY LIGHTING AND ALL ASSOCIATED COMPONENTS AND BRANCH CIRCUITING.

3) PROVIDING FOR NEW RACEWAYS AND CONDUCTORS FOR LIGHTING AND POWER.

4) CUTTING, CHANNELING, AND CHASING REQUIRED TO ACCOMMODATE THE ELECTRICAL INSTALLATION AND ROUGH PATCHING.

5) ADDITIONS AND MODIFICATIONS TO EXISTING POWER DISTRIBUTION EQUIPMENT AND RELATED FEEDERS.

6) PROVIDING OF HVAC POWER AND WIRING AND FINAL CONNECTIONS TO HVAC EQUIPMENT.

7) PROVIDING OF ELECTRICAL CONDUIT, JUNCTION BOXES, PULL BOXES, ETC., REQUIRED FOR ALL ELECTRICAL AND MECHANICAL EQUIPMENT.

8) GROUNDING OF ALL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE (NEC) AND AS SHOWN ON THE DRAWINGS.

9) MAINTAIN CONTINUITY OF EXISTING CIRCUITING TO ADJACENT AREAS NOT AFFECTED BY THE NEW WORK.

10) PROVIDING TELEPHONE/DATA AND SIGNAL CONDUIT, JUNCTION BOXES, PULLBOXES, SLEEVES, WIRING, AND DEVICES.

11) PROVIDING ALL REQUIRED ADDITIONS AND MODIFICATIONS TO THE NEW/EXISTING BUILDING FIRE ALARM SYSTEM.

12) PROVIDING RECEPTACLES, LIGHT SWITCHES, DISCONNECT SWITCHES, FUSES, DIMMERS, OUTLET BOXES, CONTACTORS AND OTHER WIRING DEVICES INCLUDING RELATED BRANCH CIRCUIT WIRING.

13) PROVIDING TEMPORARY LIGHT AND POWER DURING CONSTRUCTION.

C. ALL DRAWINGS, PLANS, DETAILS, SPECIFICATIONS AND SPECIFICATION ADDENDA ARE MADE PART OF THIS CONTRACT AND SHALL APPLY TO ALL WORK UNDER THE CONTRACT UNLESS OTHERWISE AMENDED, MODIFIED, SUPPLEMENTED OR SPECIFIED HEREIN.

D. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES BY OWNER INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.

E. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH ALL DEPARTMENTS HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

3. SHOP DRAWINGS:

A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT, CONTRACTOR SHALL PROVIDE COMPLETE SETS OF COORDINATED SHOP DRAWINGS OF ALL NEW AND EXISTING EQUIPMENT, INDICATING CAPACITY, DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT AND ENGINEER.

B. INDICATE ON EACH SHOP DRAWINGS SUBMITTED:

1) PROJECT NAME AND LOCATION
2) NAME OF ARCHITECT AND ENGINEER
3) ITEM IDENTIFICATION
4) APPROVAL STAMP OF PRIME CONTRACTOR

C. SUBMISSIONS:

1) SUBMISSIONS 11 IN. X 17 IN. OR SMALLER: IF THE SUBMISSION IS A CATALOG CUT, THEN THE CONTRACTOR SHALL SUBMIT ONE ORIGINAL AND TWO COPIES. OTHERWISE, HE SHALL SUBMIT THREE COPIES. THE ARCHITECT WILL FORWARD THE ORIGINAL AND ONE COPY (TWO COPIES WHEN NO ORIGINAL IS RECEIVED) TO THE ENGINEER. ALL CATALOG CUTS SHALL BE COMPLETE.

2) SUBMISSIONS LARGER THAN 11 IN. X 17 IN.: SUBMIT TWO PRINTS TO THE ARCHITECT. THE ARCHITECT WILL FORWARD ONE PRINT TO THE ENGINEER.

3) SUBMISSIONS MAY BE SUBMITTED ELECTRONICALLY IN PDF FORMAT.

D. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING ITEMS AND ASSOCIATED COMPONENTS:

1) PANELBOARDS (INCLUDING DIMENSIONS, SCHEDULES, AND CATALOG CUTS).
2) CIRCUIT BREAKERS
3) FIRE ALARM DEVICES
4) LIGHTING FIXTURES AND LAMPS
5) DISCONNECT SWITCHES AND FUSES
6) WALL SWITCHES
7) WIRING DEVICES
8) TELE/DATA WIRING AND DEVICES

4. AS-BUILT DRAWINGS AND EQUIPMENT OPERATIONAL INSTRUCTIONS:

A. UPON COMPLETION AND ACCEPTANCE OF WORK, CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND EQUIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS CONTRACT.

B. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2 IN. X 11 IN. PAPER AND BOUND IN THREE RING BINDERS WITH CLEAR ACETATE COVERS. CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ENGINEER.

C. THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PROJECT, ARCHITECT AND ENGINEER.

D. REPRODUCIBLE "AS-BUILT" DRAWINGS SHALL BE PROVIDED INDICATING THE AS INSTALLED CONDITIONS OF THE WORK. "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AND/OR THE CLIENT AFTER COMPLETION OF THE INSTALLATION.

5. GENERAL PROVISIONS FOR ELECTRICAL WORK:

A. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.

B. DEFINITIONS:

1) "ELECTRICAL CONTRACTOR", "THE CONTRACTOR": THE PARTY OR PARTIES THAT HAVE BEEN DULY AWARDED THE CONTRACT FOR AND ARE THEREBY MADE RESPONSIBLE FOR THE ELECTRICAL WORK AS DESCRIBED HEREIN.

2) "ARCHITECT", "ENGINEER", "OWNERS REPRESENTATIVE": THE PARTY OR PARTIES RESPONSIBLE FOR INTERPRETING, ACCEPTING, AND OTHERWISE RULING ON THE PERFORMANCE UNDER THIS CONTRACT.

3) "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.

4) "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.

5) "FURNISH" OR "SUPPLY: TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES.

6) "WORK": LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.

7) "WIRING": RACEWAY, FITTINGS, WIRE, BOXES AND RELATED ITEMS.

8) "CONCEALED": EMBEDDED IN MASONRY OR OTHER CONSTRUCTION, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS, IN TRENCHES, IN CRAWL SPACES, OR IN ENCLOSURES.

9) "EXPOSED": NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE.

10) "SIMILAR" OR "EQUAL": EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.

C. TEMPORARY LIGHT AND POWER: PROVIDE TEMPORARY LIGHT AND POWER SYSTEMS AT EARLIEST POSSIBLE DATE WITHIN THE CONSTRUCTION AREAS FOR THE REQUIREMENTS OF ALL TRADES AS HEREIN DESCRIBED. EXTEND SYSTEMS TO NEW CONSTRUCTION AS SOON AS PHYSICALLY POSSIBLE. MAINTAIN SYSTEM DURING WORKING HOURS OF ALL TRADES. COST OF ENERGY WILL BE PAID FOR BY OWNER. PROVIDE ALL REQUIRED MAINTENANCE, INCLUDING LAMPS AND SOCKETS.

D. QUALITY ASSURANCE:

1) QUALITY AND GAUGE OF MATERIALS: NEW, BEST OF THEIR RESPECTIVE KINDS, FREE FROM DEFECTS AND LISTED BY UNDERWRITERS LABORATORIES, INC., OR OTHER NATIONALLY APPROVED TESTING AGENCY AND BEARING THEIR LABEL. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION SHALL BE OF SAME MANUFACTURER, EXCEPT AS NOTED.

2) GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED AS DEFINED IN PART 1 PARAGRAPH 2.D.

3) HEIGHTS OF OUTLETS:

a) FROM FINISHED FLOOR TO CENTER LINE OF OUTLETS FOR:

RECEPTACLES AND TELEPHONES:	1 FT.-6 IN. (U.O.N.)
WALL SWITCHES:	4 FT.-0 IN.
WALL FIXTURES:	7 FT.-0 IN.
MOTOR CONTROLS:	5 FT.-0 IN.
FIRE ALARM STROBE LIGHTS:	6 FT.-8 IN. OR 6 IN. BELOW CEILING (WHICHEVER IS LOWER)
GONGS AND HORNS:	7 FT.-6 IN.
FIRE ALARM PULL STATIONS:	4 FT.-0 IN.

b) EXCEPTIONS: AT JUNCTION OF DIFFERENT WALL FINISH MATERIALS, ON MOLDING OR BREAK IN WALL SURFACE, IN VIOLATION OF CODE, OR AS NOTED OR DIRECTED.

PART 2– PRODUCTS/APPLICATION

1. LOW-VOLTAGE DISTRIBUTION EQUIPMENT:

A. PROVIDE COMPLETE EQUIPMENT INCLUDING: SWITCHES, FUSES, CIRCUIT BREAKERS, PANELS AND TRANSFORMERS.

B. ALL EQUIPMENT SHALL CONFORM TO NEMA, ANSI AND IEEE STANDARDS.

2. APPROVED MANUFACTURERS:

A. DISCONNECT SWITCHES:	SQUARE D, GE, EATON, SIEMENS
B. PANELBOARDS:	SQUARE D, GE, EATON, SIEMENS (MATCH BUILDING STANDARD)
C. CIRCUIT BREAKERS:	SQUARE D, GE, EATON, SIEMENS (MATCH BUILDING STANDARD)
D. RACEWAYS:	NATIONAL WIRE PRODUCTS, WHEATLAND, REPUBLIC
E. WIRE/CABLE:	ROME PHELPS DODGE, GENERAL CABLE, SIMPLEX, SOUTHWIRE
F. RECEPTACLES:	HUBBELL, LEVITON
G. LIGHT SWITCHES:	HUBBELL, LEVITON
H. OCCUPANCY SENSORS:	HUBBELL, LUTRON
I. EXIT SIGNS:	DUAL-LITE, ATLITE, LIGHT ALARM (MATCH BUILDING STANDARD)

2. ELECTRICAL DEVICES, PLATES, AND LABELING:

A. DIMMERS SHALL BE RATED AT VOLTAGE COMPATIBLE WITH FIXTURE, WATTAGE SIZE AS REQUIRED. WHERE DIMMER SWITCHES ARE LOCATED NEXT TO SINGLE POLE OR VARIABLE SPEED TYPE SWITCHES, THE SINGLE POLE/VARIABLE SPEED SWITCHES SHALL MATCH THE DIMMING SWITCH STYLE. DIMMERS, WHERE GANGED TOGETHER, SHALL BE PROPERLY DERATED BASED ON MANUFACTURERS RECOMMENDATIONS. FINS OF DIMMERS SHALL NOT BE REMOVED IN MULTIGANG INSTALLATIONS. PROVIDE OVER-SIZED JUNCTION BOX FOR MOUNTING OF WALL DIMMERS.

B. MULTIPLE DEVICES AT A COMMON LOCATION SHALL BE INSTALLED IN A COMMON MULTI-GANG BOX WITH A SINGLE COMMON FACEPLATE. DERATE DIMMER SWITCHES PER MANUFACTURER'S REQUIREMENTS WHEN GANGED.

C. THE FOLLOWING ARE THE STANDARD ELECTRICAL DEVICES TO BE USED FOR NEW INSTALLS UNLESS OTHERWISE NOTED BELOW ALL DEVICES ARE HUBBELL.

1) NORMAL POWER DUPLEX = HBL8300I
2) NORMAL POWER SINGLE RECEPTACLE = HBL8310I
3) NORMAL POWER SINGLE POLE SWITCH = HBL1221I
4) NORMAL POWER THREE WAY SWITCH = HBL1223I
5) NORMAL POWER FOUR WAY SWITCH = HBL1224I
6) NORMAL POWER GFCI = GFR8300HILA
7) NORMAL POWER TAMPER PROOF DUPLEX = HBL8300SGIA
8) WALL MOUNT OCCUPANCY SWITCH = ATP1277I
9) WALL MOUNT OCCUPANCY 3 WAY SWITCH = ATP200I
10) CEILING MOUNT OCCUPANCY SENSOR = ATD200C
11) POWER PACK FOR CEILING MOUNTED OCCUPANCY SENSOR = CU300A
12) EMERGENCY POWER DUPLEX = HBL8300HRED
13) EMERGENCY POWER SINGLE RECEPTACLE = HBL8310R
14) EMERGENCY POWER SINGLE POLE SWITCH = HBL122ILC
15) EMERGENCY POWER THREE WAY SWITCH = HBL1223ILC
16) EMERGENCY POWER FOUR WAY SWITCH = HBL1224R
17) EMERGENCY POWER GFCI = HBL8300HLRA
18) EMERGENCY POWER TAMPER PROOF RECEPTACLE = HBL8300SGRA
19) KEY OPERATED SWITCHES = HBL1221L
20) EMERGENCY BYPASS LIGHTING RELAYS = LVS EMERGENCY POWER CONTROLS
21) LOW VOLTAGE LIGHT CONTROL RELAY = CURBELL LC-040
22) DIMMERS SHALL BE MATCHED TO THE SPECIFIC BALLAST OR DRIVER TO BE CONTROLLED

D. UNLESS OTHERWISE NOTED ALL WALL PLATES SHALL BE 420 SATIN STAINLESS STEEL FINISH.

E. ALL DEVICES MUST BE LABELED AT THE DEVICE ON THE WALL PLATE. THE STANDARD MARKING WILL LIST THE PANEL THEN THE CIRCUIT NUMBER.

1) EXAMPLE 15-3-2 CIR #23

F. IN ADDITION TO BEING TESTED FOR VOLTAGE AND POLARITY, ALL STRAIGHT BLADE DEVICES MUST BE TESTED TO ABOVE MINIMUM TENSION LEVELS FOR HOSPITAL GRADE DEVICES. A RECORD OF TEST RESULTS MUST BE TURNED OVER TO FACILITIES MANAGEMENT.

G. ALL NEW GFCI RECEPTACLES MUST BE PROPERLY TESTED TO VERIFY ACCEPTABLE TRIP LEVELS. A RECORD OF THE TEST RESULTS MUST BE TURNED OVER TO FACILITIES MANAGEMENT.

3. RACEWAYS:

A. PROVIDE RACEWAYS ONLY AS HERE-IN SPECIFIED, EXCEPT AS NOTED. RACEWAYS SHALL BE RUN CONCEALED, EXCEPT AS NOTED.

B. PROVIDE RACEWAY SUPPORT UTILIZING CEILING TRAPEZE, STRAP HANGERS, OR WALL BRACKETS. PROVIDE U-BOLTS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND CONNECTED TO ACCEPTABLE SUPPORTS. PROVIDE RISER CLAMPS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND RESTING ON SLAB. FOR THROUGH-THE-FLOOR SYSTEMS, UTILIZE AN ASSEMBLY SIMILAR TO HUBBELL FIRE RATED POKE-THROUGH FLOOR BOX SYSTEM. FOR ABOVE FLOOR FITTINGS TELEPHONE SHALL BE BUSHED HOLE AND POWER SHALL BE DUPLEX RECEPTACLE OR OTHER AS NOTED. PROVIDE SEPARATION BARRIER BETWEEN POWER AND TELEPHONE COMPARTMENTS. PROVIDE JUNCTION BOX ON UNDERSIDE OF FLOOR. PACK FITTING TO RESTORE FIRE RATING OF FLOOR.

C. SECURE ALL RACEWAYS TO SUPPORTS WITH PIPE STRAPS OR U-BOLTS. SPACING OF SUPPORTS SHALL BE A MINIMUM OF 10 FT ON CENTER FOR METALLIC RACEWAY AND AS REQUIRED FOR NONMETALLIC RACEWAY. SPACING SHALL BE 5 FT ON CENTER FOR WIREWAYS AND PER CODE AND AS NOTED FOR OTHERS. MOUNT SUPPORTS TO STRUCTURE MASONRY WITH TOGGLE BOLTS ON HOLLOW MASONRY, EXPANSION SHIELDS OR INSERTS IN CONCRETE AND BRICK, MACHINE SCREWS ON METAL, BEAM CLAMPS ON FRAMEWORK, WOOD SCREWS ON WOOD, AND PAN THROUGH STRAPS IN METAL DECK. NAILS, RAWL PLUGS OR WOOD PLUGS SHALL NOT BE PERMITTED. WHERE REQUIRED BY STRUCTURE, FURNISH THROUGH BOLTS AND FISHPLATES.

D. EXPOSED RACEWAYS SHALL BE RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS. PROVIDE CLEARANCE WITH WATER, STEAM OR OTHER PIPING (MINIMUM 3 IN. SEPARATION FROM STEAM AND HOT WATER PIPES, EXCEPT 1 IN. FROM PIPE COVER AT CROSSINGS AND 18 IN. FOR PARALLEL RUNS). FOR HUNG CEILING OUTLETS, RUN IN HUNG CEILING AND CONNECT TO CEILING SUPPORT CHANNELS. IN MASONRY AND POURED CONCRETE, RUN VERTICALLY ONLY.

E. MAINTAIN GROUNDING CONTINUITY OF INTERRUPTED METALLIC RACEWAYS WITH GROUND CONDUCTOR, AND IN FLEXIBLE CONDUIT FOR FEEDERS AND MOTOR TERMINAL CONNECTIONS.

F. EMPTY RACEWAYS OVER 10 FT LONG: PROVIDE FISH OR PULL WIRE, GALVANIZED OR NYLON ROPE.

G. PROVIDE RACEWAYS COMPLETE WITH BOXES, FITTINGS, AND ACCESSORIES.CONDUIT OR TUBING SIZES REFERRED TO IN SPECIFICATIONS AND ON DRAWINGS ARE NOMINAL DIAMETERS. MINIMUM DIAMETER SHALL BE 3/4 IN.

H. THE INSTALLATION OF ALL RACEWAYS SHALL BE IN COMPLIANCE WITH THE NEC.

I. ALL WIRES TO BE RUN IN CONDUIT ONLY. NO HEALTHCARE FACILITY CABLE (HCF) OR METALLIC CABLE (MC) ALLOWED. FIXTURE WHIPS ALLOWED AS REQUIRED.

J. RIGID METAL CONDUIT SHALL BE USED:

1) WHERE EXPOSED ON THE EXTERIOR OF THE BUILDING OR ELSEWHERE ON SITE.
2) WHERE EXPOSED TO A POTENTIAL FOR PHYSICAL DAMAGE INSIDE THE BUILDING.
3) WHERE VOLTAGE IS TO EXCEED 600 VOLTS.
4) WHERE REQUIRED BY THE NEC.

J. ELECTRICAL METALLIC TUBING SHALL BE USED (WHERE RMC IS NOT REQUIRED):

1) FOR ALL BRANCH CIRCUIT AND MOTOR FEEDERS INCLUDING ASSOCIATED CONTROL CIRCUITS.
2) FOR ALL BRANCH CIRCUIT HOME RUNS.
3) FOR ALL CONCEALED WORK RELATED TO NEW WALL ROUGH IN.
4) FOR ALL FEEDERS AND SUB FEEDERS UNLESS NOTED.
5) FOR ALL ROUGH IN WORK FOR TELE-COMMUNICATIONS, DATA, NURSE CALL, AV, TV AND ANY OTHER LOW VOLTAGE WORK.
6) FOR ALL LOW VOLTAGE WIRING WHERE EXPOSED INCLUDING MECHANICAL ROOMS.
7) FOR ALL FIRE ALARM WORK.
8) MINIMUM CONDUIT SIZE 3/4 INCH TRADE SIZE.

K. RIGID NONMETALLIC POLYVINYL CHLORIDE SHALL BE USED:

1) FOR ALL WORK BELOW GRADE OR UNDER SLAB ON GRADE CONSTRUCTION UNLESS OTHERWISE NOTED.
2) RMC 90 DEGREE SWEEPS SHALL BE USED AT THE FINAL ELBOW OR RISER TO GRADE.

L. LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT SHALL BE USED:

1) FOR FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND MOTORS IN LENGTHS NOT TO EXCEED 36 INCHES.

M. FLEXIBLE METALLIC CONDUIT SHALL BE USED:

1) IN LIEU OF LFMC IN DRY NON- OILY CONDITIONS FOR FLEXIBLE CONNECTIONS EXCLUDING MOTORS AND GENERATORS.
2) WHERE FISHED INTO AND CONCEALED IN EXISTING WALLS.
3) FOR LIGHTING WHIPS.
4) FOR CONNECTION BETWEEN FIRE ALARM JUNCTION AND DEVICE BOXES.
5) LENGTHS OF GREATER THAN 6' ARE NOT TO BE USED IN DROP CEILINGS.

N. HEALTHCARE FACILITY CABLE SHALL NOT BE USED EXCEPT:

1) IN LIMITED CASES, WITH PRIOR APPROVAL, FOR OLD WORK AND OTHER SITUATIONS WHERE PIPE AND FLEXIBLE CONDUIT CANNOT BE USED.

O. METALLIC SHEATHED CABLE SHALL NOT BE USED.

P. SURFACE METAL RACEWAY SHALL BE:

1) USED ONLY FOR OLD WORK SITUATIONS WHERE AN EXISTING WALL IS UNABLE TO BE FISHED WITH FMC.
2) GALVANIZED STEEL WITH SNAP ON COVERS IN COLOR SELECTED BY OWNER.
3) WIREMOLD 500/700 SERIES FOR SINGLE DEVICES.
4) WIREMOLD 2000/3000/4000 FOR OTHER APPLICATION WHEN CALLED FOR (POWER POLE, WORKTOP, ETC.).
5) SURFACE NON-METALLIC RACEWAY SHALL BE USED AS A LOW VOLTAGE WIRE MANAGEMENT AUXILIARY GUTTER ONLY IN SELECT LOCATIONS.

4. CONDUIT FITTINGS AND BOXES:

A. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. OUTLET BOXES SHALL BE SET SQUARE AND TRUE WITH BUILDING FINISH. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRON OR GROUT IN WITH MASONRY. VERIFY OUTLET LOCATIONS IN FINISHED SPACES WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISHES. PROVIDE BARRIERS BETWEEN SWITCHES CONNECTED TO DIFFERENT PHASES FOR VOLTAGES EXCEEDING 150 VOLTS TO GROUND.

B. PROVIDE PULL BOXES AND JUNCTION BOXES IN LONG STRAIGHT RUNS OF RACEWAY TO ASSURE THAT CABLES ARE NOT DAMAGED WHEN THEY ARE PULLED, TO FULFILL REQUIREMENTS AS TO THE NUMBER OF BENDS PERMITTED IN RACEWAY BETWEEN CABLE ACCESS POINTS, THE ACCESSIBILITY OF CABLE JOINTS AND SPLICES, AND THE APPLICATION OF CABLE SUPPORTS.

C. PULLBOXES AND JUNCTION BOXES SHALL BE SIZED SO THAT THE MINIMUM BENDING RADIUS CRITERIA SPECIFIED FOR THE WIRES AND CABLE ARE MAINTAINED.

D. USE WEATHERPROOF BOXES, JUNCTION BOXES AND DEVICES FOR ALL REQUIRED WEATHERPROOF INSTALLATION.

E. OUTLET BOXES SHALL BE PROVIDED FOR ALL LOW VOLTAGE DEVICES (I.E. TELEPHONE/DATA, SECURITY, FIRE ALARM, ETC.) COORDINATE BOX SIZE AND DEPTH WITH RESPECTIVE VENDOR.

F. FITTINGS FOR ALL RACEWAYS LISTED ABOVE SHALL BE UL LISTED FOR THE TYPE AND SIZE RACEWAY THEY ARE INSTALLED ON, AND FOR APPLICATION AND ENVIRONMENT IN WHICH THEY ARE INSTALLED.

1) CONDUIT FITTINGS FOR HAZARDOUS LOCATIONS SHALL COMPLY WITH UL 886.
2) FITTINGS FOR EMT SHALL BE STEEL SET SCREW.
3) FITTINGS SHALL BE CONCRETE TIGHT WHERE EMBEDDED IN CONCRETE.
4) NO DIE CAST FITTINGS SHALL BE USED FOR ANY TYPE OF RACEWAY, STEEL ONLY.
5) ALL CLAMPS STRAPS AND HANGERS MUST BE UL LISTED FOR THE INSTALLATION.

G. IN ADDITION TO BEING SIZED CORRECTLY ACCORDING TO THE NEC, BOXES SHALL COMPLY WITH THE FOLLOWING.

1) BOXES SHALL BE STAMPED OR WELDED STEEL, MINIMUM SIZE 4 INCH SQUARE OR OCTAGON BY 2-1/8 INCH DEEP FOR ALL JUNCTION AND DEVICE LOCATIONS.

5. IDENTIFICATION OF RACEWAYS, BOXES, AND CONDUCTORS:

A. THE FOLLOWING SHALL BE USED TO IDENTIFY RACEWAYS AND BOXES ABOVE DROP CEILINGS AND WHERE EXPOSED.

1) COLOR CODE FOR BOX COVERS.

a) RED = FIRE ALARM
b) BLACK = NORMAL POWER
c) GREEN = CRITICAL POWER
d) YELLOW = LIFE SAFETY POWER
e) ORANGE = 277/480 VOLT POWER
f) BLUE = NURSE CALL
g) WHITE = TELECOMMUNICATIONS

B. ALL JUNCTION BOX COVERS SHALL BE MARKED WITH THE SOURCE OF POWER, VOLTAGE AND CIRCUIT NUMBERS.

C. ALL CONDUCTORS INCLUDING NEUTRAL CONDUCTORS IN JUNCTION BOXES AND AT PANELS SHALL BE MARKED WITH CIRCUIT NUMBERS.

6. CONDUCTORS, CABLES, AND SPLICES:

A. PROVIDE WIRE AND CABLE COMPLETE WITH ACCESSORIES. SIZE REFERENCE SHALL BE AWG EXCEPT AS NOTED.

B. FOR BUILDING WIRES AND CABLES RATED 600V OR LESS, TO BE USED AS FEEDERS OR BRANCH CIRCUITS:

1) CONDUCTORS SHALL BE STRANDED COPPER.
2) MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG.
3) INSULATION SHALL BE DETERMINED BY THE NEC BASED ON USAGE.
4) WIRE SIZES SHALL BE ADJUSTED FOR VOLTAGE DROP, AND DERATED AS REQUIRED.
5) WITH LIMITED EXCEPTIONS, CABLE TYPES HCF/MC/AC SHALL NOT BE USED.

C. FOR WIRE SPLICES #10 AWG OR SMALLER:

1) WIRENUTS SHALL BE 3M PERFORMANCE PLUS WIRE CONNECTORS OR EQUIVALENT.
2) 'SKOTCHLOK' OR OTHER IRREVERSIBLE CONNECTORS SHALL NOT BE USED.

D. INSTALLATION

1) NOT MORE THAN THREE LIGHTING OR CONVENIENCE CIRCUITS IN ONE CONDUIT UNLESS OTHERWISE NOTED.
2) PROVIDE A SEPARATE NEUTRAL CONDUCTOR FOR EVERY CIRCUIT.
3) PROVIDE SEPARATE RACEWAYS OR BARRIERS FOR CONDUCTORS OF DIFFERENT VOLTAGES AND SOURCES.
4) PIGTAIL ALL SPLICES AT DEVICES, DO NOT WIRE THROUGH A DEVICE.

E. ADJUST CABLE SIZING AS REQUIRED TO MAINTAIN VOLTAGE DROP. INCREASE RACEWAY SIZES FOR LARGER WIRE AS REQUIRED.

G. COLOR CODING SHALL BE AS FOLLOWS:

1) 120/208 VOLT SYSTEM: BLACK FOR A PHASE, RED FOR B PHASE, BLUE FOR C PHASE.

2) NEUTRAL WIRE SHALL UTILIZE WHITE OUTER COVERING THROUGHOUT.

3) EQUIPMENT GROUND WIRE SHALL UTILIZE GREEN OUTER COVERING THROUGHOUT.

4) WHERE COLOR-CODED CABLE IS NOT AVAILABLE, CERTIFY IN WRITING AND REQUEST PERMISSION TO OVERLAP CONDUCTORS WITH 6 IN. COLOR TAPING IN ACCESSIBLE LOCATIONS.

H. PROVIDE FLAMEPROOF LINEN OR FIBER TAGS IN ACCESSIBLE LOCATIONS FOR FEEDERS INDICATE FEEDER NUMBER, SIZE, PHASE AND POINTS OF ORIGIN AND TERMINATIONS. FOR CONTROL AND ALARM WIRING INDICATE TYPE (CONTROL OR ALARM), SIZE OF WIRE, AND POINTS OF ORIGIN AND TERMINATIONS.

I. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS.

J. ALL POWER, LIGHT, AND FEEDERS TO BE IN ELECTROMETALLIC TUBING (EMT) BACK TO SOURCE.

7. GROUNDING:

A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED TO PROVIDE AN ELECTRICALLY GROUNDING PATH TO THE GROUNDING ELECTRODE IN A CODE APPROVED MANNER.

B. METAL RACEWAYS, METAL ENCLOSURES OF ELECTICAL DEVICES AND EQUIPMENT, LIGHTING FIXTURES AND OTHER EQUIPMENT SHALL BE COMPLETELY GROUNDED.

C. PROPER HARDWARE REQUIRED FOR COMPLETE GROUNDING SYSTEM SHALL BE INSTALLED BY THE CONTRACTOR. USE EXOTHERMIC WELDING PROCESS FOR INACCESSABLE CONNECTIONS.

D. USE AN INTERNAL BONDING CONDUCTOR WHERE FLEXIBLE METALLIC CONDUITS ARE INSTALLED.

E. GROUND MOTORS FROM GROUNDING BUSHING IN THE STARTER TO THE MOTOR FRAME.

F. GROUNDING CONDUCTOR SHALL BE RUN WITH THE CIRCUIT CONDUCTORS AND TERMINATED TO AN APPROVED GROUNDING TERMINAL.

G. PROVIDE SUPPLEMENTARY GROUND BONDING WHERE METALLIC CONDUITS TERMINATE AT METAL CLAD EQUIPMENT (OR AT THE METAL PULL BOX OF EQUIPMENT) FOR WHICH A GROUND BUS IS SPECIFIED WITH A BUSHING OF THE GROUNDING TYPE CONNECTED INDIVIDUALLY TO GROUND BUS.

H. ALL GROUND WIRES SHALL BE SUITABLY PROTECTED FROM MECHANICAL INJURY.

I. CONTRACTOR SHALL PROVIDE ALL REQUIRED GROUNDING AND BONDING FOR ALL NEW I.T. RACKS.

8. LIGHTING FIXTURES:

A. COORDINATE ALL WORK INCLUDING ALL LIGHT FIXTURE SPECIFICATIONS WITH ARCHITECTURAL DRAWINGS.

B. PROVIDE FIXTURES ("LUMINARIES"), COMPONENTS AND LAMPS. FIXTURES SHALL BE COMPLETELY FACTORY ASSEMBLED, WIRED AND EQUIPPED WITH ALL NECESSARY SOCKETS, BALLASTS, SUPPORTING HARDWARE, AND ACCESSORIES.

C. ALL LIGHTING FIXTURE MOUNTING HARDWARE SHALL MATCH AND BE COORDINATED WITH THE NEW CEILING SYSTEM TYPE. ALL FIXTURES SHALL BE EQUIPPED WITH "EARTHQUAKE" CLIPS. ALL LIGHTING FIXTURES SHALL BE INSTALLED WITH SEISMIC BRACING AS INDICATED ON ARCHITECTURAL CEILING DETAILS.

D. ALL FIXTURES SHALL BE FREE OF LIGHTING LEAKS BELOW CEILING.

E. FLUORESCENT BALLAST SHALL BE UL'S CLASS "P" AND SHALL CONFORM TO ANSI AND UL SPECIFICATIONS WITH LABELS OF APPROVAL BY UL AND CERTIFICATION BY C.B.M. BALLASTS SHALL COMPLY WITH THE STATE ENERGY CODE. BALLASTS FOR FLUORESCENT LAMPS SHALL BE OF THE ENERGY SAVING SUPER LOW HEAT DESIGN WITH HIGH POWER FACTOR (0.9 MINIMUM) AND A HIGH BALLAST FACTOR (0.95 MINIMUM). ALL BALLASTS SHALL BE SUPPLIED AS UNIVERSAL VOLTAGE, SUITABLE TO BE CONNECTED TO 120V OR 277V LIGHTING.

F. WHERE DIMMING OF FLUORESCENT FIXTURES IS REQUIRED, THE ELECTRONIC BALLAST INSTALLED MUST BE COMPATIBLE WITH THE DIMMING SPECIFIED.

G. WHERE DIMMING OF LOW VOLTAGE FIXTURES IS REQUIRED, THE STEP DOWN VOLTAGE TRANSFORMER SHALL BE ELECTRONIC (OR MAGNETIC) AS NOTED BY THE LIGHTING DESIGNER/ARCHITECT SCHEDULE. CONTRACTOR WILL BE RESPONSIBLE FOR REVIEWING FIXTURE SPECIFICATION AND ENSURING DIMMER SWITCH INSTALLED IS COORDINATED WITH FIXTURE TYPE.

H. ALL RECESSED FIXTURES SHALL BE SET FLUSH INTO ACOUSTIC TILE CEILINGS.

9. OCCUPANCY SENSORS:

A. CONTRACTOR'S WORK SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, APPLIANCES, CONTROL HARDWARE, SENSORS, WIRE, JUNCTION BOXES, AND EQUIPMENT NECESSARY FOR A COMPLETELY OPERATIONAL SENSOR CONTROL SYSTEM, AS DESCRIBED HEREIN.

B. ALL SENSORS SHALL BE EITHER SELF-CONTAINED OR INSTALLED AS OF OTHER SPECIFIED SYSTEMS OF THE DUAL TECHNOLOGY TYPE PROVIDING VOLUMETRIC COVERAGE WITH THE DETECTION AREA. SENSORS SHALL BE SOLID-STATE DESIGN AND BE DESIGNED FOR ENERGY CONSERVATION.

C. SENSORS LOCATED IN ADJACENT ROOMS OR SPACES, OR SENSORS CONTROLLING DIFFERENT LIGHTING FIXTURES OR ZONES WITHIN THE SAME ROOM, SHALL OPERATE AT DIFFERENT FREQUENCIES IN ORDER TO PREVENT INTERFERENCE (CROSS TALK) BETWEEN SENSORS.

D. SENSORS SHALL HAVE THE FOLLOWING FUNCTIONS:

1) TIMED DELAY FOR TURNING LIGHTS OFF: ADJUSTABLE OVER A RANGE OF 1 TO 30 MINUTES.

2) MANUAL OVERRIDE SWITCH: TURNS LIGHTS OFF MANUALLY REGARDLESS OF TIMED DELAY.

3) ISOLATED RELAY CONTACT: OPERATES ON DETECTION OF OCCUPANCY OR VACANCY, AS INDICATED, TO ACTIVATE AN INDEPENDENT FUNCTION.

4) AMBIENT LIGHT LEVEL SENSOR: ADJUSTABLE FOR SETTING A LEVEL OF AMBIENT ILLUMINATION ABOVE WHICH THE SENSOR WILL NOT TURN THE LIGHTS ON.

E. INFRARED SENSORS: DETECTS OCCUPANCY BY A COMBINATION OF HEAT AND MOVEMENT IN ZONE COVERAGE.

F. ULTRASONIC SENSORS: EMITS A BEAM OF ULTRASONIC ENERGY AND DETECTS OCCUPANCY BY A SENSING A CHANGE IN PATTERN OF REFLECTED ULTRASONIC ENERGY.

G. DUAL TECHNOLOGY SENSORS: USES A COMBINATION OF INFRARED AND ULTRASONIC DETECTION METHODS TO DISTINGUISH BETWEEN OCCUPIED AND UNOCCUPIED CONDITIONS FOR THE AREA COVERED.

H. ALL OCCUPANCY SENSORS SHALL BE SET AT FULL SENSITIVITY AND MAXIMUM FOOT CANDLES. COVERAGE SHALL REMAIN CONSTANT AFTER SENSITIVITY CONTROL HAS BEEN SET. SENSOR TIME DELAY SHALL BE SET.

I. FOR ADDITIONAL INFORMATION, INCLUDING MOUNTING REQUIREMENTS AND WIRING DIAGRAMS, REFER TO MANUFACTURER'S TECHNICAL LITERATURE AND DETAILS ON DRAWINGS.

J. SENSORS TO BE PROVIDED WITH MASKING TAPE FOR INFRARED COMPONENTS TO PREVENT FALSE TRIPPING OUTSIDE THE COVERAGE AREA.

K. BEFORE TENANT MOVE-IN DATE AND TURN OVER OF THE PROJECT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH SENSOR TECHNICAL REPRESENTATIVE TO FIELD ADJUST SENSOR SENSITIVITY AND LOCATION TO ENCOMPASS ENTIRE ROOM OR AREA WITHOUT NUISANCE TRIPPING FROM ADJACENT AREAS.

L. OCCUPANCY SENSORS SHALL DERIVE POWER FROM LIGHTING CIRCUIT SERVING LIGHT FIXTURES IT CONTROLS.

10. SELF-POWERED EXIT SIGNS:

A. FURNISH AND INSTALL SELF-POWERED EXIT SIGNS COMPLETE WITH INTEGRAL BATTERY/CHARGER CAPABLE OF OPERATING THE SIGN FOR 90 MINUTES IN THE EVENT OF A POWER FAILURE.

B. UNIT TO HAVE SEALED NICKEL CADMIUM BATTERY, LED ILLUMINATORS, TEST BUTTON, AND INDICATING LIGHT.

C. BATTERY/CHARGER PACK SHALL BE MOUNTED ABOVE THE SIGN. CEILING MOUNTED SIGNS SHALL BE ARRANGED SO THAT THE PACK IS RECESSED ABOVE THE CEILING. WALL MOUNTED SIGNS SHALL HAVE CONCEALED BATTERY PACKS.

D. EXIT SIGNS SHALL MATCH BUILDING STANDARD OR BE MANUFACTURED BY DUAL-LITE, ATLITE, LIGHT ALARMS, OR APPROVED EQUAL.

11. PANELBOARDS:

A. DISTRIBUTION PANELS: SWITCHING UNITS SHALL BE 3 PHASE, 4 WIRE CIRCUIT-BREAKER TYPE UNLESS OTHERWISE NOTED ON PANEL SCHEDULES. BUS BARS SHALL BE HARD DRAWN COPPER, MINIMUM 98% CONDUCTIVITY, SILVER OR TIN-PLATED JOINTS. CABINETS SHALL BE GALVANIZED SHEET STEEL BACK BOX, WITH DOOR AND TRIM AND LAPPED AND WELDED CORNERS. HARDWARE SHALL BE CHROME-PLATED WITH FLUSH LOCK/LATCH HANDLE ASSEMBLY (UP TO 48 IN. HIGH DOORS) OR VAULT HANDLE, LOCK AND 3-POINT CATCH (LARGER THAN 48 IN. HIGH DOORS). HINGES SHALL BE SEMI-CONCEALED, 5-KNUCKLE STEEL WITH NONFERROUS PINS, 180-DEG OPENING, LOCATED A MAXIMUM 26 IN. ON CENTERS. MINIMUM GUTTER SPACES FOR LIGHTING PANELS SHALL BE 5-3/4 IN. SIDES, TOP AND BOTTOM. DIRECTORY HOLDER SHALL BE METAL FRAME WITH CLEAR PLASTIC, TRANSPARENT COVER. A TYPEWRITTEN LIST INDICATING FEEDER CABLE AND CONDUIT SIZE, CIRCUIT NUMBERS, OUTLETS SUPPLIED AND THEIR LOCATIONS SHALL BE PROVIDED.

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MERGED WITH COLLIERS ENGINEERING & DESIGN

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PROJECT:
NUVANCE HEALTH
NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM
34 MAPLE STREET, NORWALK, CT 06856

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: VH
CHECKED BY: TL
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
ELECTRICAL SPECIFICATIONS (1 OF 2)

DRAWING NO.
E300

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

ELECTRICAL SPECIFICATIONS (CONT'D)

B. PROVIDE CODE GAUGE STEEL DOORS FOR ALL PANELBOARD BOXES. FRONT COVER SHALL BE A "DOOR WITHIN A DOOR" TYPE. THE OUTER DOOR (TRIM) SHALL ALLOW ACCESS TO ENTIRE PANELBOARD BOX INCLUDING GUTTER SPACES. OUTER DOOR (TRIM) SHALL BE ATTACHED DIRECTLY TO BOX BY A FULL LENGTH PIANO HINGE. THE INNER DOOR SHALL ALLOW ACCESS TO CIRCUIT BREAKERS ONLY. PROVIDE LOCK AND SET OF KEYS FOR INNER DOOR PER PANELBOARD.

C. PROVIDE A COPPER EQUIPMENT GROUND BAR IN EACH PANEL, AND A COPPER ISOLATED GROUND BAR IN NOTED PANELS.

D. PANELS SHALL BE PROVIDED WITH NEUTRAL BARS SIZED AT 200% OF THE PHASE BUS BARS.

E. PHASE LEGS OF ALL PANELS SHALL BE BALANCED AT SUPPLY POINT TO WITHIN 10% AFTER ALL CIRCUITS ARE WIRED AND LOADS CONNECTED. ANY PANEL FOUND WITH UNBALANCED LOADS SHALL HAVE ITS CIRCUITS REARRANGED AS REQUIRED TO BALANCE PHASE LEGS.

F. PROVIDE MULTI-CABLE LUGS WHERE REQUIRED. DOUBLE LUGGING SHALL NOT BE PERMITTED.

G. MOUNTING HEIGHT SHALL BE A MAXIMUM OF 6 FT.-6 IN. FROM FLOOR TO TOP OF SWITCH UNIT.

H. UPDATE DIRECTORIES ON EXISTING PANELBOARDS WHERE CIRCUITING HAS CHANGED.

I. PANELS SHALL HAVE ENGRAVED WHITE CORE, BLACK LAMICOID NAMEPLATE AFFIXED WITH EPOXY CEMENT.

12. CIRCUIT BREAKERS:

A. CIRCUIT BREAKERS: MOLDED CASE BREAKERS SHALL BE THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, BOLT-ON TYPE, MANUALLY OPERATED WITH INSULATED TRIP-FREE HANDLE. MULTI-POLE TYPE BREAKERS SHALL CONTAIN INTERNAL TRIP BAR. TERMINALS SHALL BE SUITABLE FOR COPPER OR ALUMINUM CABLE. FURNISH AUXILIARY DEVICES WHERE REQUIRED FOR SHUNT-TRIPPING, OPEN AND CLOSE MOTOR OPERATOR AND ALARM INDICATION. ENCLOSURES SHALL BE DEAD FRONT, NEMA TYPE 1, EXCEPT AS NOTED. FRAMES, IC AND INTERCHANGEABLE TRIPS SHALL BE AS FOLLOWS:

1) MINIMUM SHORT CIRCUIT RATING OF 10,000 AMPERES SYMMETRICAL FOR 120/208V PANELS OR HIGHER WHERE NOTED.

2) MINIMUM SHORT CIRCUIT RATING OF 14,000 AMPERES SYMMETRICAL FOR 277/480V PANELS OR HIGHER WHERE NOTED.

B. FOR PANELBOARD APPLICATIONS, CIRCUIT BREAKERS SHALL BE BOLTED TO THE PANELBOARD BUS BARS. WHERE CIRCUIT BREAKERS ARE INSTALLED IN EXISTING PANELBOARDS, BREAKERS SHALL BE OF THE SAME MANUFACTURER AND INTERRUPTING RATING. BREAKERS SHALL BE COMPATIBLE WITH EXISTING PANELBOARD.

C. MULTIWIRE BRANCH CIRCUITS SUPPLYING POWER TO MORE THAN ONE DEVICE OR EQUIPMENT SHALL BE PROVIDED WITH A MEANS TO DISCONNECT SIMULTANEOUSLY ALL UNGROUNDED CONDUCTORS AT THE PANELBOARD WHERE THE BRANCH CIRCUIT ORIGINATES. COORDINATE WITH LOCAL AUTHORITY HAVING JURISDICTION THE MEANS REQUIRED TO MEET NEC SECTION 210.4(B).

D. TESTS: OPEN AND CLOSE LOAD BREAK SWITCHING DEVICES UNDER LOAD.

13. DISCONNECT SWITCHES:

A. DISCONNECT SWITCHES SHALL BE FUSED OR NONFUSED AS NOTED. VOLTAGE SHALL BE AS REQUIRED. SWITCHES SHALL BE HEAVY DUTY, EXCEPT AS NOTED, AND HORSEPOWER RATED FOR MOTOR LOADS. TOGGLE TYPE SWITCHES SHALL BE NONFUSED, LOAD BREAK, HAVING MAXIMUM RATINGS OF 20 AMP AT 600 VOLTS AND 30 AMP AT 240 VOLTS. KNIFE-BLADE TYPE SWITCHES SHALL BE LOAD BREAK, QUICK-MAKE QUICK-BREAK, UL CLASS R UP TO 600 AMP. MAXIMUM RATING EXCEPT AS NOTED SHALL BE 800 AMP. ARC QUENCHERS SHALL BE PROVIDED. SWITCHES SHALL BE SIMILAR TO GENERAL ELECTRIC QMR. ALL SWITCH ENCLOSURES SHALL BE DEAD FRONT, NEMA TYPE 1, EXCEPT AS NOTED.

B. OUTDOOR DISCONNECT SWITCHES SHALL BE SIMILAR TO INDOOR, EXCEPT LISTED FOR OUTDOOR APPLICATIONS (NEMA 3R OR 4, AS REQUIRED).

14. TELEPHONE AND DATA SYSTEM:

A. DEFINITIONS

1) INTERNAL STRUCTURED CABLING – IS DEFINED AS INTRA-BUILDING DISTRIBUTION OF CABLE MEDIA, SUCH AS BOTH FIBER AND COPPER STATION CABLE, STATION JACK HARDWARE, BUILDING DISTRIBUTION FRAMES (BDF), INTRA BUILDING DISTRIBUTION FRAME (IDF) TERMINALS, SLEEVES, CONDUIT, RACEWAYS, DISTRIBUTION FRAME HARDWARE, ETC. ALL OTHER PHYSICAL PLANT SUCH AS GROUNDING, POWER, CONDUIT, AND RACEWAY NOT CONSIDERED OUTSIDE PLANT (OSP) ARE PART OF THE ISP.

2) BDF – BUILDING DISTRIBUTION FRAME – PRIMARY TELECOMMUNICATIONS CLOSET FOR A BUILDING OR FUNCTIONALLY-GROUPED AREA OF A BUILDING.

3) IDF – INTRA-BUILDING DISTRIBUTION FRAME – SUB-CLOSET FOR INSTALLATION OF ELECTRONIC EQUIPMENT AND CABLE TERMINATION WHEN, AND ONLY WHEN, THE DISTANCE BETWEEN ANY TELECOMMUNICATIONS OUTLET AND THE BDF EXCEEDS 290 CABLE FT.

4) VOICE CABLE – CABLING WHICH CARRIES TELECOMMUNICATIONS SYSTEM SIGNALS, EITHER INTEGRATED VOICE/DATA OR VOICE ONLY SIGNALS.

5) DATA CABLE – CABLING WHICH CARRIES ONLY DATA COMMUNICATIONS SIGNALS.

6) VIDEO CABLE – CABLING WHICH CARRIES ONLY VIDEO OR TV COMMUNICATIONS SIGNALS.

7) FIBER "CABLE" – FIBER OPTIC CABLING CARRYING HIGH SPEED DATA SIGNALS.

8) NH – NORWALK HOSPITAL

B. CODES AND STANDARDS

1) ALL WORK SHALL MEET ALL APPLICABLE CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO:

a) LOCAL FIRE PROTECTIVE CODES
b) BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL (BICSI) STANDARDS
c) NATIONAL ELECTRICAL MANUFACTURERS ASSOC. (NEMA) STANDARDS
d) ELECTRONICS INDUSTRY ASSOC. /TELECOM. INDUSTRY ASSOC. (EIA/TIA)
e) NORWALK HOSPITAL REQUIREMENTS.

C. COMMUNICATIONS CABLING

1) THE FOLLOWING ARE APPROVED CABLE MANUFACTURERS:

a) BER-TEK
b) MOHAWK
c) COMMSCOPE
d) SUPERIOR-ESSEX

2) FOR ALL HOSPITAL APPLICATIONS STANDARD IS CAT6A SHIELDED, UNLESS OTHERWISE SPECIFIED.

3) THE PATCH PANELS AND JACKS ARE TO BE EITHER SIEMONS OR ORTRONICS. SIEMONS Z-MAX OR ORTRONICS TRACJACK. THIS IS PRIMARILY DRIVEN BY AVAILABILITY. VENDOR IS TO CARRY THE 25 YEAR WARRANTY END TO END.

4) PROVIDE CABLE TEST REPORT ELECTRONICALLY AT THE COMPLETION OF THE JOB.

5) CABLE SPECIFICATIONS

a) COORDINATION WITH ITG IS REQUIRED PRIOR TO ALL PROJECTS TO DETERMINE WHAT TYPE CABLING IS NECESSARY IN DIFFERENT PARTS OF THE BUILDINGS AND WHERE IT IS TO BE TERMINATED. THIS INCLUDES BUT IS NOT LIMITED TO.

-CAT 6A VS CAT 6
-LEGACY COAX FOR TV VS CAT 6A
-LEGACY PHONE BOARDS VS VOIP

b) UNLESS OTHERWISE NOTED OR APPROVED THE FOLLOWING CABLE IS TO BE USED.

-CAT 6A ESSEX SUPERIOR 6F-272-2B
-CAT 6A ESSEX SUPERIOR 6A-272-2B
-CAT 6 BELDEN 2413 PLENUM RATED GREEN

c) UNLESS OTHERWISE NOTED OR APPROVED THE FOLLOWING PARTS FROM THE SIEMON COMPANY ARE TO BE USED TO TERMINATE THE ABOVE LISTED CABLES.

CAT 6A
-JACKS Z-MAX Z6A-20 (UNSHIELDED) Z6A-S20 (SHIELDED)
-PLATES MX-FP-S-02-20 (1 GANG, 2 DEVICES. ADJUST AS NECESSARY)
-WALL PHONES MX-WP-Z6A-SS (UNSHIELDED) MX-WP-Z6AS-SS (SHIELDED)

CAT 6 (FOR EXISTING WIRES TO BE RE-USED)
-CT-C6-20
-CT-C6-C6-20

PHONE (LEGACY PHONE LINES TO BE RE-USED IF ALLOWABLE)
-CT-F-C5-20
-CT-F-C5-C5-20

2) CABLE COMPONENT SPECIFICATIONS

a) 4 PAIR F/UTP CABLE

FOUR (4) TWISTED PAIRS OF SOLID, 23 AWG, COPPER CONDUCTORS. EACH CONDUCTOR INDIVIDUALLY INSULATED.

MINIMUM MECHANICAL AND ELECTRICAL CHARACTERISTICS: EQUAL TO OR BETTER THAN INDIVIDUAL CHARACTERISTICS ESTABLISHED IN EIA/TIA TSB-36 FOR CATEGORY 6 CABLE.

MANUFACTURER: SUPERIOR ESSEX
PART NO.: 6F-272-XB

b) CATEGORY 6A SHIELDED STRANDED (S/FTP) MODULAR CORD

MINIMUM MECHANICAL AND ELECTRICAL CHARACTERISTICS; EQUAL TO OR BETTER THAN INDIVIDUAL CHARACTERISTICS ESTABLISHED IN EIA/TIA TSB-36 AND EIA/TIA 568A FOR CATEGORY 6A CABLES.

MANUFACTURER: SIEMON
PART NO.: ZM6A-S(XX)-XX

c) 8-PIN MODULAR JACKS

CATEGORY 6A SHIELDED MODULE HYBRID (FLAT/ANGLED) MOUNTED FEMALE JACKS CAPABLE OF TERMINATING BOTH SOLID AND STRANDED CONDUCTORS. JACKS MOUNT INTO A MOLDED PLASTIC FACEPLATE.

MINIMUM MECHANICAL AND ELECTRICAL CHARACTERISTICS: EQUAL TO OR BETTER THAN INDIVIDUAL CHARACTERISTICS ESTABLISHED IN EIA/TIA 568A AND TSB-40A CATEGORY 6, ISO 8877 AND BELL PUB 47102 FOR TERMINATION AND MODULAR CONNECTING HARDWARE.

MANUFACTURER: SIEMON
PART NO.: Z6A-S(XX)

d) FACEPLATES: ALL FACEPLATES SHALL BE IVORY. COORDINATE COLOR WITH ARCHITECT PRIOR TO PURCHASE.

ONE POSITION FACEPLATE:

MANUFACTURER: SIEMON
PART NO.: MX-FP-S-01-(XX)

TWO POSITION FACEPLATE:

MANUFACTURER: SIEMON
PART NO.: MX-FP-S-02-(XX)

THREE POSITION FACEPLATE:

MANUFACTURER: SIEMON
PART NO.: MX-FP-S-03-(XX)

FOUR POSITION FACEPLATE:

MANUFACTURER: SIEMON
PART NO.: MX-FP-S-04-(XX)

SIX POSITION FACEPLATE:

MANUFACTURER: SIEMON
PART NO.: MX-FP-S-06-(XX)

TV OUTLET: ACCOMMODATE ONE FLUSH MOUNTED CONNECTOR FOR SINGLE COAXIAL OUTLET. ATTACHES TO STANDARD SINGLE GANG FLUSH-MOUNTED PLASTIC RING, OR NEMA BOX, UON.

MANUFACTURER: SIEMON
PART NO.: 10GMX-FPSO2-(XX)
OR APPROVED EQUAL

e) PATCH PANELS / CABLE MANAGEMENT HARDWARE

48 PORT MODULAR PATCH PANEL FOR 6A SHIELDED RACK MOUNTED PATCHING. WITH MOUNTED CLIPS, LABELS, AND HARDWARE.

MANUFACTURER: SIEMON
PART NO.: Z6AS-PNL(X)-U48K

f) FIBER OPTICS CABLE

INTERLOCKED ARMOR FIBER OPTIC CABLES – 6 FIBER COUNT

MANUFACTURER: SUPERIOR ESSEX
PART NO.: L40063401

INTERLOCKED ARMOR FIBER OPTIC CABLES – 12 FIBER COUNT

MANUFACTURER: SUPERIOR ESSEX
PART NO.: L4012B401

3) CABLE INSTALLATION

a) ALL DATA AND VOICE CABLE RUNS SHALL CONSIST OF CONTINUOUS, UNBROKEN, UN-SPLICED CABLES OF MAXIMUM 290 FT. LENGTH BETWEEN BDF/IDF AND OUTLET TERMINATIONS. DAISY-CHAINING IS NOT PERMITTED.

b) TELECOM ROOMS SHALL BE A MINIMUM OF 100 SQUARE FEET IN SIZE, WITH A MINIMUM OF ONE TELECOM ROOM ON EACH FLOOR. WHERE ANY STRUCTURED CABLING STATION CABLE RUN'S TOTAL LENGTH, INCLUDING COMING DOWN WALLS AND SERVICE LOOPS, EXCEEDS 90 METERS ON A PARTICULAR FLOOR, AN ADDITIONAL TELECOM ROOM SHALL BE ESTABLISHED IN THAT AREA OF THE BUILDING, IN ORDER TO REDUCE THE LENGTHS OF THOSE LONG CABLE RUNS.

c) CABLE SHALL NOT BE BENT IN RADII LESS THAN 1 INCH OR THAT SPECIFIED IN INSTALLATION STANDARDS FOR THE CATEGORY RATING.

d) CABLE JACKETS SHALL BE PROTECTED DURING INSTALLATION, AND INSTALLED IN SUCH A MANNER, TO AVOID NICKS, ABRASIONS, BURNING, KINKS AND SCUFFING.

e) RECOMMENDED CLEARANCE FROM ELECTRICAL CABLES AND SOURCES OF ELECTROMAGNETIC INTERFERENCE.

f) CABLE SHALL NOT BE RUN WITHIN CLOSE PROXIMITY TO ELECTRICAL WIRING, TRANSFORMERS, ELECTRIC MOTORS, AND FLUORESCENT LIGHTING. THE FOLLOWING SEPARATIONS ARE REQUIRED FOR VOICE/DATA CABLE RUNS: UNSHIELDED POWER LINES OR ELECTRICAL EQUIPMENT IN PROXIMITY TO OPEN OR NON-METAL PATHWAYS: <2KVA 5 INCHES; 2-5KVA 12 INCHES; >5KVA -24 INCHES OR TO MEET STATE OF CONNECTICUT CODE. POWER LINES ENCLOSED IN A GROUNDED METAL CONDUIT (OR EQUIVALENT SHIELDING) IN PROXIMITY TO GROUNDED METAL: <2KVA 2.5 INCHES; 2-5KVA 6 INCHES; >5KVA 12 INCHES. NEVER TIE TELECOMMUNICATIONS CABLES TO ELECTRICAL CONDUIT. TRANSFORMERS AND ELECTRIC MOTORS: 40 INCHES. FLUORESCENT LIGHTING: 12 INCHES.

g) WHEN ALLOWED BY CABLE STANDARD, CABLE WILL HAVE A SERVICE LOOP LEFT IN THE BDF/IDF AND AT THE OUTLET END TO ALLOW FOR MOVING OR RE-TERMINATION. SERVICE LOOPS MUST CONFORM TO SPECIFICATIONS TO INCLUDE TOTAL LENGTH AND BEND RADII. SERVICE LOOP WILL BE 10 FEET AT THE STATION (DEVICE) END AND IF POSSIBLE 10 FEET AT THE DISTRIBUTION CLOSET END.

h) IF BUILDING IS RENOVATED OR REWIRED, ABANDONED CABLE SHALL BE REMOVED FROM THE BUILDING IN ACCORDANCE WITH NATIONAL ELECTRIC CODE, ONCE IT IS NO LONGER IN SERVICE. UNUSED, UN-TERMINATED CABLE IS ONLY ALLOWED IF THERE IS A PLANNED PURPOSE FOR THE CABLE.

4) CABLE PATH

a) WHEREVER POSSIBLE CABLE SHALL BE GROUPED TOGETHER IN PATHWAYS.

b) CABLE PATHWAYS SHALL BE RUN DOWN MAIN CORRIDORS WHENEVER POSSIBLE. THIS WILL ALLOW FOR FUTURE PULLING OF ADDITIONAL CABLE.

c) ALL NEW CABLE PATHWAYS USING LADDERS, TRAYS, J-HOOKS, OR CONDUITS SHALL BE DESIGNED AND INSTALLED FOR 25% FREE CAPACITY.

d) WHENEVER CONDUITS ARE USED, A 200LB-TEST (MINIMUM) PULL CORD WILL BE INSTALLED IN THE CONDUIT ALONG WITH THE CABLE.

e) THE MINIMUM SIZE CONDUIT IS 1" DIAMETER.

f) RIGID GALVANIZED STEAL CONDUIT MUST BE USED IN CONCRETE EMBEDDED INSTALLATIONS (DOES NOT APPLY TO SIMPLE PENETRATION OF A CONCRETE BARRIER)

g) CONDUITS AND CABLES PENETRATING FIRE WALLS WILL BE FIRE-STOPPED IN ACCORDANCE WITH APPLICABLE CODES.

h) INTUMESCENT NON-HARDENING FIRESTOP PUTTY OR FIRESTOP PLUG SHALL BE USED WITH A MINERAL WOOL BACKING TO FILL THE INTERIOR AREA OF THE SLEEVE PENETRATING THE WALL OR FLOOR.

i) INTUMESCENT FIRESTOP CAULK SEALANT SHALL BE USED TO FILL ANY VOID AROUND THE OUTSIDE PERIMETER OF THE SLEEVE PENETRATING WALLS OR FLOORS

j) ENDS OF ALL CONDUITS WILL BE FITTED WITH PLASTIC BUSHINGS TO PROTECT EMERGING CABLES FROM ABRASION DURING INSTALLATION AND USE.

5) CABLE SUPPORT

a) PATHWAYS WILL BE CONSTRUCTED FROM APPROPRIATE CABLE SUPPORTS SUCH AS J-HOOKS, CABLE LADDERS, TRAYS/RACEWAYS, CONDUITS, ETC. SUCH SUPPORTS WILL BE ATTACHED INDEPENDENTLY TO THE BUILDING STRUCTURE AND SHALL NOT BE ATTACHED TO THE SUSPENDED CEILING GRID SUPPORTS. THE ADDED WEIGHT TO THE CEILING GRID SYSTEM CAN CAUSE DISTORTION IN THE GRID SYSTEM.

b) CABLE LADDERS OR TRAYS/RACEWAYS SHALL BE USED FOR MAIN RUNS WHENEVER PRACTICAL.

c) THE MINIMUM CABLE SUPPORT SHALL BE J-HOOKS. THESE ARE QUITE ACCEPTABLE FOR MOST INDIVIDUAL CABLES ENTERING ROOMS.

d) CABLE SUPPORT SHALL BE AT A MAXIMUM OF 5 FT. INTERVALS.

e) CABLE TIES SHALL NOT BE CINCHED SO TIGHTLY THAT IT DEFORMS THE CABLE JACKET.

f) CABLE TIES SHALL BE TRIMMED OF ANY EXCESS LENGTH. VELCRO CABLE TIES MAY BE USED IN NON-WEIGHT-BEARING LOCATIONS.

6) CABLE TERMINATION SPECIFICATIONS

a) ALL TERMINATIONS FOR VOICE AND DATA CABLING WILL BE IN ACCORDANCE WITH THE CURRENT TIA/EIA STANDARDS.

b) ALL VOICE AND DATA OUTLETS WILL USE RJ-45 INSERTS WITH APPROPRIATE FACEPLATES.

c) ALL VOICE AND DATA OUTLETS WILL BE TERMINATED UTILIZING THE 568A WIRING CONFIGURATION.

d) ALL VOICE DATA RACKS WILL UTILIZE 1U WIRE MANAGEMENT.

e) TERMINATION OF VOICE/DATA CABLES IN THE BDF/IDF SHALL BE IN CAT 6 E APPROVED PATCH BAYS/PANELS. THESE PATCH BAYS SHALL BE RACK MOUNTED.

f) FIBER CABLE SHALL BE TERMINATED AND TESTED, TO MEET MANUFACTURER'S SPECIFICATIONS FOR BANDWIDTH.

7) WIRELESS ACCESS POINT CABLE INSTALLATION

a) A SUFFICIENTLY SIZED SERVICE LOOP SHALL BE PLACED IN THE CEILING TO ALLOW FOR PROPER PLACEMENT AND MOVEMENT OF WAP.

b) CABLE WILL BE TERMINATED IN AN UN-MOUNTED SURFACE MOUNT CAT 6 RECEPTACLE.

8) CABLE LABELING

a) ALL LABELING WILL BE WITH MACHINE LABELERS AS TO BE NEAT AND LEGIBLE

b) ALL CABLE OUTLETS AND CLOSET TERMINATIONS WILL BE APPROPRIATELY LABELED TO MATCH THE CABLE USING THE LABELING SCHEME SPECIFIED BY NH TELECOMMUNICATIONS DEPARTMENT.

c) ALL PATCH PANELS, FACEPLATES, OR OTHER TERMINATIONS WILL BE ELECTRONICALLY LABELED WITH THE FULL AND COMPLETE LOCATION IDENTIFIER.

d) ALL CABLES THEMSELVES WILL BE LABELED WITHIN 12 INCHES OF EACH END OF TERMINATION POINTS.

e) FACEPLATE LAYOUT : BLUE (VOICE) MODULE TOP LEFT , BLANK MODULE TOP RIGHT, GREEN MODULES (DATA) BOTTOM LEFT AND BOTTOM RIGHT.

9) COMMUNICATION IDENTIFICATION

a) USING THE SIEMON COMPANY ICONS, PHONES SHALL BE RED, NETWORK BLUE, AND "OTHER" IVORY.

b) PHONES SHALL TONED OUT AND LABELED ACCORDING TO WHERE THAT ARE CUT DOWN IN THE CLOSET, INCLUDING PAIR COLOR IF APPLICABLE.

c) DATA SHALL BE TESTED AFTER TERMINATION AND LABELED USING; THE CLOSET, PATCH PANEL AND PORT NUMBER.

-EXAMPLE TO2A-PP9-23

15. FIRE ALARM SYSTEM:

A. CONTRACTOR SHALL PROVIDE A COMPLETE OPERATIONAL FIRE ALARM SYSTEM FOR THE WORK AREA(S), INCLUDING INTERTIES TO THE EXISTING BUILDING FIRE ALARM SYSTEM, FOR ALL NEW FIRE ALARM WORK, INCLUDING:

1) FIRE ALARM SPEAKER/STROBE OR HORN/STROBE DEVICES
2) FIRE ALARM STROBE DEVICES
3) FIRE ALARM PULL STATIONS
4) SMOKE DETECTORS
5) HEAT DETECTORS

B. FIRE ALARM WIRING COLOR CODE.

1) WIRE SIZES LISTED BELOW ARE A MINIMUM. MANUFACTURE'S REQUIREMENTS, LENGTHS AND LOADS MAY REQUIRE LARGER SIZED WIRE.

a) MAPNET INITIATING LOOP = 18/2 SOLID TWISTED SHIELDED RED
b) SPEAKER LOOP = 18/2 SOLID TWISTED SHIELDED RED WITH WHITE TRACER
c) STROBE LOOP = (2) #14 AWG RED AND BLACK
d) 24 VOLT DUCT DETECTOR POWER = (2) #14 AWG YELLOW AND BROWN
e) 24 VOLT DOOR HOLDER POWER = (2) #12 AWG RED AND BLACK
f) FIRE PHONE = 18/2 SOLID TWISTED SHIELDED RED WITH YELLOW TRACER
g) ALL FIRE ALARM WIRING SHALL BE INSTALLED WITHIN A RACEWAY. NO OPEN WIRE INSTALLATIONS

C. CONTRACTOR SHALL ALSO INCLUDE ALL COMPONENTS TO UPGRADE THE EXISTING BASE BUILDING SYSTEM EXPANSION INCLUDING, BUT NOT LIMITED TO, RELAY CARDS, STROBE CONTROL PANELS, AMPLIFIERS, ETC.

D. CONTRACTOR TO OBTAIN THE SERVICES OF THE BASE BUILDING FIRE ALARM VENDOR TO DEVELOP AND DESIGN A CODE COMPLIANT, FULLY FUNCTIONAL FIRE ALARM SYSTEM. ALL WORK TO BE DONE IN COORDINATION WITH BASE BUILDING FIRE ALARM VENDOR AND BUILDING MANAGEMENT.

E. ALL EQUIPMENT SHALL MEET REQUIREMENTS OF NFPA 72, ALL APPLICABLE CODES, AND LOCAL LAWS, AND BE INSTALLED AND CONNECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. ALL FINAL CONNECTIONS TO BE MADE BY THIS CONTRACTOR WITH THE APPROVAL AND SUPERVISION OF THE BUILDING OWNER AND FIRE ALARM SYSTEM VENDOR.

F. ALL COST ASSOCIATED WITH CONNECTIONS AND REPROGRAMMING OF THE EXISTING FIRE ALARM SYSTEM TO BE PAID BY THIS CONTRACTOR.

G. BUILDING FIRE ALARM SYSTEM INTEGRITY SHALL BE MAINTAINED AT ALL TIMES (BEFORE, DURING, AND AFTER DEMOLITION AND/OR CONSTRUCTION. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO MAINTAIN OPERATION OF ALL EXISTING FIRE ALARM DEVICES AT ALL TIMES.

H. ALL FIRE ALARM DEVICES ARE TO BE FULLY COMPATIBLE WITH THE EXISTING BUILDING ADDRESSABLE FIRE ALARM SYSTEM.

I. ALL AUDIO VISUAL WALL MOUNTED FIRE ALARM DEVICES SHALL BE WHITE WITH WHITE FACE PLATE AND RED LETTERING UNLESS OTHERWISE DIRECTED BY ARCHITECT.

K. FIRE ALARM AND DETECTION SYSTEMS MUST BE MAINTAINED AND OPERATIONAL TO THE MAXIMUM EXTENT POSSIBLE. THE FIRE ALARM SYSTEM WITHIN CONSTRUCTION AREAS MAY BE MODIFIED TO PROVIDE CONSTRUCTION LEVEL FIRE ALARM COVERAGE THROUGHOUT THE PROJECT AREA. SUCH MODIFICATIONS SHOULD BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS AND MAY INVOLVE THE TEMPORARY MOUNTING OF EXISTING FIRE ALARM SYSTEM NOTIFICATION APPLIANCES AND THE REMOVAL OF AREA-SMOKE DETECTORS. FIRE ALARM SYSTEM NOTIFICATION COVERAGE MUST BE MAINTAINED WITHIN THE CONSTRUCTION AREA AND MANUAL FIRE ALARM PULL STATIONS MUST BE MAINTAINED AT THE ENTRANCE TO EXITS. FIRE ALARM COVERAGE IN OCCUPIED AREAS MUST NOT BE MODIFIED / IMPAIRED.

L. WHEN A FIRE ALARM SYSTEM IS MODIFIED / IMPAIRED TO FACILITATE WORK, AN IMPAIRMENT PLAN SHALL BE DEVELOPED, APPROVED AND INCORPORATED INTO NUVANCE INTERIM LIFE SAFETY MEASURES (ILSM'S) IN ACCORDANCE WITH THE REQUIREMENTS OF THE AHJ FOR APPROVAL PRIOR TO ANY IMPAIRMENT WORK BEING DONE. FIRE ALARM IMPAIRMENTS SHOULD BE LIMITED TO 4-HOURS OR LESS. IN NO CIRCUMSTANCE MAY A FIRE ALARM SYSTEM BE IMPAIRED WHILE THE AUTOMATIC SPRINKLER SYSTEM IS ALSO IMPAIRED UNLESS APPROPRIATE MEASURES ARE PUT IN PLACE AND APPROVED BY THE FPPM (E.G., FIRE WATCH AND LOG).

16. SECURITY SYSTEM:

A. CONTRACTOR SHALL FURNISH OUTLET BOXES AND EMPTY CONDUITS REQUIRED FOR INSTALLATION OF SECURITY SYSTEM HARDWARE AND CABLING.

B. CONTRACTOR SHALL REFER TO SECURITY DRAWINGS OR DETAILS ON THESE DRAWINGS FOR ALL REQUIREMENTS FOR SECURITY HARDWARE AND CABLING.

PART 3– EXECUTION

1. GENERAL:

A. PERFORM THE WORK AT SUCH TIME AND IN SUCH MANNER AS TO MINIMIZE INTERFERENCE WITH BUILDING'S NORMAL OPERATION. NOTIFY BUILDING MANAGEMENT REPRESENTATIVES IN ADVANCE EACH TIME A SERVICE OUTAGE OR INTERRUPTION WILL BE REQUIRED. SCHEDULE SUCH SERVICE OUTAGE OR INTERRUPTION ONLY AFTER HAVING RECEIVING APPROVAL OF DATE, HOUR, AND TIME INTERVAL REQUIRED THEREOF. SCHEDULE OF WORK AS DIRECTED SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE.

B. COORDINATE WITH THE BUILDING OWNER FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS OR A MINIMUM OF FIVE (5) DAYS PRIOR TO ANY WORK, WHICHEVER IS MORE STRINGENT. CONTRACTOR IS TO PERFORM WORK ON PREMIUM TIME SO AS TO NOT DISTURB EXISTING TENANTS ON OTHER FLOORS.

C. OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS, OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS. SEALANT SHALL BE RATED FOR 3 HOURS. TELECOMMUNICATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING FIRE STOPPING IN 'IT' CONDUITS/SLEEVES/PENETRATIONS AFTER 'IT' WIRES ARE PULLED.

D. MAINTAIN GROUND CONTINUITY THROUGHOUT ALL SYSTEMS.

E. MAINTAIN CONTINUITY AND PROTECT ALL EXISTING CIRCUITS TO REMAIN SERVING EQUIPMENT WITHIN THE BASE BUILDING CORE AREAS OR OTHER TENANT AREAS AFFECTED BY THE ALTERATION WORK. WHENEVER IT IS REQUIRED THAT AN EXISTING CIRCUIT BE MODIFIED, REVISED, DISCONNECTED, OR REMOVED IT SHALL BE UNDERSTOOD THAT THE CIRCUIT SHALL BE RECONNECTED AND SERVICE RE-ESTABLISHED IN THE REMAINING PORTION OF THE CIRCUIT AFFECTED BY THE ALTERATION.

F. PRIOR TO ANY CHASING, CHOPPING, OR CORE DRILLING BEING PERFORMED, THE CONTRACTOR SHALL FIELD INVESTIGATE CONDITIONS AND COORDINATE WITH ALL APPROPRIATE TRADES TO ENSURE THAT WORK WILL BE IN HARMONY WITH OTHER WORK AND NOT AFFECT ANY EXISTING BUILDING SYSTEMS. X-RAY SLABS IF REQUIRED. THIS WORK MUST BE APPROVED BY BUILDING MANAGEMENT PRIOR TO PROCEEDING. ALL CORING/CHASING SHALL BE DONE ON OVERTIME.

G. FOR TEMPORARY POWER, FURNISH AND INSTALL WIRING FOR ADEQUATE LIGHT AND SMALL TOOLS POWER FOR THE PROJECT. THIS SHALL INCLUDE STRINGERS, LAMPS, OUTLETS, BREAKERS, AND FUSING, AS IT IS NECESSARY. ALL TEMPORARY WIRING SHALL BE REMOVED FROM SPACE AT COMPLETION OF PROJECT.

H. WHEN USING TEMPORARY LIGHTING, THE CONTRACTOR SHALL CLEARLY LABEL PANELS AND BREAKERS USED FOR LIGHTING. LOCATION OF PANELS TO BE SHOWN ON FLOOR PLAN POSTED AT ENTRANCE TO WORK AREA. PROPER TEMPORARY LIGHTING AND POWER MUST BE INSTALLED AND MAINTAINED IN ALL WORK AREAS. CONNECTIONS TO EXISTING STAIRWELL AND EXIT LIGHT SYSTEMS ARE NOT PERMITTED. TEMPORARY LIGHT STREAMERS, WHERE SPLICED, ARE TO HAVE COMPRESSION FITTINGS OR BE SOLDERED.

I. THE CONTRACTOR SHALL CUT BACK TO THE FLOOR, WALL OR CEILING, REMOVE WIRING AND PLUG BOTH ENDS OF CONCEALED CONDUITS MADE OBSOLETE BY THIS ALTERATION. EXPOSED CONDUITS, WIREWAYS, OUTLET BOXES, PULL BOXES, HANGERS, ETC. MADE OBSOLETE BY THE ALTERATION WORK SHALL BE REMOVED, UNLESS OTHERWISE NOTED.

J. IT IS POSSIBLE THAT THERE WILL BE CERTAIN REMOVALS AND RELOCATIONS OF THE EXISTING ELECTRICAL INSTALLATION NECESSARY FOR THE SATISFACTORY PERFORMANCE OF THE WORK. THESE CHANGES CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS, BUT MUST BE CONSIDERED BY THE CONTRACTOR WHILE REVIEWING THE EXISTING CONDITIONS AT THE SITE AND PREPARING THE PROPOSAL.

K. ALL CONSTRUCTION AND DEMOLITION OPERATION ELECTRICAL WIRING AND EQUIPMENT FOR LIGHT, HEAT, OR POWER PURPOSES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF NFPA 70, NATIONAL ELECTRICAL CODE.

L. ELECTRICAL DEVICES SHALL BE MAINTAINED IN A SAFE CONDITION.

M. EXTENSION CORDS SHALL BE MAINTAINED FREE FROM DAMAGE.

N. DAMAGED EQUIPMENT AND CORDS SHALL BE REMOVED FROM SERVICE UNTIL RENDERED SAFE.

O. DURING CONSTRUCTION OR DEMOLITION ACTIVITIES, ALL TEMPORARY AND PERMANENT SERVICE EQUIPMENT DISCONNECTING MEANS SHALL BE READILY ACCESSIBLE TO EMERGENCY SERVICE PERSONNEL AND SHALL BE LABELED AS TO WHICH EQUIPMENT IS CONTROLLED BY SUCH DISCONNECTS.

P. THE ELECTRICAL CONTRACTOR SHALL ESTABLISH SAFEGUARDING PLANS RELATED TO THE INSTALLATION OF SPECIFIC EQUIPMENT.

2. DEMOLITION:

A. ALL DEMOLITION WORK MUST BE DONE WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES.

B. TEMPORARY SHUTDOWNS OF EXISTING SERVICES MUST BE DONE AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING FACILITIES AND ONLY WITH APPROVAL.

C. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES WITH TEMPORARY CONNECTIONS OF POWER AND OR SYSTEMS IF NECESSARY.

D. UNLESS REMOVED IN THEIR ENTIRETY, PROPERLY LABEL ALL POWER CIRCUITS, PHONE LINES, DATA DROPS AND OTHER ELECTRICAL SYSTEM ELEMENTS FOR FUTURE RE-USE. POWER SHOULD BE LABELED BY VOLTAGE, PANEL AND CIRCUIT NUMBER. PHONES AND DATA SHOULD BE LABELED BY CLOSET AND PORT. ALL OTHER SYSTEMS SHOULD BE LABELED BY SOURCE AND USAGE.

E. ALL OUTDATE OR UNUSED ELECTRICAL SYSTEM COMPONENTS MUST BE REMOVED IN THEIR ENTIRETY.

F. ANY REMAINING ELECTRICAL SYSTEM COMPONENTS WITHIN, OR PASSING THROUGH THE AREA UNDER CONSTRUCTION MUST BE BROUGHT UP TO THE CURRENT CODE STANDARDS.

3. PRODUCT DELIVERY, STORAGE AND HANDLING:

A. MOVING OF EQUIPMENT: WHERE NECESSARY, SHIP IN CARTED SECTIONS OF SIZE TO PERMIT PASSING THROUGH AVAILABLE SPACES.

B. ACCESSIBILITY: FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS SHALL BE PERMITTED. CHANGES OF MAGNITUDE OR INVOLVING EXTRA COST ARE NOT PERMISSIBLE WITHOUT REVIEW. GROUP CONCEALED ELECTRICAL EQUIPMENT REQUIRING ACCESS WITH EQUIPMENT FREELY ACCESSIBLE THROUGH ACCESS DOORS.

4. EXISTING EQUIPMENT REFURBISHMENT:

A. WHERE PANELBOARDS, SWITCHES, CIRCUIT BREAKERS, TRANSFORMERS, ETC. ARE EXISTING TO BE REUSED THE CONTRACTOR SHALL CLEAN AND REFURBISH THE EQUIPMENT. THIS SHALL INCLUDE TIGHTENING ALL CONNECTIONS, REPLACING DEFECTIVE MECHANISMS, EXERCISING MECHANISMS AND PROVIDING ANY MISCELLANEOUS COMPONENTS SO THE EQUIPMENT IS IN FIRST CLASS WORKING ORDER.

B. ALL EXISTING LIGHTING FIXTURES TO REMAIN AND RELOCATED LIGHTING FIXTURES IN AREA OF WORK IS TO BE CLEANED AND RELAMPED.

5. PROTECTION:

A. CONTRACTOR SHALL BE RESPONSIBLE FOR WORK AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED. MATERIALS AND EQUIPMENT SHALL BE CAREFULLY STORED WHICH ARE NOT IMMEDIATELY INSTALLED AFTER DELIVERY TO SITE. CLOSE EXPOSED PARTS OF THE WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF MOISTURE OR OBSTRUCTING MATERIALS.

B. PROTECT THE WORK AND MATERIAL OF OTHERS FROM DAMAGE INSTALLED AS PART OF THIS CONTRACT. RESTORE ANY WORK DAMAGED AND BE RESPONSIBLE FOR ALL CURRENT WORK AND ASSOCIATED COSTS.

C. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE. PAINTED EXPOSED WORK SOILED OR DAMAGED; CLEAN AND REPAIR TO MATCH ADJOINING WORK BEFORE FINAL ACCEPTANCE. REMOVE DEBRIS FROM INSIDE AND OUTSIDE OF MATERIAL AND EQUIPMENT.

6. TEMPORARY WIRING

A. ALL BRANCH CIRCUITS SHALL ORIGINATE IN AN APPROVED POWER OUTLET OR PANEL BOARD.

B. CONDUCTORS SHALL BE PERMITTED WITHIN MULTI CONDUCTOR CORD OR CABLE ASSEMBLIES OR AS OPEN CONDUCTORS.

C. ALL CONDUCTORS SHALL BE PROTECTED BY OVERCURRENT DEVICES RATED FOR THE AMPACITY OF THE CONDUCTORS.

D. RUNS OF OPEN CONDUCTORS SHALL BE LOCATED WHERE THE CONDUCTORS ARE NOT SUBJECT TO PHYSICAL DAMAGE, AND THE CONDUCTORS SHALL BE FASTENED AT INTERVALS NOT EXCEEDING 10 FEET.

E. EACH BRANCH CIRCUIT THAT SUPPLIES RECEPTACLES OR FIXED EQUIPMENT SHALL CONTAIN A SEPARATE EQUIPMENT GROUNDING CONDUCTOR WHERE RUN AS AN OPEN CONDUCTOR.

7. TEMPORARY LIGHTING

A. TEMPORARY LIGHTS SHALL BE EQUIPPED WITH GUARDS TO PREVENT ACCIDENTAL CONTACT WITH THE BULB UNLESS THE CONSTRUCTION OF THE REFLECTOR IS SUCH THAT THE BULB IS DEEPLY RECESSED.

B. TEMPORARY LIGHTING FIXTURES, SUCH AS QUARTZ, THAT OPERATE AT TEMPERATURES CAPABLE OF IGNITING ORDINARY COMBUSTIBLES SHALL BE FASTENED SECURELY SO THAT THE POSSIBILITY OF THEIR COMING IN CONTACT WITH SUCH MATERIALS IS PRECLUDED.

C. TEMPORARY LIGHTS SHALL BE EQUIPPED WITH HEAVY-DUTY ELECTRICAL CORDS WITH CONNECTIONS AND INSULATION MAINTAINED IN SAFE CONDITION.

D. TEMPORARY LIGHTS SHALL NOT BE SUSPENDED BY THEIR ELECTRICAL CORDS UNLESS SUCH CORDS AND LIGHTS HAVE BEEN DESIGNED FOR THAT PURPOSE.

E. SPLICES SHALL HAVE INSULATION EQUIVALENT TO THAT OF THE CABLE.

F. TEMPORARY WIRING AND LIGHTS SHALL BE REMOVED IMMEDIATELY UPON THE COMPLETION OF THE CONSTRUCTION OR PURPOSE FOR WHICH THE WIRING AND LIGHTS WERE INSTALLED.

G. CONSTRUCTION RELATED TEMPORARY LIGHTING SUPPLEMENTED BY PERSONAL LIGHTING SHALL BE PROVIDED AS EMERGENCY LIGHTING FOR EGRESS.

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REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID
ISSUED DATE: 08/14/2024

DRAWN BY: VH
CHECKED BY: TL
PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:
ELECTRICAL SPECIFICATIONS (2 OF 2)

DRAWING NO.
E301

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

FIRE PROTECTION SYMBOLS AND ABBREVIATIONS

BFP	BACKFLOW PREVENTOR
E	EXISTING
ER	EXISTING TO REMAIN
ETR	EXISTING TO BE RELOCATED
FLA	FULL LOAD AMPS
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
FHR	FIRE HOUSE RACK ASSEMBLY
FS	WATERFLOW SWITCH
GPM	GALLONS PER MINUTE
HZ	HERTZ
KW	KILOWATT
MCA	MINIMUM CIRCUIT AMPS
NTS	NOT TO SCALE
PH	PHASE
POC	POINT OF CONNECTION
SCA	SPRINKLER CONTROL ASSEMBLY
SQ FT	SQUARE FEET
TS	TAMPER SWITCH
TYP	TYPICAL
V	VOLTS
●	NEW CONCEALED PENDENT SPRINKLER
⊙	EXISTING EXPOSED PENDENT SPRINKLER
◀	NEW SIDEWALL SPRINKLER
○	EXISTING SPRINKLER TO REMAIN
⊠	EXISTING SPRINKLER TO BE REMOVED
———	NEW SPRINKLER PIPING
———	EXISTING SPRINKLER PIPING TO REMAIN
– – –	NEW SPRINKLER DRAIN PIPING
	CAPPED PIPE
	CAPPED AND VALVE CONNECTION
	PITCH PIPE DOWN IN DIRECTION OF ARROW
	ELBOW TURNED UP
	ELBOW TURNED DOWN
	BOTTOM PIPE CONNECTION
	TOP PIPE CONNECTION
	SHUT-OFF VALVE (GATE OR BALL VALVE SEE SPECS)
	GLOBE VALVE
	CHECK VALVE
	WATERFLOW SWITCH
□	NEW EQUIPMENT
X-X / X-X	EXISTING EQUIPMENT TO BE REMOVED
E	EXISTING EQUIPMENT TO REMAIN
ETR	EXISTING EQUIPMENT TO BE RELOCATED
	POINT OF NEW CONNECTION TO EXISTING WORK
	REMOVE AND SAFE OFF EXISTING WORK FOR RECONNECTION
X	FIRE PROTECTION PLAN NOTE TAG
X	REVISION SYMBOL
XX	HYDRAULIC CALCULATIONS NODE

DEMOLITION NOTES

1. DEMOLITION NOTES, SYMBOL LISTS AND DETAILS ARE APPLICABLE TO ALL FIRE PROTECTION DRAWINGS.
2. ALL PIPING IN WALLS AND FLOORS NOT TO BE REUSED WILL BE PLUGGED OR CAPPED AND CUTTING AND PATCHING WILL BE PERFORMED TO RESTORE SURFACE TO ORIGINAL CONDITION BY THIS CONTRACTOR.
3. AFTER REMOVING PIPING THROUGH FLOOR SLABS, PENETRATIONS SHALL BE PATCHED WITH APPROVED FIRE-RATED MATERIAL.
4. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF FIRE PROTECTION WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE OWNER/ENGINEER.
5. ALL EXISTING WORK REQUIRED TO REMAIN BUT INTERFERING WITH THE PROPOSED NEW FIRE PROTECTION SYSTEM SHALL BE RELOCATED AND RECONNECTED USING MATERIALS CONFORMING TO THE STANDARDS AND SPECIFICATIONS OF THESE CONTRACT DOCUMENTS.
6. REMOVE ALL WET SPRINKLER HEADS AND ASSOCIATED BRANCH PIPING, HANGERS, ETC IN AREA OF DEMOLITION WORK BACK TO EXISTING SPRINKLER MAIN. CAP ALL REMAINING PIPE OPENINGS AT MAIN. EXISTING BRANCH PIPING CONNECTED TO SPRINKLER HEADS TO REMAIN SHALL BE RECONNECTED BACK TO EXISTING MAIN.
7. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF FIRE PROTECTION WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED.
8. PROVIDE ADDITIONAL SUPPORT AND HANGERS FOR ALL EXISTING PIPING TO REMAIN THAT IS AFFECTED BY THE DEMOLITION OF EXISTING CEILINGS AND INTERIOR PARTITIONS.
9. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
10. ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE REROUTED TO BE CONCEALED BEHIND FINISHED SURFACES.
11. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
12. THE SHUTDOWN AND DRAINING OF THE EXISTING BUILDING FIRE PROTECTION SYSTEM SHALL BE COORDINATED WITH THE OWNER AND/OR BUILDING MANAGEMENT. THE OWNER AND/OR BUILDING MANAGEMENT SHALL BE CONTACTED AT LEAST 2 BUSINESS DAYS PRIOR TO THE SYSTEM SHUTDOWN.
13. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING FIRE PROTECTION SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
14. WHEN EXISTING SPRINKLER SYSTEM IS DEACTIVATED THE SPRINKLER CONTRACTOR SHALL PROVIDE A TEMPORARY SPRINKLER LOOP AROUND THE CORE OF THE BUILDING OR PROVIDE A 24 HOUR FIRE WATCH UNTIL THE NEW SPRINKLER SYSTEM BECOMES ACTIVE AT NO ADDITIONAL COST TO THE OWNER.
15. THE CONTRACTOR SHALL REMOVE ALL PIPING SUPPORTS FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN. THE CONTRACTOR SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS NECESSARY.
16. 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 REQUIREMENTS.
17. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE FIRE PROTECTION CONTRACTOR, AS DIRECTED BY THE OWNER.
18. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE & LOCAL REQUIREMENTS.

GENERAL NOTES

1. THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF WORK AS WELL AS INDICATE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL ADHERE TO THESE DRAWINGS AS CLOSELY AS POSSIBLE. HOWEVER, THE RIGHT IS RESERVED TO VARY THE RUNS OF PIPING AND TO MAKE OFFSETS, WHERE NECESSARY, TO ACCOMMODATE CONDITIONS ARISING AT THE JOB SITE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO WORK SHALL BE PERFORMED PRIOR TO RECEIPT OF EQUIPMENT, DUCTWORK AND PIPING FABRICATION DRAWING APPROVAL.
2. ANY MATERIAL, WORK OR INCIDENTAL ACCESSORIES OR MINOR DETAILS NOT SHOWN BUT NECESSARY TO MAKE THE WORK COMPLETE IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
3. PRIOR TO SUBMISSION OF BID THE CONTRACTOR SHALL VISIT THE SITE TO REVIEW THE EXISTING CONDITIONS ASSOCIATED WITH THE SCOPE OF WORK AND ADJACENT AREAS TO ASCERTAIN THE DIFFICULTIES WHICH WILL AFFECT THE EXECUTION OF THE WORK OF THIS CONTRACT.
4. SUBMISSION OF A BID WILL BE CONSTRUED AS EVIDENCE THAT A INSPECTION OF THE SITE HAS TAKEN PLACE AND LATER NO CLAIMS FOR ADDITION LABOR, EQUIPMENT, OR MATERIALS DUE TO DIFFICULTIES ENCOUNTERED FROM TO EXISTING CONDITIONS SHALL BE ACCEPTED.
5. THIS CONTRACTOR SHALL PROVIDE PROTECTION THROUGHOUT THE ENTIRE SPACE WITHIN THE SCOPE OF WORK AS REQUIRED BY THE LOCAL CODES. LOCAL FIRE DEPARTMENT REGULATIONS, BUILDING MANAGEMENT REQUIREMENTS, AND NFPA 13 FOR THE DURATION OF THE PROJECT. ANY TEMPORARY FIRE PROTECTION SYSTEM SHALL BE REMOVED UPON ACTIVATION OF THE PERMANENT FIRE PROTECTION SYSTEM.
6. SPRINKLER HEADS SHALL BE ±1/2" FROM CENTER OF CEILING TILE. THE CONTRACTOR SHALL PROVIDE FOR ALL ADDITIONAL FITTING TO ACHIEVE THIS AND INCLUDE THE COST FOR ADDITIONAL FITTING IN THEIR CONTRACT PRICE.
7. THE CONTRACTOR SHALL COORDINATE ALL NEW WORK WITH NEW WORK OF ALL OTHER TRADES AS WELL AS EXISTING CONDITIONS.
8. THE MINIMUM PIPE SIZE FOR ANY SPRINKLER HEAD SHALL BE 1 INCH.
9. ALL SPRINKLER PIPE SIZES SHOWN ARE FOR COST ESTIMATING PURPOSES ONLY. THIS CONTRACTOR IS TO PROVIDE THERE OWN HYDRAULIC CALCULATIONS TO DETERMINE PIPE SIZES AND INCLUDE ANY INCREASED/DECREASED PIPING SIZING WITHIN THEIR CONTRACT PRICE.
10. ALL PIPING SHALL BE INSTALLED TIGHT TO THE BOTTOM OF STEEL AT ALL TIMES UNLESS OTHERWISE INDICATED OR REQUIRED BY FIELD CONDITIONS.
11. ALL PIPING OF DISSIMILAR MATERIALS SHALL HAVE DIELECTRIC FITTINGS.

SPRINKLER DESIGN CRITERIA

LIGHT HAZARD OCCUPANCY

AREAS OF APPLICATIONS:	1500 SQ FT
MAXIMUM COVERAGE PER SPRINKLER:	225 SQ FT
DESIGN DENSITY:	0.10 GPM PER SQ FT
SPACING BETWEEN SPRINKLERS:	15'-0" MAXIMUM
DISTANCE BETWEEN SPRINKLERS & WALLS:	1/2 OF ALLOWABLE DISTANCE BETWEEN SPRINKLERS

ORDINARY HAZARD (GROUP 1) OCCUPANCY (STORAGE ROOMS, MECHANICAL & ELECTRICAL EQUIPMENT SPACES)

AREAS OF APPLICATIONS:	1500 SQ FT
MAXIMUM COVERAGE PER SPRINKLER:	130 SQ FT
DESIGN DENSITY:	0.15 GPM PER SQ FT
SPACING BETWEEN SPRINKLERS:	15'-0" MAXIMUM
DISTANCE BETWEEN SPRINKLERS & WALLS:	1/2 OF ALLOWABLE DISTANCE BETWEEN SPRINKLERS

SPRINKLER HEAD SCHEDULE

SYMBOL	TYPE	STYLE	TEMP.	FINISH	RESPONSE	ORIFICE K-FACTOR	MANUFACTURER MODEL	REMARKS
●	PENDENT	CONCEALED	135°	WHITE	QUICK	1/2" 5.6	RELIABLE G5-56	–

FIRE PROTECTION DRAWING INDEX

DRAWING NO.	DRAWING TITLE
FP001	FIRE PROTECTION NOTES AND LEGENDS
FP100	FIRE PROTECTION PLANS
FP200	FIRE PROTECTION SPECIFICATIONS

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

LONG CONSULTING
87 Federal Rd., Bldg. II, Ste. 201
Brookfield, CT 06804
www.LongEngineers.com
TEL: (203) 663-3703

PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: AG

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

FIRE PROTECTION NOTES AND LEGEND

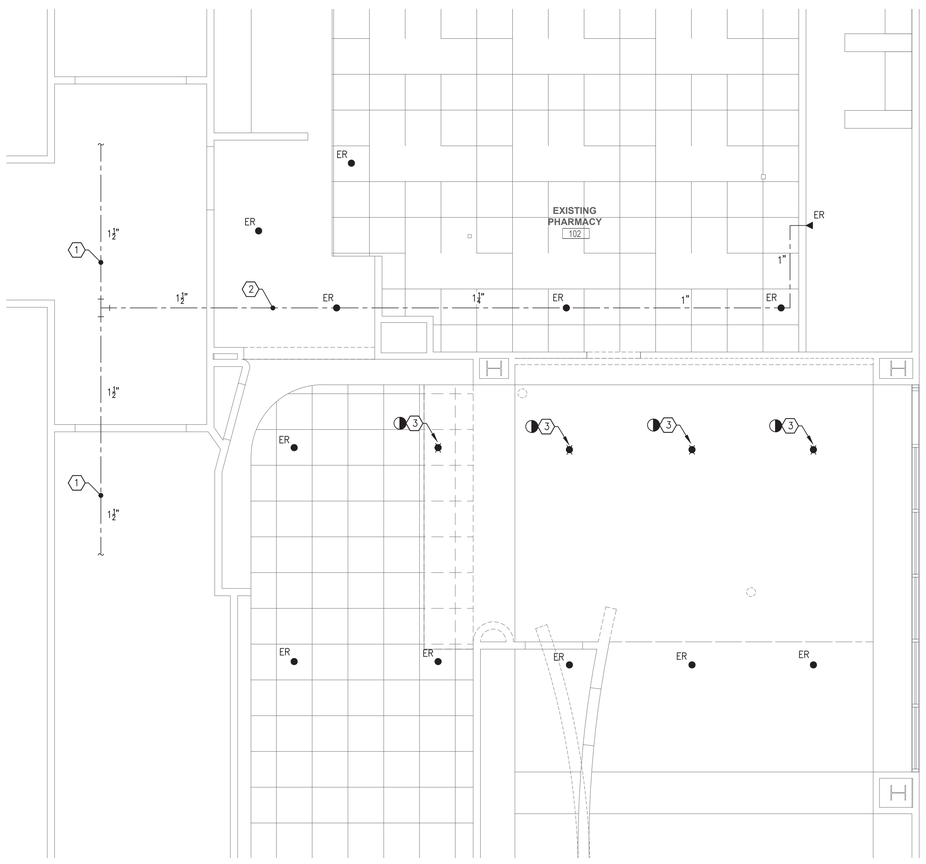
DRAWING NO.

FP001

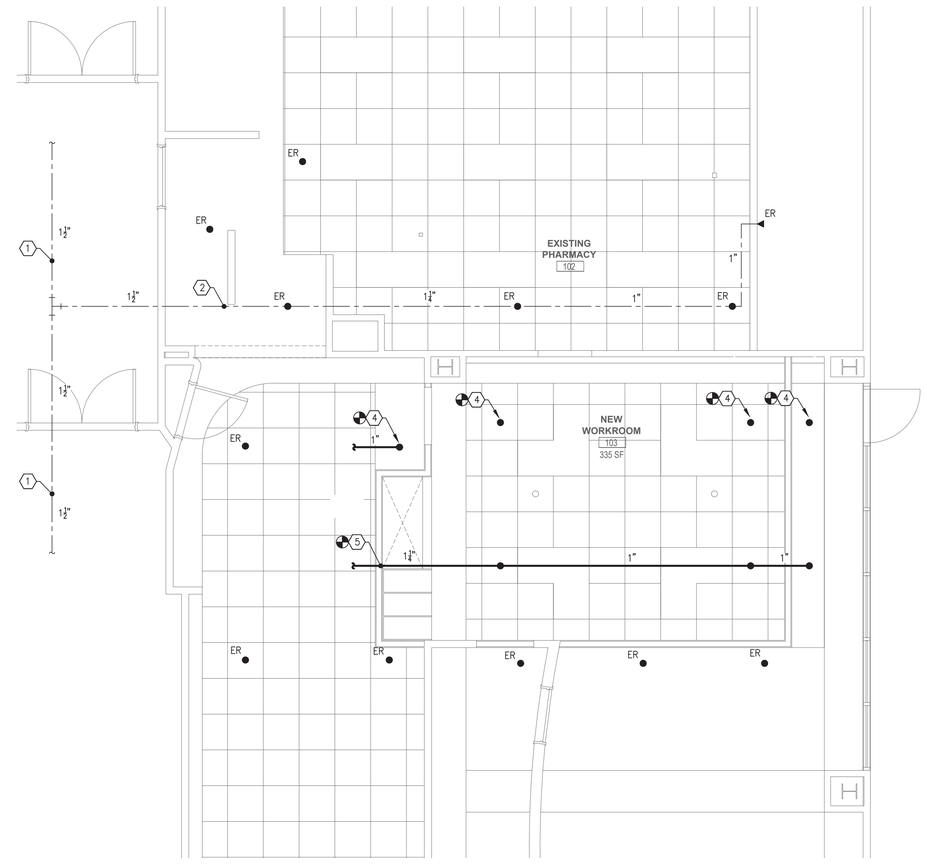
Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

FIRE PROTECTION PLAN NOTES

1. EXISTING FIRE PROTECTION MAIN ROUTED IN CEILING TO REMAIN.
2. EXISTING FIRE PROTECTION BRANCH PIPING TO REMAIN.
3. EXISTING SPRINKLER HEAD IN AREA OF WORK TO BE DEMOLISHED. REUSE EXISTING FIRE PROTECTION BRANCH PIPING SERVING DEMOLISHED SPRINKLER HEAD AS POINT OF CONNECTION FOR NEW WORK.
4. NEW SPRINKLER HEAD PROVIDED IN AREA OF WORK. REUSE EXISTING FIRE PROTECTION BRANCH PIPING AS POINT OF CONNECTION FOR NEW WORK.
5. NEW FIRE PROTECTION BRANCH PIPING ROUTED FROM NEAREST FIRE PROTECTION MAIN IN CORRIDOR PROVIDED FOR ADDITIONAL SPRINKLER HEADS IN AREA OF WORK. COORDINATE ROUTING AND EXACT POINT OF CONNECTION IN FIELD.



1 FIRE PROTECTION DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



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

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

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87 Federal Rd., Bldg. A, Ste. 319
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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

34 MAPLE STREET, NORWALK, CT 06856

REVISIONS:

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: AG

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

FIRE PROTECTION PLANS

DRAWING NO.

FP100

Plot Date: 7/2/2024 4:10:26 PM Dwg Filename: R23_Norwalk Hospital Retail Pharmacy Workroom_detached.rvt

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS

A. INSTALL ALL NEW WORK IN A NEAT WORKMANLIKE MANNER READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR.

B. CODES, PERMITS AND INSPECTIONS:

1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF CURRENT NFPA–13 STANDARD FOR THE "INSTALLATION OF SPRINKLER SYSTEMS", CURRENT NFPA–101 "LIFE SAFETY CODE', AND ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK SHALL BE INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. CONTRACTOR IS TO INFORM ENGINEER OF ANY EXISTING WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE BY THIS CONTRACTOR AND AT NO EXPENSE TO THE OWNER.

2. THIS CONTRACTOR SHALL OBTAIN ALL EQUIPMENT APPROVALS AS REQUIRED BY STATE AND LOCAL AUTHORITIES. PERMITS SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

C. SITE VERIFICATION:

1. PRIOR TO SUBMISSION OF THE BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE TO ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATE TO THE WORK INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN. DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO SUBMISSION OF THE BID, AND IF NOT RESOLVED TO SATISFACTION, SHALL BE SUBMITTED AS A WRITTEN QUALIFICATION OF THE BID. SUBMISSION OF A BID SHALL BE EVIDENCE THAT SITE VERIFICATION HAS BEEN PERFORMED AS DESCRIBED ABOVE.

D. CONTRACT DOCUMENTS:

1. PRIOR TO SUBMISSION OF A FORMAL BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTION, DEMOLITION, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SPRINKLER AND SHALL INCLUDE ANY WORK REQUIRED IN THE BID WHICH IS INDICATED OR IMPLIED TO BE PERFORMED BY THIS TRADE IN OTHER SECTIONS OF THE WORK.

2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND APPROXIMATE LOCATION OF EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND COORDINATE FINAL LOCATIONS OF SPRINKLER HEADS AND PIPING. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT

3. IF A CONFLICT OCCURS IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS, THE MORE STRINGENT SITUATION SHALL APPLY.

E. GUARANTEE:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THIS WORK. FINAL ACCEPTANCE SHALL BE DEFINED AS THE TIME AT WHICH THE FIRE PROTECTION WORK IS TAKEN OVER AND ACCEPTED BY THE OWNER, AND IS UNDER CARE, CUSTODY, AND CONTROL OF THE OWNER. ENGAGE THE SERVICES OF VARIOUS MANUFACTURERS SUPPLYING THE EQUIPMENT FOR THE PROPER STARTUP AND OPERATION OF ALL SYSTEMS INSTALLED. INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND SERVICING OF THE SYSTEM.

2. THE CONTRACTOR SHALL GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL INCLUDE RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THIS CONTRACTOR.

3. THIS CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SYSTEMS UNTIL THE FINAL ACCEPTANCE OF THE WORK.

G. DEFINITIONS:

1. FIRE PROTECTION CONTRACTOR, "THIS CONTRACTOR" – THE PARTY OR PARTIES HAVE BEEN DULY AWARDED THE CONTRACT FOR AND ARE THEREBY MADE RESPONSIBLE FOR THE FIRE PROTECTION WORK AS DESCRIBED HEREIN.

2. 'THIS CONTRACT', 'THE CONTRACT' – THE AGREEMENT COVERING THE WORK TO BE PERFORMED BY THIS CONTRACTOR.

3. "APPROVED", "EQUAL", "SATISFACTORY", "ACCEPTED", "ACCEPTABLE", "EQUIVALENT" – SUITABLE FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER BASED ON DOCUMENTS PRESENTED FOR SUCH DETERMINATION.

4. "THESE SPECIFICATIONS", "THIS SECTION, PART, DIVISION" (OF THE SPECIFICATION) – THE DOCUMENT SPECIFYING THE WORK TO BE PERFORMED BY 'THIS CONTRACTOR'.

5. "THE FIRE PROTECTION WORK", "THIS WORK" – ALL LABOR MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES, AND OTHER ITEMS REQUIRED FOR A PROPER AND COMPLETE INSTALLATION BY THE MECHANICAL CONTRACTOR.

6. "ARCHITECT", "ENGINEER", "OWNER'S REPRESENTATIVE" – THE PARTY OR PARTIES RESPONSIBLE FOR INTERPRETING, ACCEPTING AND OTHERWISE RULING ON THE PERFORMANCE UNDER THIS CONTRACT.

7. "FURNISH" – PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THE MECHANICAL WORK.

8. "INSTALL" – UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING INSTALLATION AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE MECHANICAL WORK.

9. "PROVIDE" – "FURNISH" AND "INSTALL".

10. "NEW" – MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.

11. "RELOCATE" – MOVE EXISTING EQUIPMENT AND ALL ACCESSORIES AS REQUIRED.

12. "REMOVE" – DISMANTLE AND CART AWAY FROM SITE INCLUDING ALL RELATED ACCESSORIES. ALL ITEMS SHALL BE LEGALLY DISPOSED OF. ALL OTHER EQUIPMENT AND OPERATIONS IN ANY WAY AFFECTED BY THE REMOVAL IS TO REMAIN IN FULL OPERATION. PROVIDE ALL NECESSARY COMPONENTS TO MAINTAIN SUCH OPERATION.

1.02 SCOPE OF WORK

A. EXISTING FIRE PROTECTION SYSTEM IS A "WET PIPE" SYSTEM, EMPLOYING AUTOMATIC SPRINKLERS ATTACHED TO A PIPING SYSTEM CONTAINING WATER. THE MODIFICATION OF THE EXISTING SPRINKLER SYSTEM SHALL INCLUDE THE FOLLOWING:

1. INSTALL AUTOMATIC SPRINKLERS AND PIPING WHERE SHOWN ON THE CONTRACT DRAWINGS.

2. REMOVE EXISTING SPRINKLER HEADS WHERE SHOWN ON THE CONTRACT DRAWINGS.

3. CONNECT NEW BRANCH PIPE TO EXISTING BRANCH PIPE AND MAIN PIPE.

4. TEST ALL NEW WORK IN THE PRESENCE OF THE OWNERS' REPRESENTATIVE AND ALL AUTHORITIES HAVING JURISDICTION.

5. PREPARE AS–BUILT DRAWINGS INDICATING ACTUAL LOCATIONS OF SPRINKLER HEADS AND PIPING.

B. SECURE CERTIFICATES, PAY ALL FEES AND CHARGES FOR ALL WORK INSTALLED, CERTIFYING COMPLIANCE WITH ALL AUTHORITIES. CONTRACTOR TO COORDINATE WITH OWNER FOR REQUIRED SPECIAL INSPECTIONS AND OBTAIN ALL APPROVALS. DELIVER CERTIFICATES TO OWNER FOR SIGNING BEFORE FILING

1.03 COORDINATION WITH BUILDING MANAGEMENT

A. THIS CONTRACTOR IS TO OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS PRIOR TO BID SUBMISSION TO DETERMINE THE REQUIREMENTS AND THE EXTENT OF PREMIUM TIME WORK REQUIRED BY THE BUILDING.

B. THIS CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE BUILDING OWNER'S RULES AND REGULATIONS. ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE BUILDING RULES AND REGULATIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER FOR REVIEW WITH BID SUBMISSION.

C. COORDINATE WITH BUILDING OWNER FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS. CONTRACTOR IS TO PERFORM WORK ON PREMIUM TIME, IF SO DIRECTED BY BUILDING OWNER, SO AS NOT TO DISTURB EXISTING TENANTS ON OTHER FLOORS.

1.04 PERFORMANCE REQUIREMENTS

A. THE FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN COMPLETE ACCORDANCE WITH NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2019 EDITION.

B. STANDARD PIPING SYSTEM COMPONENT WORKING PRESSURE LISTED FOR AT LEAST 175 PSIG.

1.05 SHOP DRAWINGS

A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT AND MATERIALS PROVIDE COMPLETE SET OF COORDINATED SHOP DRAWINGS OF ALL NEW EQUIPMENT AND MATERIALS FOR WRITTEN APPROVAL BY THE ARCHITECT AND ENGINEER. SHOP DRAWINGS SUBMISSION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. PIPE AND FITTINGS

2. SPRINKLER HEADS

3. INSTALLATION DRAWINGS

4. PIPING HEADS

5. HYDRAULIC CALCULATIONS

6. SUPPORTS, HANGERS AND GUIDES

B. INSTALLATION DRAWINGS: PROVIDE HYDRAULICALLY CALCULATED DIMENSIONAL INSTALLATION PIPING LAYOUTS COORDINATED WITH ALL TRADES INDICATING ALL SPRINKLER PIPING, DRAINS, AND PIPE SIZES.

C. THE QUANTITY OF SHOP DRAWINGS SHALL AS A MINIMUM BE FOUR (4) COPIES OF 8–1/2" X 11" SUBMISSIONS AND FIVE (5) PRINTS OF ALL DRAWINGS. SPECIFIC JOB REQUIREMENTS MAY BE MORE STRINGENT AND CONTRACTOR IS RESPONSIBLE TO OBTAIN REQUIREMENTS FROM OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR OR ARCHITECT.

1.06 MAINTENANCE MANUALS

A. SUBMIT FOUR (4) LOOSE–LEAF BOUND OPERATING AND MAINTENANCE MANUALS WITH INDEX AND INDEX TABS TO INCLUDE THE FOLLOWING:

1. SPRINKLER AS–BUILT DRAWINGS WITH KEY PLAN DRAWINGS INSERTED IN BINDER.

2. ALL ITEMS SUBMITTED FOR REVIEW IN SHOP DRAWING SECTION.

3. OPERATION AND MAINTENANCE DATA FOR SPRINKLER SPECIALTIES

1.07 AS–BUILT DRAWINGS

A. CONTRACTOR SHALL MAINTAIN RECORD DRAWING PRINTS ON JOB SITE AND RECORD, AT TIME OF OCCURRENCE, DEVIATIONS FROM CONTRACT DOCUMENTS DUE TO FIELD COORDINATION, BULLETINS, OR ADDENDA.

B. CONTRACTOR SHALL REVISE SHOP DRAWINGS TO CONFORM TO RECORD DRAWINGS AND SUBMIT AS–BUILT CONDITION DRAWINGS UPON COMPLETION OF THE PROJECT. FINAL SUBMISSION OF REPRODUCIBLE AS–BUILT DRAWINGS ARE TO BE SIGNED AND CERTIFIED BY THE INSTALLING CONTRACTOR THAT THIS IS THE AS–BUILT CONDITION OF THE WORK.

1.08 SUBSTITUTIONS

A. NO SUBSTITUTE MATERIAL OR MANUFACTURER OF EQUIPMENT SHALL BE PERMITTED WITHOUT A FORMAL WRITTEN SUBMITTAL TO THE ENGINEER WHICH INCLUDES ALL DIMENSIONAL, PERFORMANCE AND MATERIAL SPECIFICATIONS. ANY CHANGES IN LAYOUT, ELECTRICAL CHARACTERISTICS, STRUCTURAL REQUIREMENTS, OR DESIGN DUE TO THE USE OF A SUBSTITUTION SHALL BE SUBMITTED TO THE ENGINEER AS PART OF THIS PROPOSAL. THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR THE SUBSTITUTION AND ALL CHANGES RESULTING FROM SUBSTITUTION. ALL ITEMS SHALL BE SUBMITTED FOR REVIEW IN CONJUNCTION WITH THE SUBMITTAL OF THE SUBSTITUTION. ANY SUBSTITUTION MUST BE SUBMITTED WITH AN EXPLANATION AS TO WHY A SUBSTITUTION IS BEING UTILIZED. IF THE SUBSTITUTED ITEM DEVIATES FROM THE SPECIFIED ITEM, THOSE DEVIATIONS ARE TO BE IDENTIFIED ON A LINE–BY–LINE BASIS. IF THE SUBSTITUTE IS BEING UTILIZED FOR FINANCIAL REASONS, THE ASSOCIATED CREDIT MUST BE SIMULTANEOUSLY SUBMITTED.

PART 2 – PRODUCTS/APPLICATIONS

2.01 PIPING

A. PIPING 2" AND SMALLER SHALL BE ANSI/ASTM A 53; ASTM A126; ASTM A 135 SCHEDULE 40 STANDARD WEIGHT BLACK STEEL. PIPING SHALL BE THREADED OR GROOVED FOR MECHANICAL COUPLINGS.

B. PIPING 2–1/2" AND ABOVE SHALL BE SCHEDULE 10 STEEL WITH VICTAULIC COUPLINGS.

2.02 FITTINGS

A. STEEL WELDING: STANDARD SEAMLESS STEEL, ANSI B–16.9 AND ASTM A–234

B. STEEL FLANGES: ANSI B–16.5

C. GROOVED END MALLEABLE IRON FITTINGS AND BOLTED CLAMP TYPE MALLEABLE IRON COUPLINGS WITH RUBBER SEALING GASKETS FOR ROLLED GROOVED END PIPE, MINIMUM WORKING PRESSURE OF 250 PSI, SIMILAR TO VICTAULIC CO. PROVIDE "FLUSH SEAL" TYPE GASKETS FOR ALL DRY SYSTEM FITTINGS.

D. CLOSE NIPPLES OR PLAIN END FITTINGS ARE NOT PERMITTED.

2.03 ESCUTCHEONS

A. ALL EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, PARTITIONS AND CEILINGS SHALL BE PROVIDED WITH A TWO PIECE HINGED, CHROME PLATED METAL ESCUTHCEON SIMILAR TO ARGCO SERIES.

2.04 PIPING SUPPORTS

A. ALL PIPING SHALL BE SUPPORTED FROM BUILDING CONSTRUCTION BY INSERTS, BEAM CLAMPS, STEEL FISHPLATES AND ACCEPTABLE BRACKETS. SUBMIT ALL METHODS OF SUPPORT FOR REVIEW.

B. PROVIDE ADDITIONAL FRAMING TO SUPPORT PIPING WERE BUILDING CONSTRUCTION IS INADEQUATE.

C. PROVIDE MINIMUM PIPE SUPPORTS SPACING AS REQUIRED BY NFPA 13. ALL PIPING SUPPORT MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 13.

D. TOP BEAM CLAMPS AND RETAINING STRAPS

1. CARBON STEEL CLAMP BODY WITH HARDENED STEEL CUP POINT SET SCREW AND LOCKNUT. BODY SHALL BE TAPPED THROUGH TO PERMIT EXTENDED ADJUSTMENT OF THREADED ROD.

2. GALVANIZED ELECTRO OR HOT DIPPED FINISH

3. GALVANIZED RETAINING STRAPS SHALL BE USED WITH ALL BEAM CLAMPS.

E. HANGER RODS: CARBON STEEL, CONTINUOUS THREAD, ELECTRO–GALVANIZED SIZED IN ACCORDANCE WITH NFPA 13 REQUIREMENTS.

F. ADJUSTABLE HANGER RINGS: CARBON STEEL, MIL GALVANIZED TO G–90 SPECIFICATION WITH KNURLED SWIVEL NUT SIZED TO NFPA 13 REQUIREMENTS.

G. EXPANSION ANCHORS: MAXIMUM LOADING, INCLUDING PIPE CONTENTS, COVERING AND ALL REQUIRED LOADS, 75 PERCENT OF MAXIMUM RATED LOAD. SAE 110M, SLOTTED TYPE, PLATED WITH DULL ZINC FINISH SIZED PER NFPA 13 REQUIREMENTS. USE ONLY AT LOCATIONS APPROVED BY OWNER.

H. SIDE BEAM BRACKET: CARBON STEEL, GALVANIZED FLUSH BACK PLATE WITH THREADED EYE SOCKET, FOR PIPE SIZES 1" THROUGH 4".

I. LAG BOLTS: CARBON STEEL, GALVANIZED, GIMLET POINT, HEX HEAD (MAXIMUM 6" LENGTH).

J. SPLIT RING HANGERS: DUCTILE IRON, GALVANIZED, HINGED, SPLIT RING EXTENSION HANGER.

K. COACH SCREW HANGER RODS: CARBON STEEL, GALVANIZED, MACHINE THREADED ON ONE END AND LAG THREADED ON THE OTHER END. IT IS MANDATORY THAT PILOT HOLES BE PRE–DRILLED TO PREVENT BEAM SPLITTING.

L. STEEL ROD COUPLINGS: CARBON STEEL, GALVANIZED

M. RISER CLAMPS: BOLTED ON EACH SIDE OF PIPE AND BEARING EQUALLY ON STRUCTURE.

N. ALL HANGER MATERIAL MUST REMAIN CORROSION FREE. COORDINATE LOCATIONS WITH ANTICIPATED ENVIRONMENTAL CONDITIONS. PROVIDE NECESSARY MATERIALS AND FINISHES TO MEET OWNER'S REQUIREMENTS AND THE REQUIREMENTS OF NFPA 13.

2.05 SPRINKLER HEADS

A. REFER TO SPRINKLER HEAD SCHEDULE ON DRAWING FP001 FOR MAKE, MODEL, AND SPRINKLER CHARACTERISTICS.

2.06 SPRINKLER TESTING

A. TEST ALL PIPING SYSTEMS HYDROSTATICALLY AT A PRESSURE OF 200 PSI FOR A PERIOD TWO (2) HOURS. THE SYSTEM SHALL NOT LOSE PRESSURE FOR ENTIRE DURATION OF TESTING.

B. ALL DEFECTS IN THE SYSTEM DISCOVERED BY THE TEST SHALL BE REPAIRED OR REPLACED. THE TEST SHALL BE REPEATED UNTIL ALL WORK IS PROVEN ACCEPTABLE.

C. SUBMIT TEST RESULTS FOR REVIEW BY ENGINEER.

D. THE CONTRACTOR IS SHALL BE RESPONSIBLE TO REPAIR OR REPLACED ALL DAMAGES CAUSED TO THE BUILDING AND WORK OF OTHER TRADES DUE TO A FAILED TESTING OF THE SPRINKLER SYSTEM.

E. THE CONTRACTOR SHALL SCHEDULE SYSTEM TESTING WITH THE BUILDING OWNER OR BUILDING MANAGEMENT A MINIMUM OF 48 HOURS IN ADVANCE AND NOTIFY ARCHITECT AND ENGINEER OF DATE AND TIME OF TEST.

PART 3 – EXECUTION

3.01 DEMOLITION, REMOVAL AND RELOCATION

A. REMOVAL, TEMPORARY CONNECTIONS AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE INSTALLATION OF THE NEW SYSTEMS. ALL EXISTING CONDITIONS ARE NOT TO BE COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK.

B. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT, AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.

C. ALL EXISTING WORK NOT INDICATED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE. WHERE EXISTING WORK TO REMAIN IS DAMAGED OR DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE TO OWNER'S SATISFACTION AT NO COST TO THE OWNER.

E. GENERAL CONTRACTOR REMOVE ALL CEILING IN AREAS WHERE NEW DUCTWORK OR PIPING IS TO BE INSTALLED OR EXISTING IS ALTERED, AS PER ARCHITECT'S INSTRUCTIONS.

F. ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED UNDER THIS CONTRACT WILL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE LEGALLY DISPOSED OF BY THIS CONTRACTOR AS DIRECTED BY THE ARCHITECT OR OWNER.

H. PROVIDE FOR LEGAL REMOVAL AND DISPOSAL OF ALL RUBBISH AND DEBRIS FROM THE BUILDING AND SITE. COORDINATE ALL DEMOLITION AND REMOVALS WITH BUILDING MANAGEMENT.

3.02 CONNECTION TO EXISTING WORK

A. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH OWNER. PROVIDE TEMPORARY DUCTWORK AND PIPING CONNECTIONS AS REQUIRED TO MINIMIZE SHUTDOWN TIME.

B. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ARCHITECT AND OWNER.

C. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES.

3.03 INSTALLATION OF NEW WORK

A. DRAWINGS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING. INSTALL PIPING AS INDICATED. DEVIATION FROM APPROVED WORKING PLANS FOR PIPING REQUIRE WRITTEN APPROVAL FROM AUTHORITIES HAVING JURISDICTION. FILE WRITTEN APPROVAL WITH ARCHITECT AND ENGINEERING BEFORE DEVIATING FROM APPROVED WORKING PLANS.

B. INSTALL AS STRAIGHT AND DIRECT AS POSSIBLE ALL PIPING FORMING RIGHT ANGLE OR PARALLEL LINES WITH BUILDING WALLS AND OTHER PIPES. PIPING SHALL BE INSTALLED SO THAT EVERY PORTION OF THE SYSTEM CAN BE ENTIRELY DRAINED.

C. INSTALL PIPE AND ALL OTHER SYSTEM COMPONENTS IN A MANNER WHICH WILL NOT INTERFERE WITH THE FULL SWING OF ANY DOOR.

D. WHERE SPRINKLERS ARE INSTALLED IN AREAS WITHOUT A HUNG CEILING THIS CONTRACTOR SHALL INSTALL SPRINKLERS BOTH OVER AND UNDER EXISTING AND NEW DUCTWORK 4'–0" AND WIDER OR WHERE THE TOTAL AGGREGATE WIDTH OR LENGTH OF MULTIPLE DUCTS EXCEEDS 4'–0" OR LARGER.

E. REAM ALL PIPES SMOOTH BEFORE INSTALLATION. DO NOT BEND, SPLIT, FLATTEN OR DAMAGE PIPE IN ANY WAY. ANY PIPE DAMAGED SHALL BE REPLACED BY THIS CONTRACTOR AT NOT ADDITIONAL COST TO THE OWNER.

F. INSTALL A DIELECTRIC FITTING BETWEEN ALL CONNECTIONS BETWEEN PIPING OF DISSIMILAR METALS.

G. INSTALL SPRINKLER HEADS IN GYPSUM AND PLASTER CEILINGS SYMMETRICALLY AND ALIGN WITH ADJACENT CEILING FIXTURES.

3.04 MATERIAL DELIVERY, STORAGE AND HANDLING

A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE ON–TIME DELIVER OF HIS MATERIALS.

B. COORDINATE WITH OWNER AND/OR BUILDING MANAGEMENT THE BUILDING REQUIREMENTS FOR THE DELIVERING OF ALL MATERIALS.

C. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF ALL HIS MATERIALS. ANY MATERIALS DAMAGED DURING DELIVERY, STORAGE, AND HANDLING SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

3.05 PAINTING

A. PAINT SPRINKLER PIPING EXPOSED TO VIEW WITHIN BUILDING WITH TWO (2) COATS OF RUST–INHIBITING PAINT; COLOR FINAL COAT SHALL BE DETERMINED BY ARCHITECT.

ARCHITECT:

Colliers Engineering & Design

PHASE ZERO DESIGN

CLIENT:

Nuvance Health

CONSULTANT:

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PROJECT:

NUVANCE HEALTH

NORWALK HOSPITAL RETAIL PHARAMACY WORKROOM

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REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

ISSUED FOR: BID

ISSUED DATE: 08/14/2024

DRAWN BY: AG

CHECKED BY: TL

PROJECT NUMBER: 22559

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

DRAWING NAME:

FIRE PROTECTION SPECIFICATIONS

DRAWING NO.

FP200

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