GENERAL LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL DETAIL SHEETS	SYMBOL PLAN SHEETS	DESCRIPTION
		SECTION DESIGNATION SECTION CUT ON THIS SHEET				CAP END OF PIPE
				XX	SLOPE	PITCH DOWN IN DIRECTION OF ARROW
		VIEW REFERENCE DESIGNATION VIEW REFERENCE ON THIS SHEET				PIPE ANCHOR
						PIPE ALIGNMENT GUIDE
	X 123	EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER (UNIT SERVED - FLOOR - SEQUENCE #)				UNION OR FLANGE
						CONCENTRIC PIPE REDUCER
	A 10 250	DIFFUSER IDENTIFICATION DIFFUSER NECK DIAMETER DIFFUSER CFM				ECCENTRIC PIPE REDUCER
			PRV			PRESSURE REDUCING VALVE
	E 960x15 9999	LINEAR DIFFUSER IDENTIFICATION LINEAR DIFFUSER NECK DIAMETER LINEAR DIFFUSER LENGTH LINEAR DIFFUSER CFM	PTRV			PRESSURE AND/OR TEMPERATURE RELIEF VALVE
						PLUG VALVE
						ISOLATION (GATE / BALL) VALVE
						VERTICAL PIPE VALVE
	2'-0" FTR 3'-6" 28	FINNED TUBE RADIATOR ACTIVE ELEMENT LENGTH EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER RADIATOR ENCLOSURE LENGTH (OR W-W=WALL-TO-WALL)	GLV			GLOBE VALVE
			BFV			BUTTERFLY VALVE
	K	KEY NOTE REFERENCE	BV			BALL VALVE
	T	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE	CV			CHECK VALVE
		TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FLR)				SOLENOID / MOTORIZED VALVE
		POINT OF CONNECTION, NEW TO EXISTING				BUTTERFLY SOLENOID VALVE
		DIRECTION OF FLOW IN PIPE				HOSE END DRAIN VALVE
		DUCTWORK, PIPING AND EQUIPMENT TO BE REMOVED	P/T	P/T		PRESSURE / TEMPERATURE TAP
(E)		EXISTING				STRAINER
(N)		NEW				STRAINER W/ BLOWDOWN
(R)		RELOCATED				BRAIDED FLEXIBLE PIPE CONNECTOR
(F)		FUTURE				DOUBLE-BOWL FLEXIBLE PIPE CONNECTOR
DIA		DIAMETER				THERMOMETER
WAD		WALL ACCESS DOOR				PRESSURE GAUGE
NIC		NOT IN CONTRACT				SIGHT GLASS
AFF		ABOVE FINISHED FLOOR	C.A.P.			CEILING ACCESS PANEL
GC		GENERAL CONTRACTOR				PUMP
MC		MECHANICAL CONTRACTOR	TB			THRUST BLOCK
EC		ELECTRICAL CONTRACTOR				MANUAL AIR VENT
UNO		UNLESS NOTED OTHERWISE				AUTOMATIC AIR VENT

DOUBLE/SINGLE LINE DUCT LEGEND
(Not all symbols listed below are used on these drawings)

SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE
45° TEE (ROUND)		90° TEE (RECTANGULAR)	SEE DETAIL	FLEX DUCT	RIGID FLEX RIGID FLEX	90° RADIUS ELBOW	
45° TEE (RECTANGULAR)		90° TEE (ROUND)	CONICAL TEE	MANUAL VOLUME DAMPER		90° ELBOW	
DUCT SPLIT		GRD RUNOUT	TAKEOFF WITH VOLUME DAMPER IND REC	REDUCER	20 8	45° ELBOW	

HVAC LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION
HWS		HOT WATER SUPPLY PIPING			SUPPLY DUCT UP / DOWN
HWR		HOT WATER RETURN PIPING			RETURN DUCT UP / DOWN
CHWS		CHILLED WATER SUPPLY PIPING			EXHAUST DUCT UP / DOWN
CHWR		CHILLED WATER RETURN PIPING			ROUND DUCT UP / ROUND DUCT DOWN
D		COOLING COIL DRAIN PAN PIPING			FLAT OVAL DUCTWORK
CWS		CONDENSER WATER SUPPLY PIPING			FLEXIBLE DUCT CONNECTION
CWR		CONDENSER WATER RETURN PIPING	BDD		BACKDRAFT DAMPER
GHWS		GLYCOL HEATING WATER SUPPLY PIPING	TCD		TEMP. CONTROL DAMPER-OPPOSED BLADE
GHWR		GLYCOL HEATING WATER RETURN PIPING	TCD		TEMP. CONTROL DAMPER- PARALLEL BLADE
PCWS		PROCESS CHILLED WATER SUPPLY PIPING			LOUVER WITH SCREEN
PCWR		PROCESS CHILLED WATER RETURN PIPING	MVD		MANUAL VOLUME DAMPER
LPS		LOW PRESSURE STEAM SUPPLY PIPING (0 - 15#)	MD		DUCT MOTORIZED DAMPER
LPC		LOW PRESSURE CONDENSATE RETURN PIPING			SPIN-IN FITTING WITH MVD
MPS		MEDIUM PRESSURE STEAM SUPPLY PIPING (16# - 60#)	FD		DUCT FIRE DAMPER
MPC		MEDIUM PRESSURE CONDENSATE RETURN PIPING	FSD		COMBINATION DUCT SMOKE & FIRE DAMPER
HPS		HIGH PRESSURE STEAM SUPPLY PIPING (61# + 125#)	SD		DUCT SMOKE DAMPER
HPC		HIGH PRESSURE CONDENSATE RETURN PIPING			DUCT SMOKE DETECTOR
PC		PUMPED CONDENSATE PIPING	DAD		DUCT ACCESS DOOR
BBD		BOILER BLOWDOWN PIPING			TURNING VANES IN DUCT ELBOW
BF		BOILER FEED WATER PIPING			
RL		REFRIGERANT LIQUID PIPING	EP		ELECTRIC-PNEUMATIC CONTROL VALVE
RS		REFRIGERANT SUCTION PIPING	PE		PNEUMATIC-ELECTRIC CONTROL SWITCH
RHG		REFRIGERANT HOT GAS PIPING			WALL SWITCH / EMERGENCY SWITCH
TT	TT	THERMOSTATIC STEAM TRAP		T	WALL MOUNTED THERMOSTAT
F&T	F&T	FLOAT AND THERMOSTATIC STEAM TRAP		CD	WALL MOUNTED CARBON DIOXIDE SENSOR
IBT	IBT	INVERTED BUCKET STEAM TRAP		OX	WALL MOUNTED OXYGEN SENSOR
TCV		(2 OR 3-WAY) TEMPERATURE CONTROL VALVE		H	HUMIDISTAT
		VENTURI METER			UNIT MOUNTED THERMOSTAT
BV		CALIBRATED BALANCING VALVE		U	UNDERCUT DOOR
AFV		AUTO FLOW VALVE		RISE	DUCT RISE
RSV		REFRIGERANT SERVICE VALVE		DROP	DUCT DROP
DPS	DP	DIFFERENTIAL PRESSURE SWITCH	A.L.		ACOUSTICALLY LINED DUCTWORK
FS		FLOW SWITCH	TCOAD		TEMPERATURE CONTROL OUTSIDE AIR DAMPER
EJ		EXPANSION JOINT	TCRAD		TEMPERATURE CONTROL RETURN AIR DAMPER
BJ		BALL JOINT EXPANSION COMPENSATOR	TCEAD		TEMPERATURE CONTROL EXHAUST AIR DAMPER
			SP IN WC		STATIC PRESSURE IN INCHES WATER COLUMN
			SD		SUPPLY AIR DEVICE
1" HWR 1" HWS		SUPPLY AND RETURN BRANCH PIPING TO TERMINAL UNIT	RG		RETURN AIR DEVICE
			RG		RETURN AIR DEVICE WITH SOUND BOOT
			EG		EXHAUST AIR DEVICE

HVAC PLAN NOTES:

1. ALL SUPPLY AIR DIFFUSERS ARE 4-WAY AIR PATTERN UNLESS SHOWN OTHERWISE.
2. DUCT SIZE OF BRANCH DUCT TO AIR DEVICE SHALL BE THE SAME SIZE AS NECK SIZE OF AIR DEVICE UNLESS NOTED OTHERWISE.
3. ALL HEATING WATER SUPPLY AND RETURN BRANCH PIPING TO TERMINAL BOXES SHALL BE 3/4" UNLESS NOTED OTHERWISE. ALL PIPING TAKE-OFFS FROM MAINS SHALL BE TOP TAKE-OFFS WITH SWING JOINTS.
4. BRANCH DUCT SIZE TO INLET OF ALL TERMINAL BOXES SHALL BE THE SAME SIZE AS THE INLET SCHEDULED UNLESS NOTED OTHERWISE. BRANCH DUCTS TO TERMINAL BOXES EXCEEDING 15' OR TWO ELBOWS, SHALL BE UP-SIZED TO NEXT STANDARD DIAMETER.
5. UNLESS OTHERWISE NOTED, ALL SUPPLY AIR DUCTWORK SHALL BE EXTERNALLY WRAPPED TO THICKNESS AS STATED IN SPECIFICATIONS. RETURN AND EXHAUST DUCTWORK IS NEITHER LINED NOR WRAPPED.
6. DUCT SIZES INDICATED ARE FREE AREA SIZES. WHERE INTERNAL DUCT LINING IS PROVIDED, SHEET METAL SHALL BE INCREASED IN SIZE TO ACCOUNT FOR THE THICKNESS OF THE LINER.

GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. A DETAILED METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY AFFECTS THE SAFETY OF THE OCCUPANTS, OWNER'S EQUIPMENT OR VALUABLE CONTENTS OR ANY SYSTEM WHICH SUPPORTS THESE SYSTEMS; OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY.
3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY THE ENGINEER/ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.
4. COORDINATE WORK WITH ALL TRADES.
5. CONTRACTOR IS RESPONSIBLE FOR SECURING AND WEATHERPROOFING ANY ROOF OPENING NOT COMPLETED DURING WORKING HOURS.
6. COORDINATE ALL DUCTWORK AND PIPING WITH EQUIPMENT, STRUCTURE, ETC.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DEACTIVATION OF ROOF-MOUNTED EQUIPMENT AND ASSOCIATED INDOOR EQUIPMENT. ONLY ONE UNIT SHALL BE TAKEN OUT OF SERVICE AT ANY TIME, WITH REMAINDER OF UNITS LEFT OPERATIONAL.
8. CONTRACTOR SHALL NOT SHUT DOWN / TAKE OUT OF SERVICE ANY SYSTEMS WITHOUT FIRST COORDINATING WITH OWNER AND PREPARING M.O.P.

DEMOLITION GENERAL NOTES:

1. EXISTING ITEMS TO REMAIN ARE DENOTED LIGHTLY UNLESS OTHERWISE NOTED. ALL ITEMS SHOWN DASHED & BOLD SHALL BE REMOVED UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL NOT SHUT-OFF OR PUT OUT OF SERVICE ANY SYSTEMS OR SERVICE WITHOUT FIRST COORDINATING WITH THE OWNER.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND UNDERSTAND THE EXTENT OF THE REMODEL WORK REQUIRED PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENT.
4. CONTRACTOR SHALL DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENT.
5. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, VERIFY EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
6. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER UNLESS OTHERWISE NOTED AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
7. WHERE EXISTING PIPING, T.C. TUBING/WIRING ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, THE WALLS SHALL BE REPAIRED TO MATCH ORIGINAL CONDITIONS.
8. WHERE EXISTING PIPING TO BE REMOVED PASSES THROUGH FLOORS, THEY SHALL BE CUT BACK TO WITHIN CONCRETE AND FILLED WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH WITH CONCRETE SURFACE.

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No.	Date	Revision

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Drawn By: SP | Checked By: SC

Drawing
MECHANICAL LEGENDS & NOTES

M-001

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DESIGN DEVELOPMENT

DUCT PRESSURE CLASSIFICATION SCHEDULE

DUCT TYPE	MATERIAL	PRESSURE CLASS	REMARKS
MEDIUM PRESSURE SUPPLY	GALVANIZED STEEL	+4"	BETWEEN SYSTEM FAN & TERMINAL BOX
LOW PRESSURE SUPPLY	GALVANIZED STEEL	+2"	BETWEEN TERMINAL BOX & ROOM
RETURN / TRANSFER AIR	GALVANIZED STEEL	+/-2"	

TERMINAL BOX SCHEDULE (HOT WATER HEAT)

REQUIREMENTS APPLYING TO ALL TERMINAL BOXES:

A. PROVIDE BOX SELECTION TO MEET LAT, DESIGN CFM AND HEATING MBH. FINAL GPM SHALL BE SET DURING BALANCING TO FLOW RATES IN LISTED PRODUCT DATA SUBMITTALS.
B. MAXIMUM STATIC PRESSURE IS BASED ON WIDE OPEN UNIT AT MAXIMUM FLOW FOR TERMINAL BOX WITH 2-ROW COIL.
C. HEATING WATER SYSTEM CONTAINS 0% PROPYLENE GLYCOL.
D. 2-ROW HEATING COIL CONDITIONS SHOWN. 1 & 2 ROW HEATING COILS ACCEPTABLE COMPLIANT WITH MBH, WATER FLOW, AIR & WATER PRESSURE DROP REQUIREMENTS & LIMITATIONS.
E. USE OF 3- & 4-ROW COILS MUST BE SPECIFICALLY IDENTIFIED BY THE SUPPLIER & ACCEPTED BY THE ENGINEER FOR EACH LOCATION PROPOSED.
F. TERMINAL BOX MAXIMUM AIR FLOW CAPABILITIES: 6"=450 CFM, 7"=650 CFM, 8"=800 CFM, 9"=1050 CFM, 10"=1350 CFM, 12"=2000 CFM, 14"=3000 CFM, 16"=4000 CFM & 24"x16"=8000 CFM.
G. MINIMUM 2-ROW COILS REQUIRED ON ALL PERIMETER BOXES.
H. REFER TO MECHANICAL LEGENDS AND NOTES SHEET FOR PROJECT ELEVATION.

REMARKS:

1. EXISTING TERMINAL BOX TO BE RE-USED, RE-INSTALLED, AND RE-BALANCED TO THE CFM SHOWN.

DESIG.		INTERIOR OR PERIMETER ZONE	MFR	MODEL	INLET SIZE (IN.)	AIR PRESS DROP MAX (IN W.C.) (SEA LEVEL)	COOLING DESIGN CFM		HEATING DESIGN CFM AT ELEV	HEATING WATER COIL DATA						MODULATING CONTROL VALVE TYPE	SOUND ATTEN. (Y/N)	REMARKS
TYPE	NO.						MAXIMUM AT ELEV	MINIMUM AT ELEV		EAT °F	LAT °F	MBH	GPM	WATER P.D. MAX (FT WC)	EWT °F			
TB	2-1-1	PERIMETER	PRICE	SDV	12	0.74	1200	360	360	55	90	10.9	0.8	6.6	160	2-WAY	No	
TB	2-1-2	PERIMETER	PRICE	SDV	12	0.74	1300	390	640	55	90	19.4	1.6	6.6	160	2-WAY	No	1
TB	2-1-3	INTERIOR	PRICE	SDV	8	0.38	380	115	115	55	80	2.5	0.5	0.8	160	2-WAY	No	
TB	2-1-5	PERIMETER	PRICE	SDV	10	0.38	660	200	320	55	90	9.7	0.8	2.1	160	2-WAY	No	
TB	2-1-6	INTERIOR	PRICE	SDV	12	0.74	1500	450	450	55	80	9.7	0.8	6.6	160	2-WAY	No	1
TB	2-1-7	INTERIOR	PRICE	SDV	6	0.39	250	75	75	55	80	1.6	0.5	0.6	160	2-WAY	No	1
TB	2-1-8	INTERIOR	PRICE	SDV	12	0.74	1100	330	330	55	80	7.1	0.6	6.6	160	2-WAY	No	1
TB	2-1-9	PERIMETER	PRICE	SDV	8	0.59	885	265	885	55	90	26.8	2.2	3.2	160	2-WAY	No	
TB	2-1-10	INTERIOR	PRICE	SDV	8	0.38	440	130	130	55	80	2.8	0.5	0.8	160	2-WAY	No	
TB	2-1-11	PERIMETER	PRICE	SDV	6	0.46	580	170	560	55	90	17.0	1.4	1.3	160	2-WAY	No	
TB	2-1-12	PERIMETER	PRICE	SDV	6	0.46	560	170	560	55	90	17.0	1.4	1.3	160	2-WAY	No	
TB	2-1-13	INTERIOR	PRICE	SDV	6	0.39	320	95	95	55	80	2.1	0.5	0.6	160	2-WAY	No	
TB	2-1-14	INTERIOR	PRICE	SDV	8	0.38	370	110	110	55	80	2.4	0.5	0.8	160	2-WAY	No	

PLUMBING FIXTURE SCHEDULE

NOTES:

1. REFER TO GENERAL SPECIFICATIONS FOR WATER CLOSETS, URINALS, LAVATORIES, SINKS AND MISCELLANEOUS FIXTURE REQUIREMENTS.
2. GRAB BARS BY ARCHITECT.
3. THIS SCHEDULE INCLUDES ITEMS THAT MAY NOT BE INCLUDED IN THE DRAWING DOCUMENTS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND MOUNTING HEIGHT.

	FIXTURE					TRIM		ELECTRICAL ACCESSORY REQUIREMENTS		CONNECTIONS				
DESIG.	FIXTURE NAME	FIXTURE DESCRIPTION	MANUFACTURER	MODEL	SIZE	MANUFACTURER	MODEL	I./R/BATTERY/HP	FLOW	WASTE	VENT	CW	HW	REMARKS
S-1	1 COMPT. SINK	SELF-RIMMING, STAINLESS STEEL, 2-HOLE PUNCH OFF-CENTER DRAIN, MANUAL OPERATED FAUCET AT 2.2 GPM	ELKAY	DSESR12722	15" X 17" X 6 1/2"	T&S BRASS	786-XKABCP	MANUAL	2.2 GPM	2"	1-1/2"	1/2"	1/2"	1-4
S-2	2 COMPT. SINK	SELF-RIMMING, STAINLESS STEEL, 2-HOLE PUNCH OFF-CENTER DRAIN, MANUAL OPERATED FAUCET AT 2.2 GPM	ELKAY	MLR-3319	33" X 19-1/2" X 7-5/8"	T&S BRASS	BL-5700-8	MANUAL	2.2 GPM	2"	1-1/2"	1/2"	1/2"	1-4

AIR DEVICE SCHEDULE

REMARKS:

GENERAL - APPLIES TO ALL AIR DEVICES: MANUAL VOLUME DAMPERS SHALL BE ACCEPTABLE IN DUCTWORK AT THE BRANCH POINT OF THE RUNOUT DUCT OR IN-LINE TO THE AIR DEVICE BY THE CONTRACTOR INSTALLING DUCTWORK. A DAMPER LOCATED AT THE AIR DEVICE SHALL BE ACCEPTABLE WHEN PERMITTED BY ENGINEER ON A CASE-BY-CASE BASIS OR WHEN THE MANUFACTURER REQUIRES AN INTEGRAL MANUAL VOLUME DAMPER.

1.

DESIG.	FUNCTION	STYLE	MFR.	MODEL	FRAME STYLE	MODULE SIZE	MATERIAL	FINISH	REMARKS
A	CEILING SUPPLY	PLAQUE FACE FIXED PATTERN, RECTANGULAR DIFFUSER	PRICE	SPD	LAY-IN	24x24	STEEL	WHITE	
B2	CEILING RETURN, TRANSFER	MODULAR PERFORATED FACE GRILLE	PRICE	PDDR	LAY-IN	SEE PLANS	STEEL	WHITE	
D	SIDEWALL RETURN, EXHAUST	FIXED ANGLE VANES, 3/4" O.C.	PRICE	530	SURFACE	SEE PLANS	STEEL	WHITE	BLADES PARALLEL WITH LONG DIMENSION, UPTURNED FOR VISION BLOCK
E2	SIDEWALL SUPPLY	ADJUSTABLE VANES, DOUBLE DEFLECTION, 3/4" O.C.	PRICE	520	SURFACE	SEE PLANS	STEEL	WHITE	

AIR COMPRESSOR / VACUUM PUMP SCHEDULE

REMARKS:

1. REFER TO ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS, INCLUDING COORDINATION OF VOLTAGE, PHASE, SCCR, WIRE SIZES, AND OVERCURRENT PROTECTIVE DEVICES. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR MINIMUM FAULT CURRENT RATING THAT EACH UNIT SHALL EXCEED. UNIT NAMEPLATE SHALL INDICATE THE SHORT CIRCUIT CURRENT RATING.
2. PROVIDE VIBRATION MOUNTINGS PER NFPA 99.
3. ALL EQUIPMENT TO BE SIZED FOR 5,800 FT. ELEVATION.
4. PROVIDE WITH DESICCANT DRYER (TO MATCH SCFM).

DESIG.						ELECTRICAL			SIZE (INCHES)			
NAME	NO.	MFR.	MODEL	SERVICE	SCFM	NUMBER OF MOTORS	VOLTAGE	PHASE	L	W	H	REMARKS
AC	1	POWEREX	MTSD0503	COMPRESSED AIR	16.6	2	460	3	31	73	68	1-4
MVP	1	POWEREX	VVODTD0303	VACUUM	13.5	1	460	3	36	53	90	1-3

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Drawing
MECHANICAL SCHEDULES

M-002

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DESIGN DEVELOPMENT

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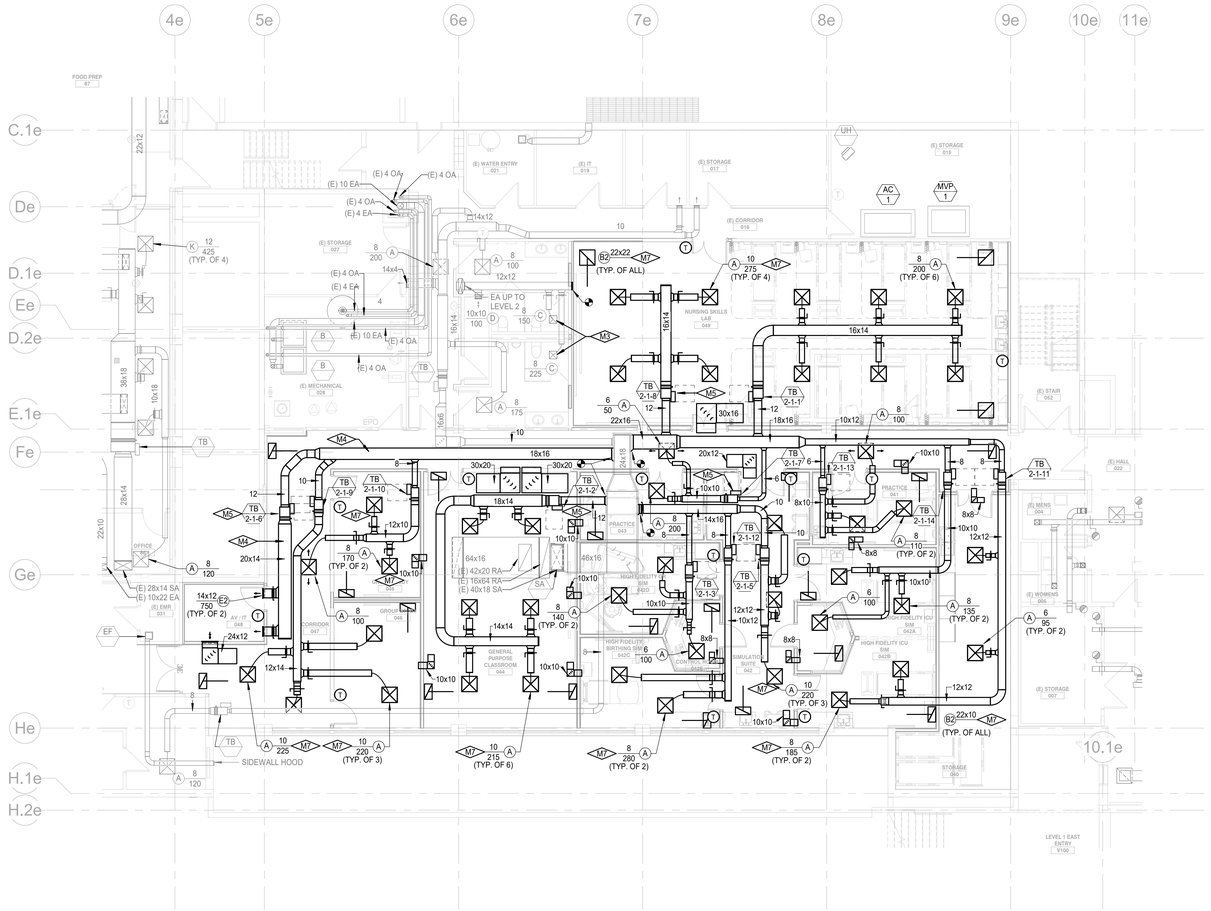
KEYNOTES	
M3	RE-BLANCE EXISTING GRILLES TO CFM SHOWN.
M4	COORDINATE DUCT ROUTING WITH CABLE TRAY CONTRACTOR.
M5	EXISTING TERMINAL BOX TO BE RE-USED, RE-INSTALLED, AND RE-BALANCED TO THE CFM SHOWN.
M7	RE-USE EXISTING DIFFUSER. CONTRACTOR TO VERIFY QUANTITY AND QUALITY OF EXISTING DIFFUSERS.



FIRST LEVEL HVAC PLAN

SCALE: 1/8" = 1'-0"

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Drawing
FIRST LEVEL HVAC PLAN

M-101

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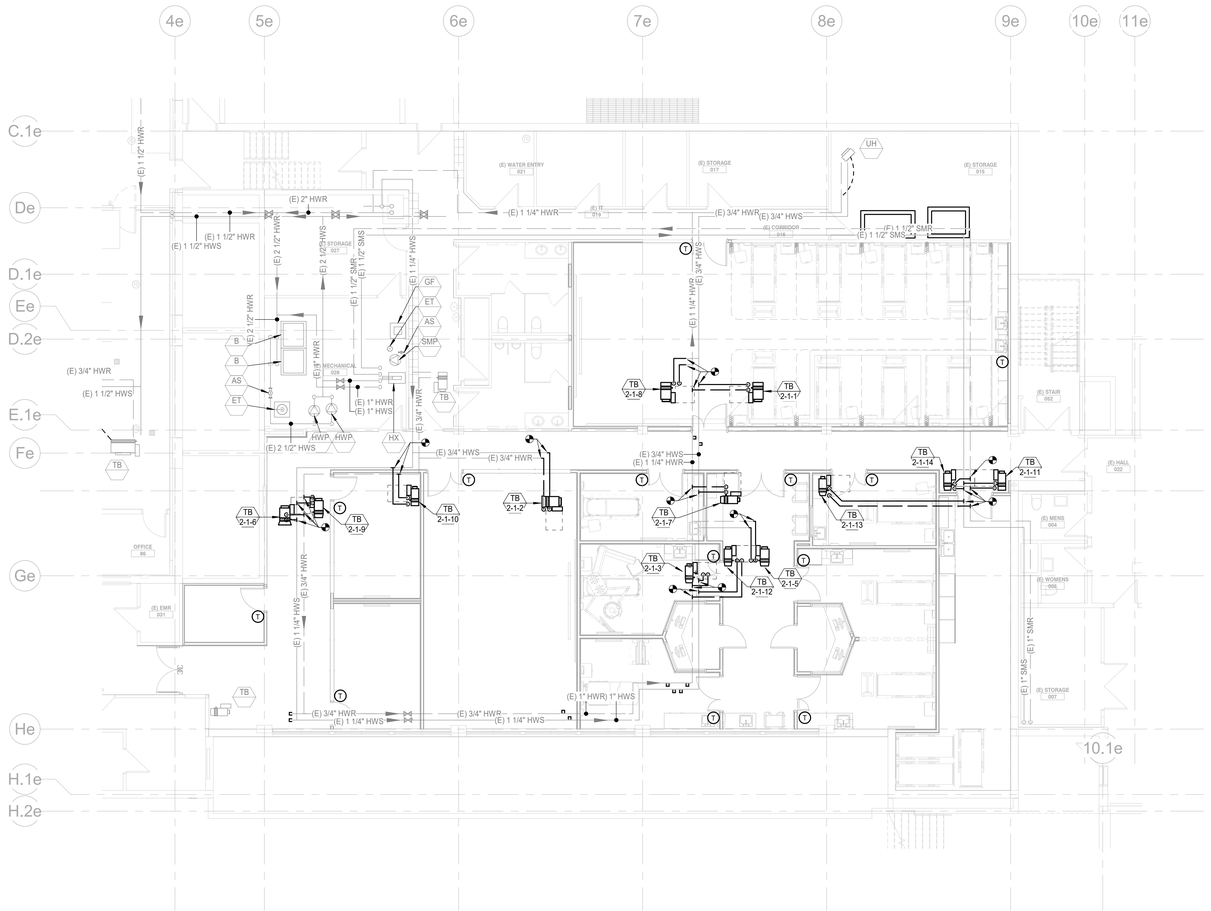
KEYNOTES



FIRST LEVEL HVAC PIPING PLAN

SCALE: 1/8" = 1'-0"

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Drawing
FIRST LEVEL HVAC PIPING PLAN

M-111

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DESIGN DEVELOPMENT

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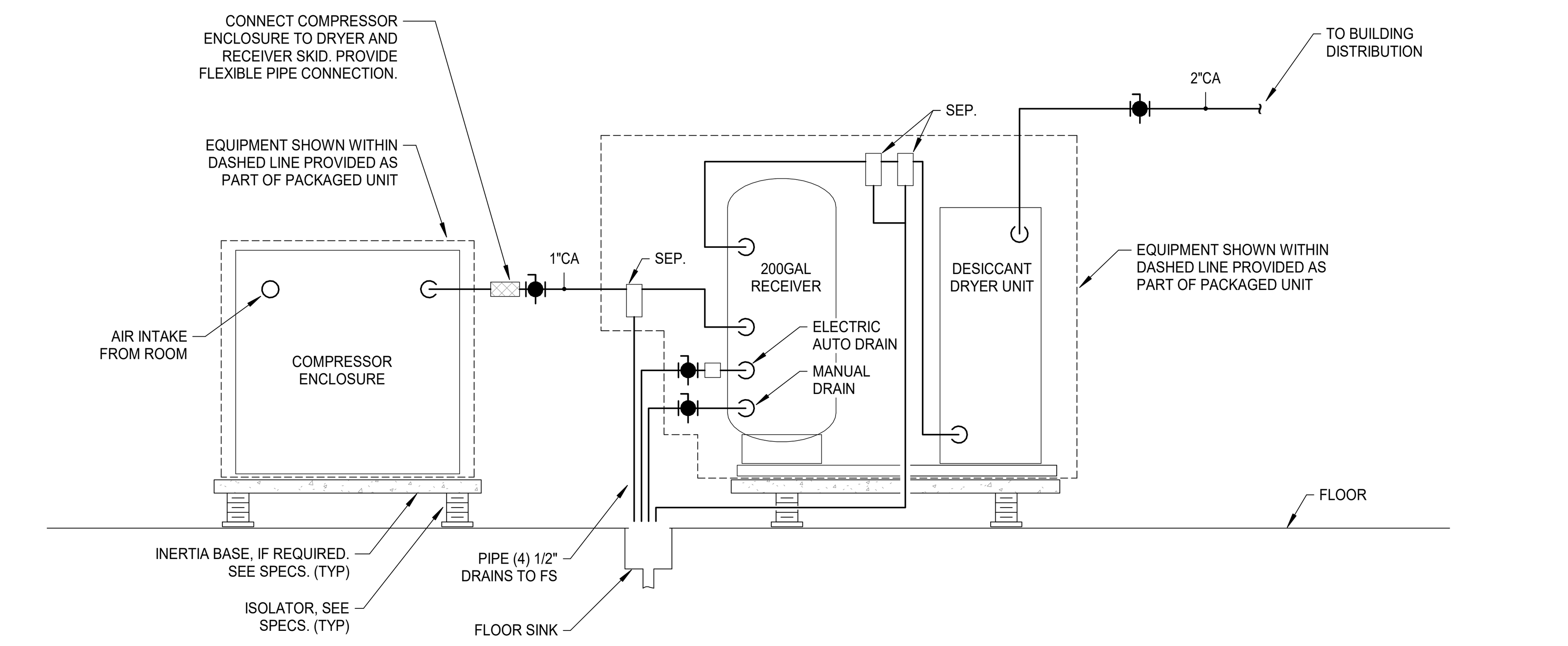
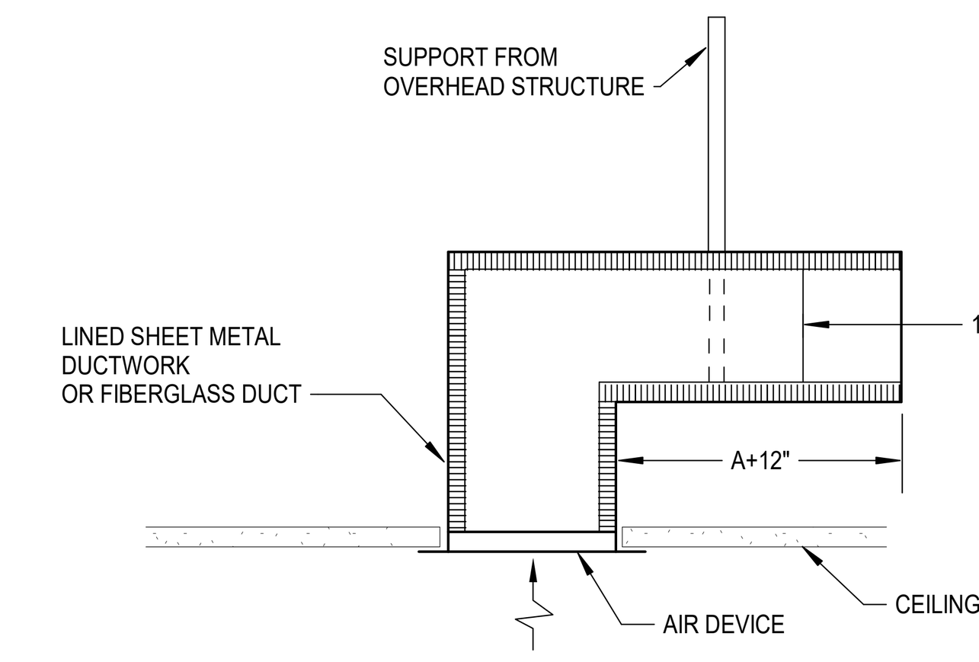


AC-1 AIR COMPRESSOR DETAIL

SCALE: NONE

0943-01



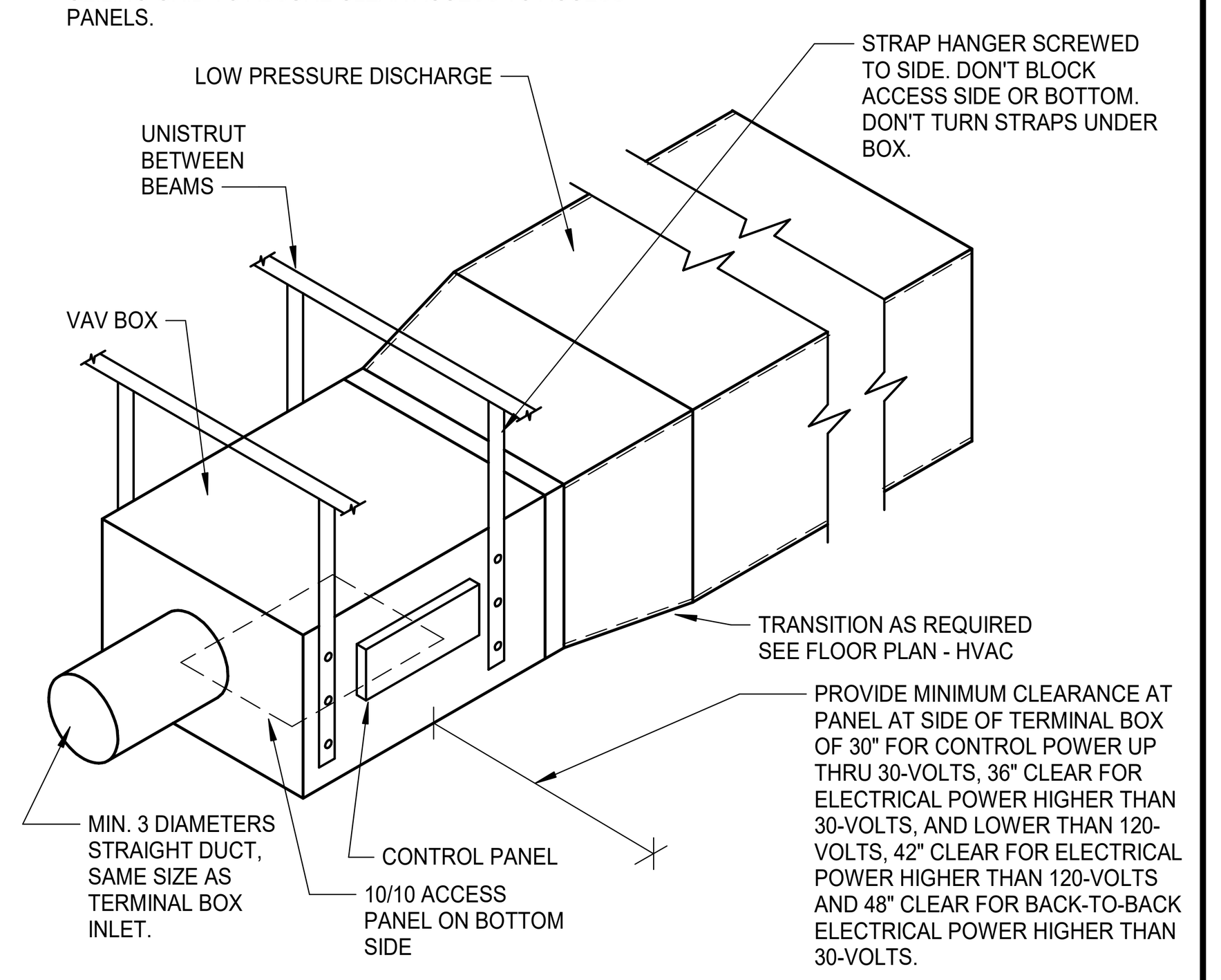
NOTES:
1. PROVIDE ON ALL LAY-IN RETURN AIR DEVICES, UNLESS NOTED OTHERWISE.
2. "A" EQUALS LONGEST DIMENSION OF AIR DEVICE NEK. EXAMPLE: FOR A 22/10 AIR DEVICE, "A" EQUALS 22".

SOUND ELBOW DETAIL

SCALE: NONE

3713-04

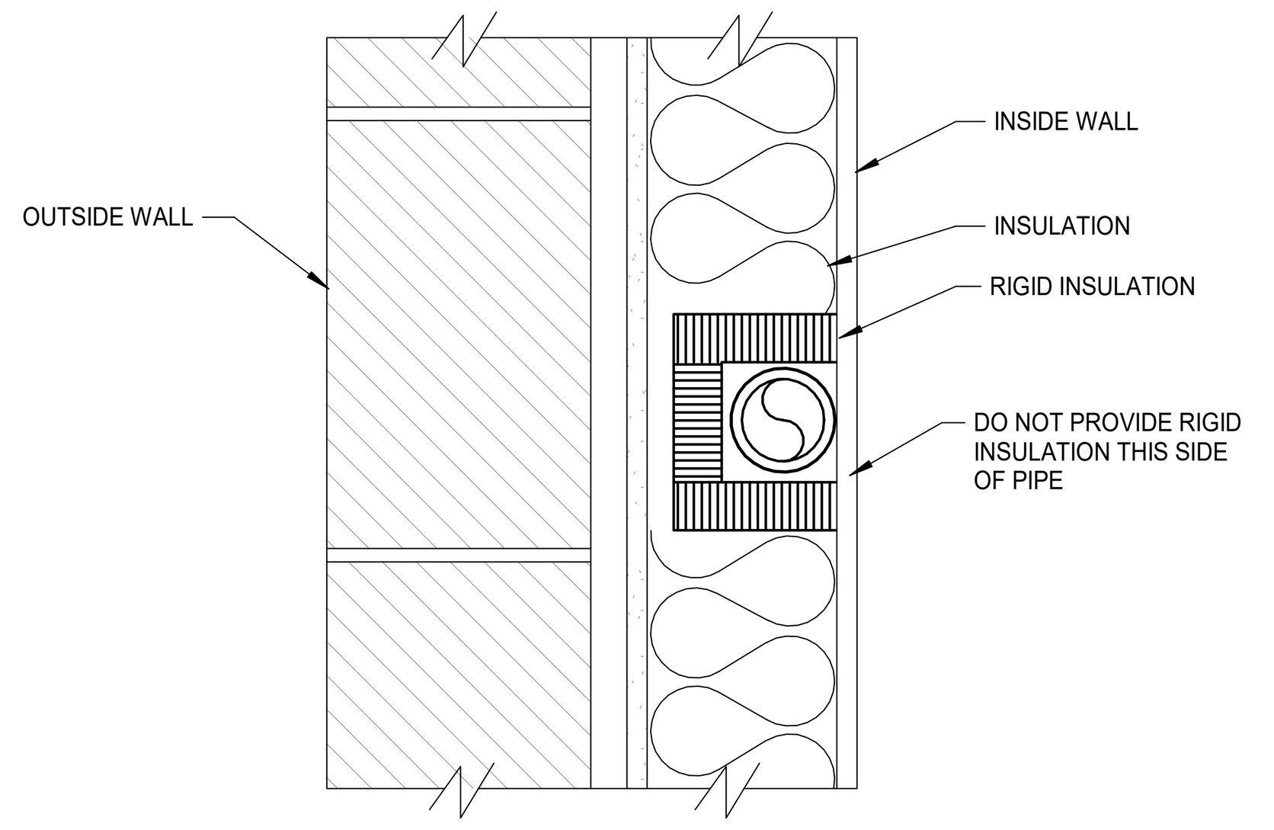
NOTE: COORDINATE INSTALLATION OF TERMINAL BOX WITH CEILING GRID TO ASSURE CLEAR ACCESS TO ACCESS PANELS.



TERMINAL BOX DETAIL

SCALE: NONE

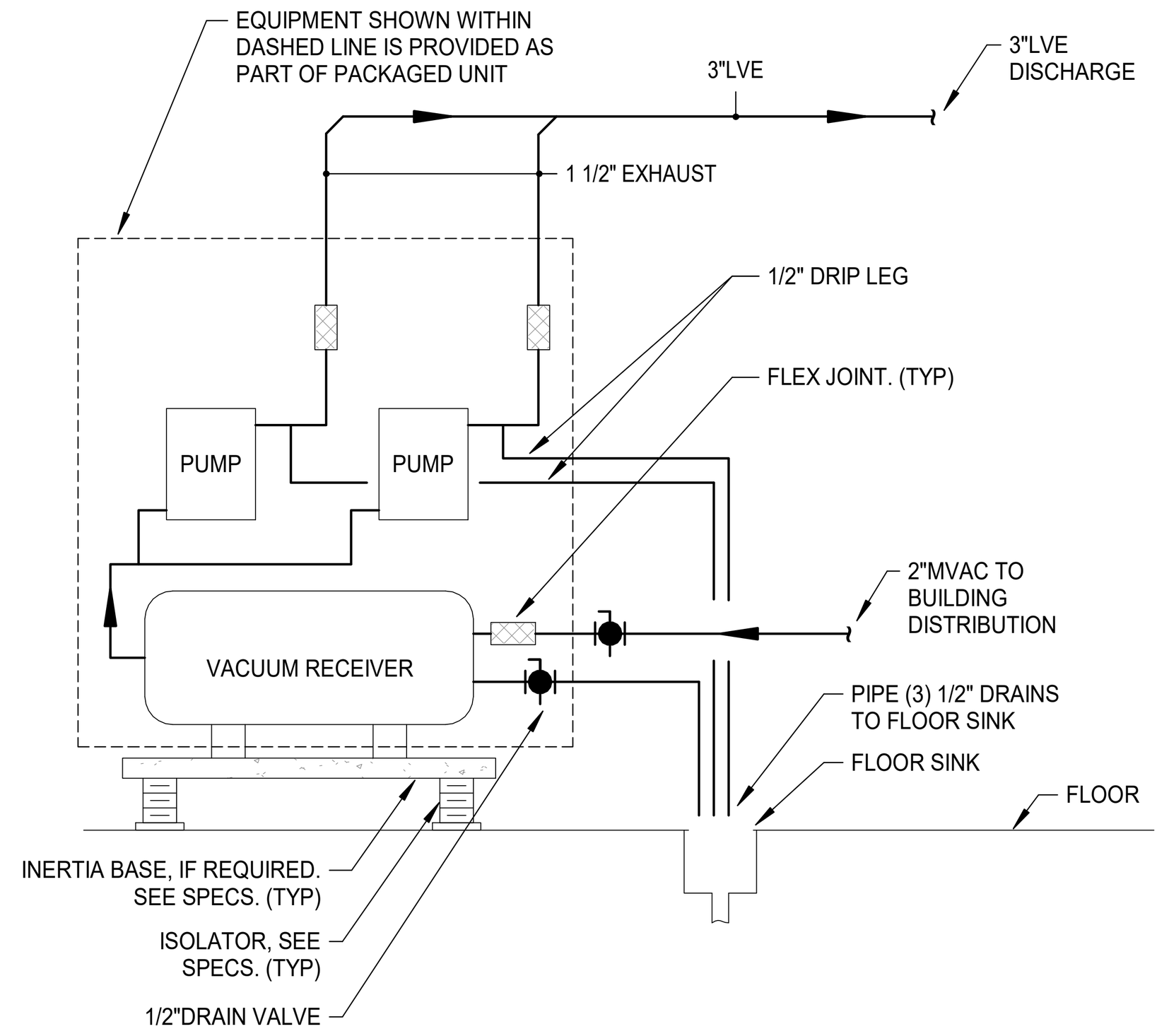
8000-42 9.17.21



PIPE IN OUTSIDE WALL DETAIL

SCALE: NONE

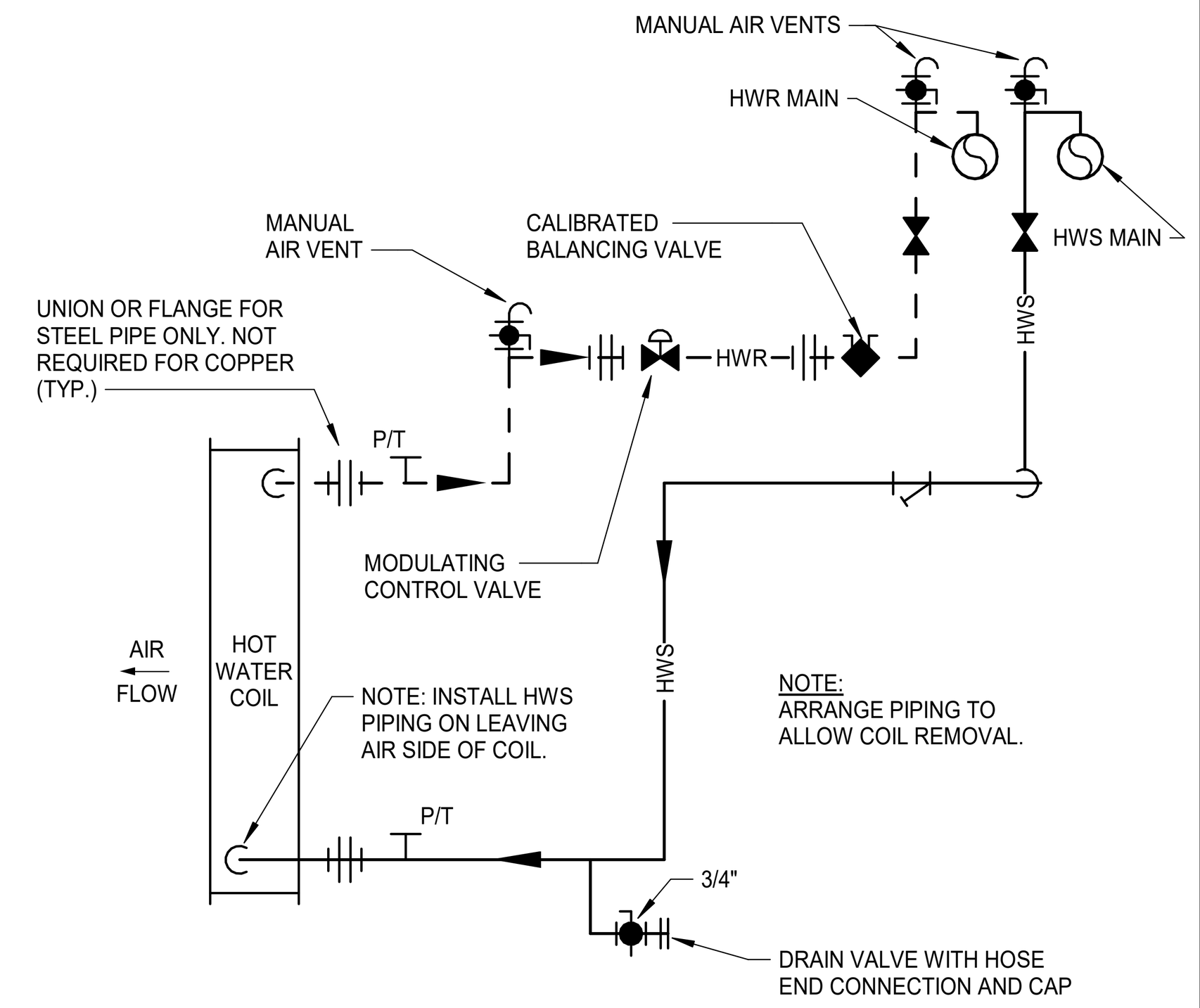
0510-08



MVP-1 VACUUM PUMP DETAIL

SCALE: NONE

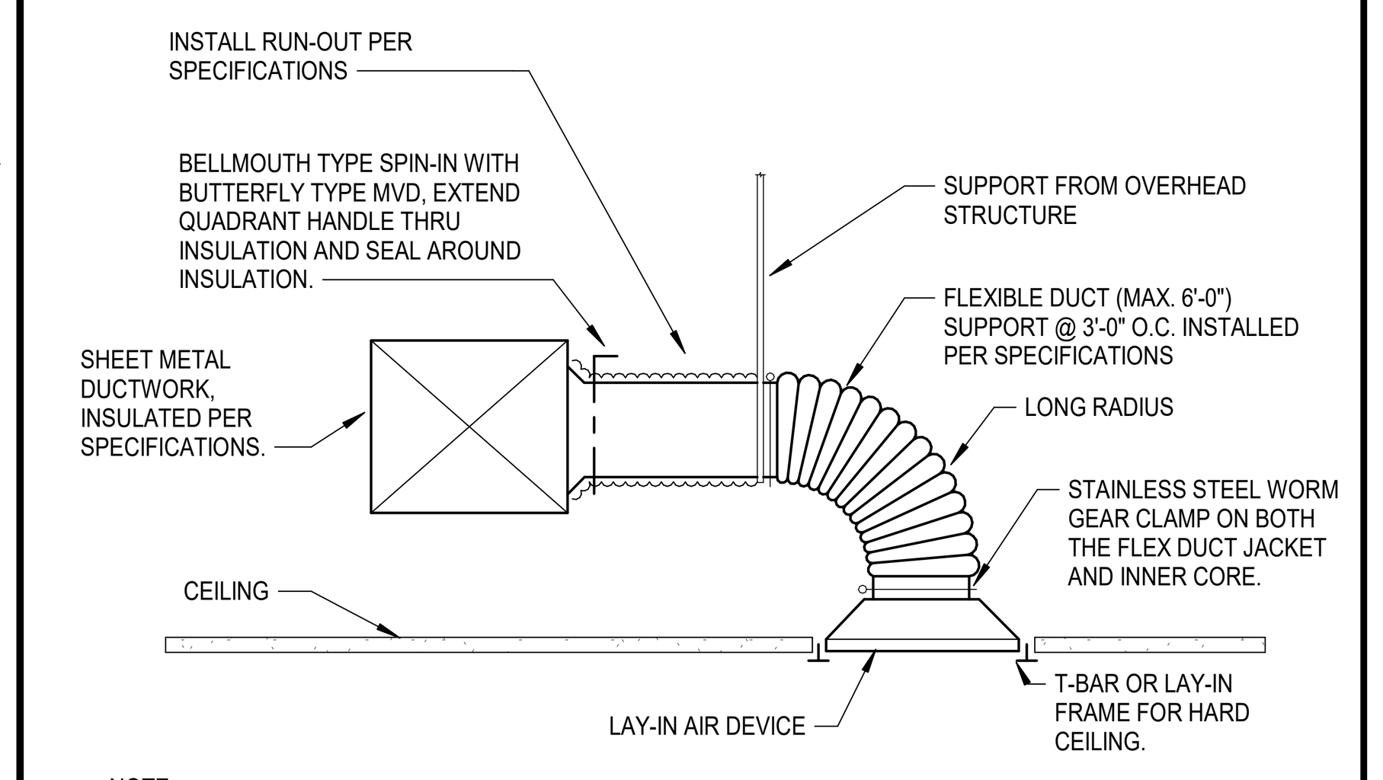
0943-01



HOT WATER REHEAT COIL PIPING DETAIL (2-WAY VALVE, SINGLE COIL)

SCALE: NONE

8000-12 8.20.20



NOTE:
CEILING DIFFUSER SHOWN; REGISTERS AND GRILLES SIMILAR.

HARD CEILING INSTALLATIONS:
1. PROVIDE LAY-IN FRAME TO ALLOW AIR DEVICE TO BE REMOVED.
2. LOCATE MVD TO BE ACCESSIBLE. IF SPIN-IN IS NOT ACCESSIBLE PROVIDE A SEPARATE MVD ACCESSIBLE BY REMOVING THE GRILLE IN LIEU OF THE ONE AT THE SPIN-IN.

ROUND NECK AIR DEVICE DETAIL

SCALE: NONE

3713-08

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ARCHITECTURE
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PLANNING
INTERIOR DESIGN

No.	Date	Revision

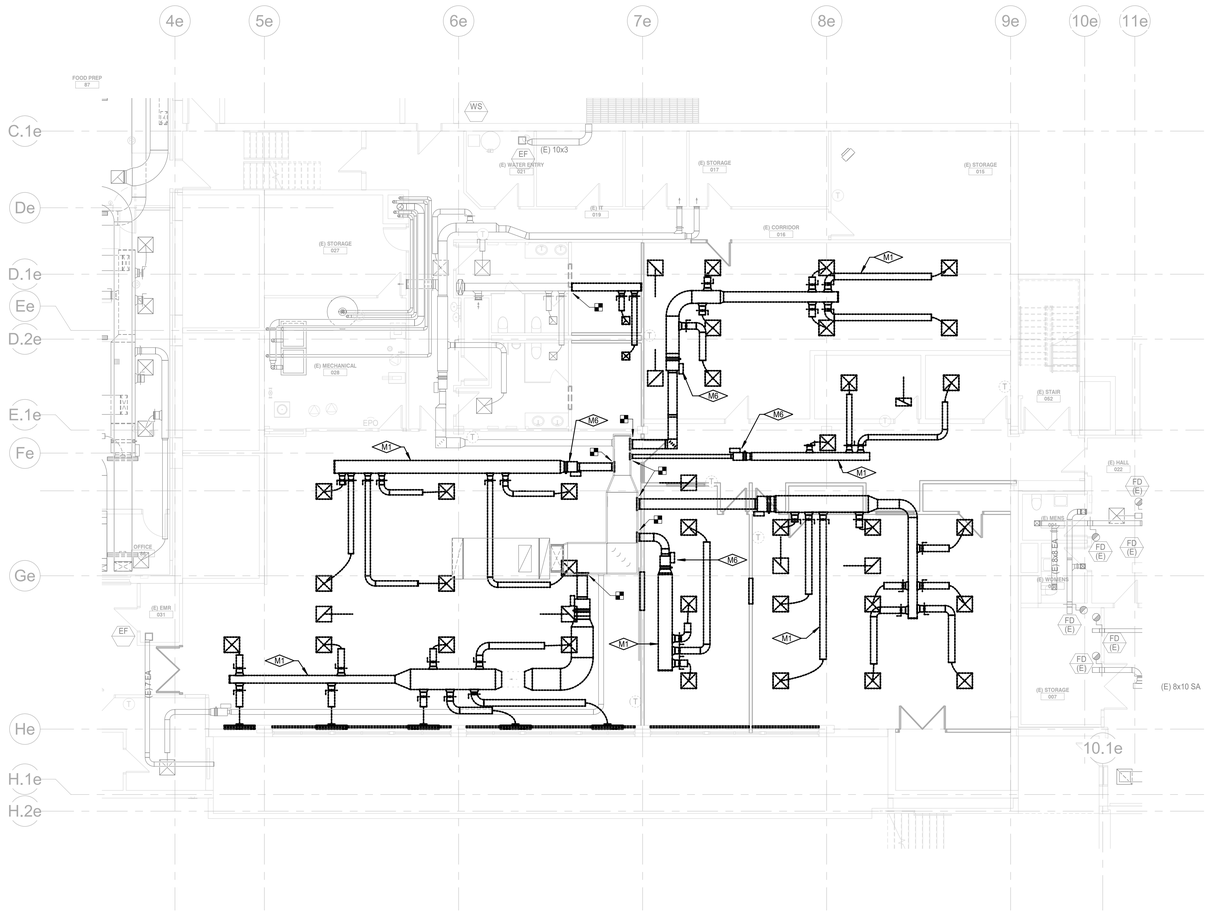
Project Name
NURSING RENOVATION
Project Number
2021-200
Date (YYYY/MM/DD)
2021/10/01
Drawn By: SP
Checked By: SC
Drawing
MECHANICAL DETAILS

M-401

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES	
M1	REMOVE VAV'S, GRILLES, AND ASSOCIATED DUCTWORK. SALVAGE VAV'S AND DIFFUSERS FOR RE-USE.
M6	RETAIN EXISTING TERMINAL BOX FOR RE-USE.



FIRST LEVEL HVAC DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

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No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: SP
Checked By: SC

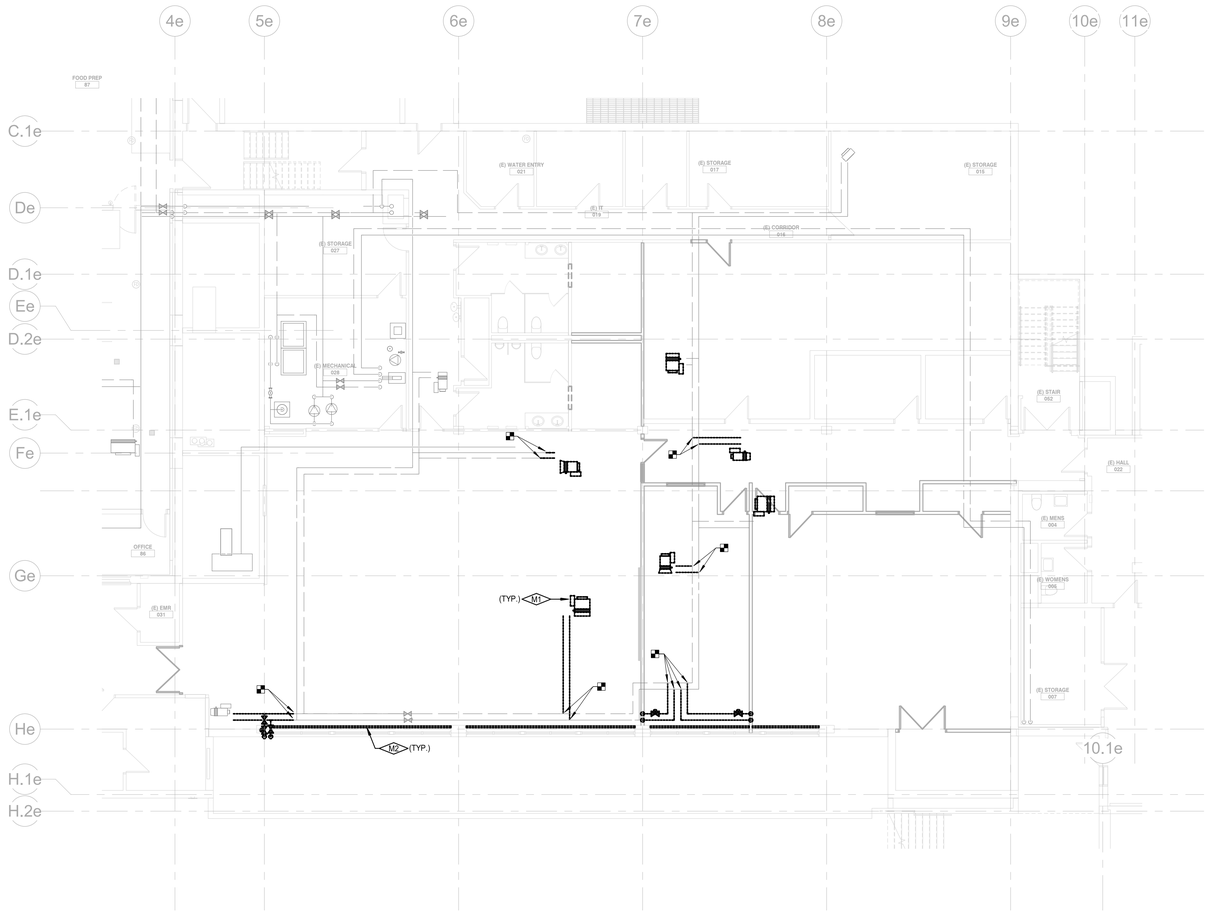
Drawing
FIRST LEVEL HVAC DEMOLITION PLAN

MD101

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES	
M1	REMOVE VAV'S, GRILLES, AND ASSOCIATED DUCTWORK. SALVAGE VAV'S AND DIFFUSERS FOR RE-USE.
M2	RUNTAL RADIATOR TO BE REMOVED AND RETURNED TO OWNER.



FIRST LEVEL HVAC PIPING DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

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ARCHITECTURE
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PLANNING
INTERIOR DESIGN

No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: SP
Checked By: SC

Drawing
FIRST LEVEL HVAC PIPING DEMOLITION PLAN

MD111

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

POWER LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SINGLE RECEPTACLE	PM	PLUG MOLD (MULTI-OUTLET ASSEMBLY)
	DUPLEX RECEPTACLE	WM	WIREMOLD (SURFACE RACEWAY)
	DOUBLE DUPLEX RECEPTACLE		CONDUIT CONCEALED
	DUPLEX RECEPTACLE, HALF SWITCHED		CONDUIT EXPOSED
CLG	DUPLEX RECEPTACLE, CEILING MOUNTED		CONDUIT, UNDERGROUND OR CONCEALED IN FLOOR AS ALLOWED PER SPECIFICATIONS
	DUPLEX RECEPTACLE, FLOOR MOUNTED		CONDUIT TURNING DOWN
	DOUBLE DUPLEX RECEPTACLE, FLOOR MOUNTED		CONDUIT TURNING UP
	SPECIAL RECEPTACLE		CONDUIT CAPPED
	SPECIAL RECEPTACLE, FLOOR MOUNTED	A-1,3,5	BRANCH CIRCUIT HOME RUN, NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS, SUBSCRIPTS INDICATE PANEL & CIRCUITS
J	JUNCTION BOX, WALL OR CEILING MOUNTED		GROUND BAR
J	JUNCTION BOX, FLOOR MOUNTED		MAIN SWITCHBOARD/DISTRIBUTION CENTER
M	MOTOR	T	TRANSFORMER
	DISCONNECT SWITCH (NON-FUSED)	CT	CURRENT TRANSFORMER
	DISCONNECT SWITCH (FUSED)	T	THERMOSTAT
	VARIABLE SPEED DRIVE WITH DISCONNECT	GANN	GENERATOR ANNUNCIATOR PANEL
M	UTILITY METER	A-1	SHADING INDICATES EMERGENCY SYSTEM TEXT INDICATES PANEL AND CIRCUIT DESIGNATION
	ELECTRICAL PANELBOARD, CONTROL PANEL, OR OTHER CABINET AS NOTED		

LIGHTING LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
a A	SHADING INDICATES EM SYSTEM, LOWER CASE SUBSCRIPT INDICATES SWITCHING, UPPER CASE SUBSCRIPT INDICATES LUMINAIRE TYPE (TYP)		DECORATIVE ADJUSTABLE ACCENT DOWNLIGHT
			SQUARE DOWNLIGHT
	SURFACE OR PENDANT MOUNTED LUMINAIRE		SQUARE WALL WASH DOWNLIGHT
	LENSED TROFFER		SQUARE ADJUSTABLE ACCENT DOWNLIGHT
	DIRECT/INDIRECT TROFFER		SQUARE DOWNLIGHT
	PATIENT OVERBED LIGHT		SQUARE WALL WASH DOWNLIGHT
	DIRECT/INDIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT		SQUARE ADJUSTABLE ACCENT DOWNLIGHT
	INDIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT		DECORATIVE PENDANT
	DIRECT DISTRIBUTION, SUSPENDED LINEAR PENDANT		PENDANT
	DIRECT/INDIRECT DISTRIBUTION, WALL MOUNT LINEAR		RECESS MOUNTED WALL LUMINAIRE
	INDIRECT DISTRIBUTION, WALL MOUNT LINEAR		WALL PACK OR EXTERIOR NON-DECORATIVE WALL SIGNAGE
	DIRECT DISTRIBUTION, WALL MOUNT LINEAR		DECORATIVE SCONCE
	DECORATIVE LINEAR WALLMOUNT		DECORATIVE POLE
	STRIP LINEAR WALLMOUNT		POLE
	SURFACE OR PENDANT MOUNTED STRIP OR INDUSTRIAL LUMINAIRE		BOLLARD
	THEATRICAL PIPE OR TRACK LIGHTING	K PC	PORCELAIN KEYLESS LAMPHOLDER, BRYANT #5228 W/ 100W A19, I.F. LAMP. 'PC' INDICATES PULLCHAIN
	TRACK HEAD		
	SURFACE DOWNLIGHT		EMERGENCY LIGHTING UNIT
	DOWNLIGHT		EXTERIOR STAKE MOUNTED
	WALL WASH DOWNLIGHT		DOCK LIGHT
	ADJUSTABLE ACCENT DOWNLIGHT		DARKROOM SAFE LIGHT (TWO COMPARTMENT SHOWN)
	DECORATIVE DOWNLIGHT		UNDERCABINET LIGHT
	DECORATIVE WALL WASH DOWNLIGHT		EXIT LIGHT, ARROWS AS INDICATED, FACES INDICATED BY SHADING

CONTROLS LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
S_a	SINGLE POLE SWITCH (SUBSCRIPT DENOTES SWITCHING)	S_{VS}	VARIABLE SPEED/SPEED CONTROLLER SWITCH
S_2	TWO POLE SWITCH	S_{EP}	EXPLOSION PROOF SWITCH
S_3	THREE-WAY SWITCH	S_{TO}	THERMAL OVERLOAD SWITCH
S_4	FOUR-WAY SWITCH	S_{MC}	MOMENTARY CONTACT SWITCH
S_K	KEY OPERATED SWITCH	S	COMBINATION SWITCH AND DUPLEX RECEPTACLE
S_M	MANUAL SWITCH, HORSEPOWER RATE	P	PHOTOCELL
S_D	DIMMER SWITCH		PUSH BUTTON
S_{PI}	SWITCH WITH PILOT LIGHT (PILOT LIGHT IS 'ON' WHEN SWITCH IS 'ON')	TC	TIME CLOCK
S_P	SWITCH WITH PILOT LIGHT LOCATOR (CONTINUOUSLY LIGHTED HANDLE)		OCCUPANCY SENSOR - WALL, SWITCH, OR CEILING MOUNTED D=DIMMING, IR=INFRARED, US=ULTRASONIC, DT=DUAL TECHNOLOGY
S_{LV}	LOW VOLTAGE SWITCH		

REFERENCE SYMBOLS LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
X	KEY NOTE REFERENCE	1	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE
LPA-#	TYPICAL CIRCUIT NUMBER	E	EXISTING TO REMAIN
TG#	TYPICAL LUMINAIRE TYPE	R	EXISTING TO BE REMOVED
X/X	TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FLR)	RL	EXISTING TO BE RELOCATED
UH	MECHANICAL EQUIPMENT REFERENCE	ER	EXISTING TO REMAIN - REPLACE DEVICE
LC1	LIGHTING CONTROL / EQUIPMENT REFERENCE	RR	EXISTING TO BE REMOVED AND REPLACED

ABBREVIATIONS LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A	AMPERES	MCP	MOTOR CIRCUIT PROTECTOR
AC	ABOVE COUNTER, MOUNT HORIZONTALLY TO CENTERLINE OF DEVICE, +6" ABOVE COUNTER OR BACK SPLASH	MEC	SEE MECHANICAL EQUIPMENT SCHEDULE
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AFG	ABOVE FINISHED GRADE	MLO	MAIN LUGS ONLY
ANN	ANNUNCIATOR	MTS	MANUAL TRANSFER SWITCH
ARF	ABOVE RAISED FLOOR	NC	NORMALLY CLOSED
ASSD	AIR SAMPLING SMOKE DETECTION	NIC	NOT IN CONTRACT
ATS	AUTOMATIC TRANSFER SWITCH	NL	NIGHT LIGHT
BFG	BELOW FINISHED GRADE	NO	NORMALLY OPEN
C	CONDUIT	NTS	NOT TO SCALE
CATV	CABLE TELEVISION	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
CCTV	CLOSED CIRCUIT TELEVISION	OFOI	OWNER FURNISHED, OWNER INSTALLED
(E)	EXISTING	OSWF	ON SITE WORK FORCE
EM	EMERGENCY	PB	PULL BOX
EMDC	EMERGENCY MAIN DISTRIBUTION CENTER	SB	STAND-BY
EP	EXPLOSION PROOF	SDC	SUB-DISTRIBUTION CENTER
EPO	EMERGENCY POWER OFF	TP	TAMPER PROOF
EVO	EMERGENCY VENTILATION ON/OFF	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
EWC	ELECTRIC WATER COOLER	TYP	TYPICAL
FA	FIRE ALARM	UF	UNDER FLOOR
G	GROUND	UG	UNDER GROUND
GCP	GENERATOR CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
HOA	HAND OFF AUTOMATIC	V	VOLTS
IG	ISOLATED GROUND	VFD	VARIABLE FREQUENCY DRIVE
MAX	MAXIMUM	W/	WITH
MCB	MAIN CIRCUIT BREAKER	W/O	WITHOUT
MCC	MOTOR CONTROL CENTER	WP	WEATHER PROOF
MDC	MAIN DISTRIBUTION CENTER	XFMR	TRANSFORMER

FIRE ALARM SYSTEM LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL	M	MANUAL PULL STATION
FAPS	FIRE ALARM (NAC) POWER SUPPLY	AIM	ADDRESSABLE INPUT MODULE
FSA	FIRE ALARM SYSTEM ANNUNCIATOR PANEL (GRAPHIC/LED)	AOM	ADDRESSABLE OUTPUT MODULE
FAA	REMOTE ANNUNCIATOR PANEL	H15cd	AUDIOVISUAL DEVICE (H##cd=HORN/STROBE COMBINATION S=SPEAKER/STROBE COMBINATION, C=CHIME/STROBE COMBINATION)
GZM	GRAPHIC ZONE MAP	H	AUDIBLE DEVICE (H=HORN, S=SPEAKER, C=CHIME)
RACP	RESCUE ASSISTANCE SYSTEM HEAD END UNIT	15cd	FIRE ALARM STROBE (cd= CANDELA RATING 15, 30, 75, 110)
FSC	FIRE FIGHTER SMOKE CONTROL PANEL	J	EMERGENCY TELEPHONE STATION (J=JACK, H=HANDSET)
FAD	FIRE ALARM DIRECTORY ANNUNCIATOR	RA	RESCUE ASSISTANCE TELEPHONE STATION)
P	SMOKE DETECTOR (P=PHOTOELECTRIC, SB=WITH SOUNDER BASE, BR=BEAM RECEIVER, BT=BEAM TRANSMITTER)		MAGNETIC DOOR HOLD
F	THERMAL DETECTOR F=FIXED TEMPERATURE, R=FIXED TEMPERATURE & RATE OF RISE (TEMP. RATING)		TAMPER SWITCH
UV	FLAME DETECTOR (UV=ULTRAVIOLET, IR=INFRARED)		FLOW DETECTOR SWITCH
	DUCT SMOKE DETECTOR S=SUPPLY, R=RETURN		PRESSURE SWITCH
RTS	DUCT DETECTOR REMOTE INDICATOR ALARM AND TEST	FSD	FIRE/SMOKE DAMPER
	REMOTE INDICATOR LIGHT	CO	CARBON MONOXIDE ALARM/DETECTOR

ONE-LINE DIAGRAM LEGEND
(Not all symbols listed below are used on these drawings)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DISCONNECT SWITCH	A	PANELBOARD "A"
	DISCONNECT SWITCH, FUSED	PM	EM=ENERGY METER, PM=POWER METER, CM=CIRCUIT MONITOR
	CIRCUIT BREAKER	VS	VOLTMETER TEST SWITCH
	FUSE	AS	AMMETER TEST SWITCH
	GROUND	V	VOLTMETER
T ##	STEP DOWN TRANSFORMER, ## INDICATES KVA	A	AMMETER
TK ##	K-RATED STEP DOWN TRANSFORMER ## INDICATES KVA, # INDICATES K RATING	XXX	SEE FEEDER/MEC/TRANSFORMER SCHEDULES FOR FEEDER SIZE
	CURRENT TRANSFORMER	G	ENGINE GENERATOR
	POTENTIAL TRANSFORMER		CONTACTOR/RELAY/CAPACITOR (AS NOTED)
OR	SERVICE ENTRANCE TRANSFORMER		TRANSFER SWITCH - ATS=AUTOMATIC, MTS=MANUAL
M	METER	GFI	GROUND FAULT INTERRUPTER
	EQUIPMENT ENCLOSURE	SPD	SURGE PROTECTIVE DEVICE
	SERVICE WEATHERHEAD	ST	SHUNT TRIP
ISCA	SHORT CIRCUIT CURRENT AVAILABLE		TERMINATIONS LB=LOAD BREAK, NLB=NO LOAD BREAK
K a	KIRK KEY INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP		DRAW-OUT DEVICE
E a	ELECTRICAL INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP		PLUG-IN DEVICE
M	MECHANICAL INTERLOCK	EO	ELECTRICALLY OPERATED

POWER PLAN NOTES:

1. MAKE ALL FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT REQUIRING ELECTRICAL CONNECTION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO ALL MECHANICAL AND OTHER EQUIPMENT INCLUDED IN THIS PROJECT.
2. COORDINATE EXACT REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
3. PROVIDE FUSES SIZED PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
4. DISCONNECT SWITCH LOCATIONS ARE SHOWN DIAGRAMMATICALLY AND SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO SUIT EQUIPMENT AND SPACE. DISCONNECT SWITCHES SHALL BE WITHIN SIGHT OF THE EQUIPMENT THEY SERVE AND MOUNTED AT 6'-3", MAXIMUM, TO TOP OF CABINET. MAINTAIN NEC WORK SPACE REQUIREMENTS.
5. RECEPTACLES INDICATED TO BE MOUNTED ABOVE COUNTER ARE TO BE MOUNTED HORIZONTALLY 6" ABOVE COUNTER UNLESS OTHERWISE NOTED.
6. COORDINATE AND VERIFY EXACT MOUNTING LOCATIONS OF WALL AND FLOOR DEVICES WITH ARCHITECTURAL ELEVATIONS, AND ANY FURNITURE OR SPECIALTY EQUIPMENT SUPPLIER DRAWINGS PRIOR TO ROUGH-IN.
7. NO RECEPTACLES SHALL BE MOUNTED BELOW +18" AFF.
8. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V CIRCUIT.
9. CIRCUITS MAY BE COMBINED INTO HOMERUNS OF UP TO SIX (6) CURRENT CARRYING CONDUCTORS, INCLUDING NEUTRALS, UNLESS OTHERWISE INDICATED. WHERE CIRCUITS ARE COMBINED WITHIN A SINGLE CONDUIT, PROVIDE STRIPING FOR FULL LENGTH OF NEUTRAL CONDUCTOR INSULATION TO MATCH THE COLOR CODE OF THE ASSOCIATED PHASE CONDUCTOR. SEE SPECIFICATION FOR COLOR CODES.
10. GFCI RECEPTACLES ARE NOT GENERALLY SHOWN ON DRAWINGS. ALL RECEPTACLE OUTLETS LOCATED IN TOILET ROOMS, SHOWER ROOMS, OUTDOOR LOCATIONS, WITHIN 6 FEET OF A SINK, OR OTHER WET LOCATIONS SHALL BE PROVIDED WITH GFCI PROTECTION PER NEC ARTICLE 210. ADDITIONAL GFCI PROTECTION TO BE PROVIDED AS INDICATED. WHERE GFCI DEVICES ARE REQUIRED AND/OR SHOWN BUT ARE NOT ACCESSIBLE WHEN EQUIPMENT IS INSTALLED, I.E. VENDING MACHINES, ETC., PROVIDE BLANK FACE GFCI DEVICE AND COVERPLATE AHEAD OF INACCESSIBLE RECEPTACLES. MOUNT ADJACENT TO EQUIPMENT AT SWITCH HEIGHT UNLESS OTHERWISE SHOWN.

ONE-LINE DIAGRAM NOTES:

1. PANELBOARDS INDICATED ON ONE LINE DIAGRAMS DO NOT SHOW ALL BRANCH CIRCUITS. REFER TO PANELBOARD SCHEDULE(S).
2. EXISTING ONE-LINE DIAGRAM TAKEN FROM OWNER FURNISHED DRAWINGS. EXISTING INFORMATION SHOWN OTHER THAN LOCATIONS IMPACTED BY NEW WORK HAS NOT BEEN VERIFIED.

LIGHTING PLAN NOTES:

1. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR EXACT MOUNTING LOCATIONS OF DEVICES AND LUMINAIRES.
2. COORDINATE LUMINAIRE LOCATIONS WITH MECHANICAL PIPING, DUCTWORK, ETC., TO AVOID CONFLICTS. SEE SPECIFICATIONS FOR COORDINATION REQUIREMENTS.
3. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V AND 277V CIRCUIT.
4. CIRCUITS MAY BE COMBINED INTO HOMERUNS OF UP TO SIX (6) CURRENT CARRYING CONDUCTORS, INCLUDING NEUTRALS, UNLESS OTHERWISE INDICATED. WHERE CIRCUITS ARE COMBINED WITHIN A SINGLE CONDUIT, PROVIDE STRIPING FOR FULL LENGTH OF NEUTRAL CONDUCTOR INSULATION TO MATCH THE COLOR CODE OF THE ASSOCIATED PHASE CONDUCTOR. SEE SPECIFICATION FOR COLOR CODES.
5. FIELD COORDINATE EXACT LOCATION OF CEILING MOUNTED OCCUPANCY SENSORS PER MANUFACTURER'S INSTRUCTIONS. OCCUPANCY/VACANCY SENSING DEVICES ARE SHOWN FOR GENERAL DESIGN INTENT ONLY. CONTRACTOR SHALL PROVIDE THE TYPE AND QUANTITY OF OCCUPANCY/VACANCY SENSING DEVICES AS NECESSARY FOR PROPER COVERAGE AND CONTROL OF LUMINAIRES WHERE INDICATED ON THE LIGHTING PLANS. FIELD ADJUSTMENT TO DEVICE LOCATIONS SHALL BE MADE AS REQUIRED TO CAPTURE ALL OCCUPANTS, WHETHER SITTING AT A DESK OR MOVING AROUND THE SPACE. ADDTIONAL DEVICES SHALL BE PROVIDED AND FIELD ADJUSTMENTS SHALL BE MADE AS NECESSARY, AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.

FIRE ALARM PLAN NOTES:

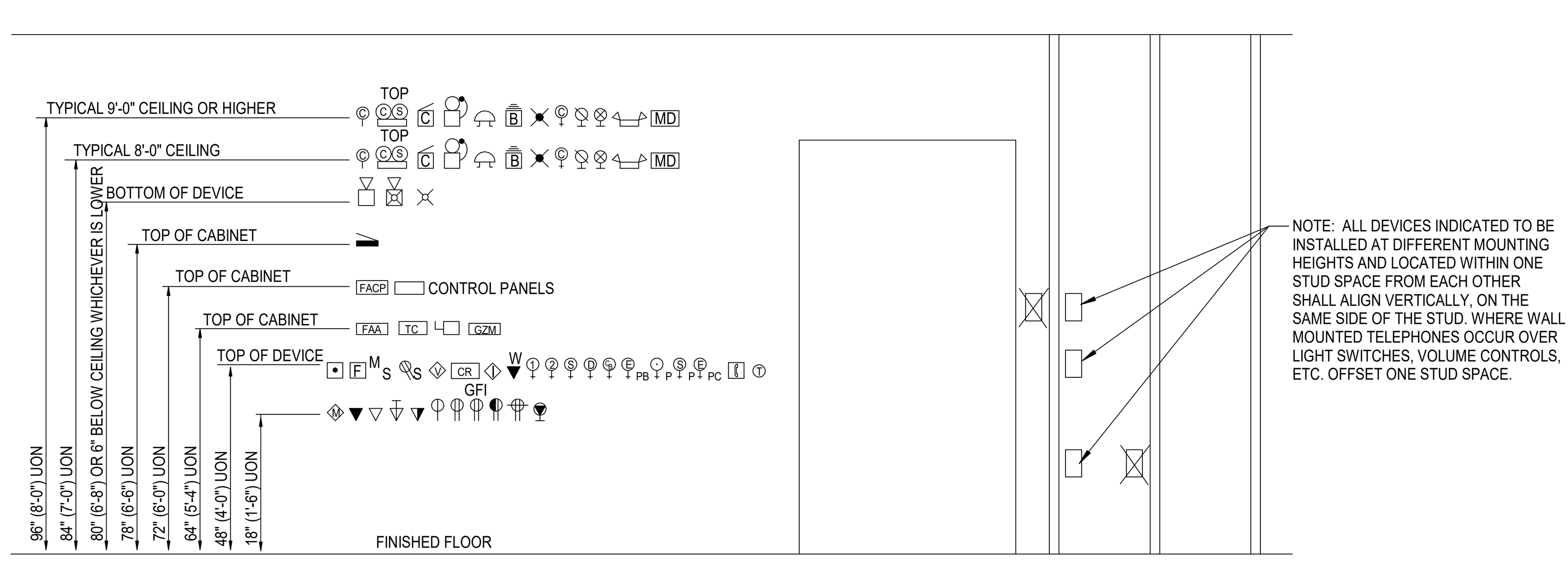
1. FIRE ALARM EQUIPMENT AND DEVICES SHOWN ON THESE DRAWING INDICATE THE INTENT, PERFORMANCE, AND SCOPE OF THE SYSTEM. THE FULL DESIGN OF THE FIRE ALARM SYSTEM SHALL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A SHOP DRAWING SUBMITTAL FOR APPROVAL BY THE LOCAL FIRE DEPARTMENT AND/OR THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL ARRANGE TO HAVE THE FIRE ALARM SYSTEM SUBMITTAL SEALED AND SIGNED BY A REGISTERED PROFESIONAL ENGINEER WHO WILL ASSUME THE DUTY OF ENGINEER OF RECORD FOR THE FIRE ALARM SYSTEM DESIGN. THE ELECTRICAL ENGINEER OF RECORD AT CATOR, RUMA & ASSOCIATES, CO. WILL NOT BE RESPONSIBLE FOR SEALING AND SIGNING THE FIRE ALARM SYSTEM SHOP DRAWING SUBMITTAL.
2. NEW FIRE ALARM DEVICES SHALL BE OF THE SAME MANUFACTURER AS THE EXISTING DEVICES AND SYSTEM. CONNECT NEW FIRE ALARM DEVICES TO THE EXISTING SYSTEM.
3. PROVIDE UPDATED GRAPHIC MAPS THROUGHOUT THE BUILDING TO REFLECT BUILDING AND FIRE ALARM SYSTEM MODIFICATIONS.

GENERAL NOTES:

1. FOR REMODELING, WORK INCLUDED IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
3. A DETAILED WRITTEN METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY OR AN OUTAGE AFFECTS THE SAFETY OF OCCUPANTS, TELEPHONE/DATA/FIRE ALARM EQUIPMENT OR COMPONENTS OF ANY SYSTEM WHICH SUPPORTS THIS EQUIPMENT OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CATOR, RUMA & ASSOCIATES IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE DRAWINGS.
5. PROVIDE SEPARATE INSULATED GROUNDING CONDUCTOR IN ALL FEEDER, HOMERUN AND BRANCH CIRCUITS.

DEMOLITION NOTES:

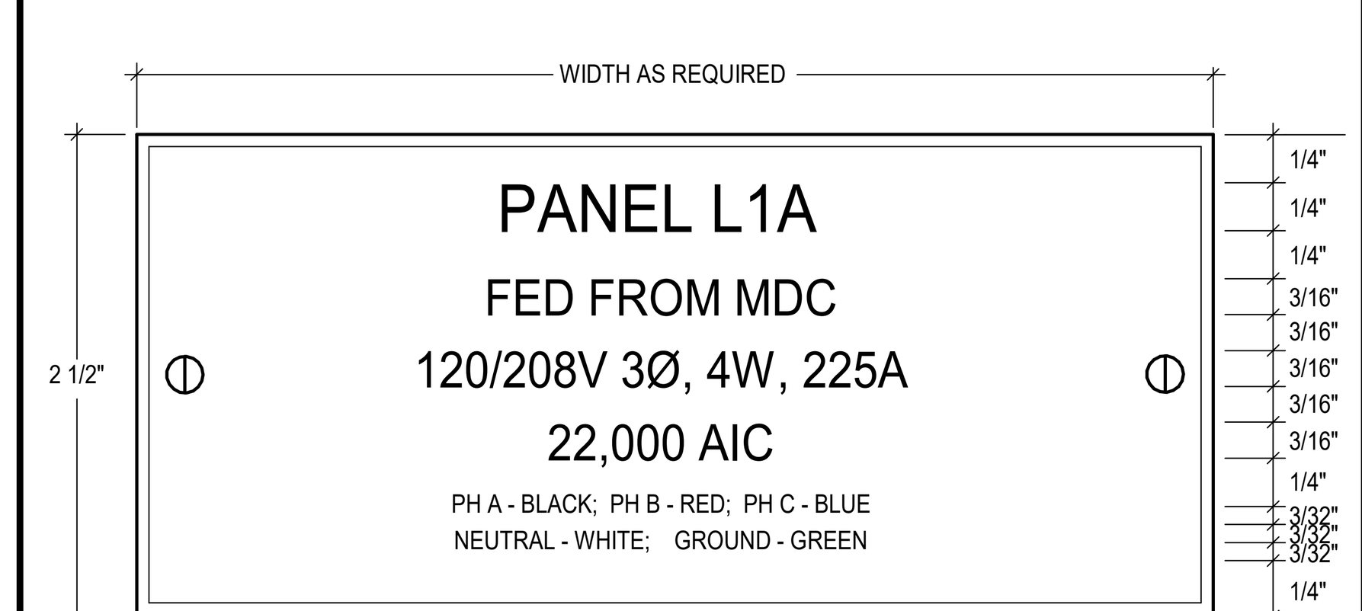
1. UNLESS NOTED OTHERWISE, BOLD ITEMS INDICATE EQUIPMENT, DEVICES, ETC. TO BE REMOVED. SEE SPECIFICATION SECTION 260500 FOR REMODEL/DEMOLITION DETAILED REQUIREMENTS.
2. DEMOLITION DRAWINGS MAY NOT SHOW EVERY ITEM TO BE DEMOLISHED. CONTRACTOR SHALL VISIT SITE TO DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENTS PRIOR TO QUOTATION. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENTS. REWORK EXISTING TERMINATIONS, CONNECTIONS, CONDUIT, WIRING, ETC. TO ACCEPT NEW WORK. MAINTAIN CIRCUIT CONTINUITY TO EXISTING CIRCUITS AND DEVICES TO REMAIN OR REMODEL/DEMOLITION DETAILED REQUIREMENTS TO BE RELOCATED. PRIOR TO COMMENCEMENT OF ANY DEMO WORK, CONFIRM EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
3. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL WIRING AND EXPOSED CONDUIT AND CONDUIT SUPPORTS BACK TO POINT OF ORIGIN OR NEXT DEVICE TO REMAIN. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER, UNLESS NOTED OTHERWISE, AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
4. WHERE EXISTING CONDUITS ARE SHOWN TO BE REMOVED AND HAVE BEEN ROUTED IN CONCRETE FLOOR SLABS, CONCRETE WALLS OR CONCRETE CEILINGS, THEY SHALL BE CUT BACK FLUSH WITH CONCRETE. FILL WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH FLUSH WITH CONCRETE SURFACE AFTER CONDUCTORS HAVE BEEN REMOVED.
5. REUSE EXISTING CONDUIT WHERE CURRENT NEC AND LOCAL CODE REQUIREMENTS ARE MAINTAINED. PROVIDE NEW CONDUIT AND WIRE FOR NEW INSTALLATIONS AND EXTENSION OF EXISTING INSTALLATIONS. REUSE EXISTING CONDUIT IN PLACE, DO NOT REINSTALL EXISTING CONDUIT. PROVIDE LABELING PER SPECIFICATIONS FOR REUSED CONDUIT.
6. RELOCATED EQUIPMENT AND DEVICES ARE TO BE CLEANED OF ALL FOREIGN MATERIAL. REPLACE EQUIPMENT OR DEVICES WHICH ARE DEFECTIVE OR DAMAGED DURING RELOCATION.
7. WHERE EXISTING DEVICES, SWITCHES, MOTOR CONNECTIONS, ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, WALLS SHALL BE PATCHED TO MATCH ORIGINAL FINISH. BLANK COVERPLATES OVER EXISTING BOXES ARE NOT ACCEPTABLE, UNLESS NOTED OTHERWISE.



TYPICAL DEVICE MOUNTING HEIGHTS
NO SCALE

NOTES:
1. HEIGHTS SHOWN ARE TYPICAL TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.
2. WHERE EVER DEVICES ARE INDICATED TO BE ABOVE DOORS, DEVICE SHALL BE CENTERED BETWEEN TOP OF DOOR TRIM AND CEILING LINE.
3. MOUNTING HEIGHTS SHOWN ON ARCHITECTURAL ELEVATIONS SHALL GOVERN OVER THOSE SHOWN ABOVE.

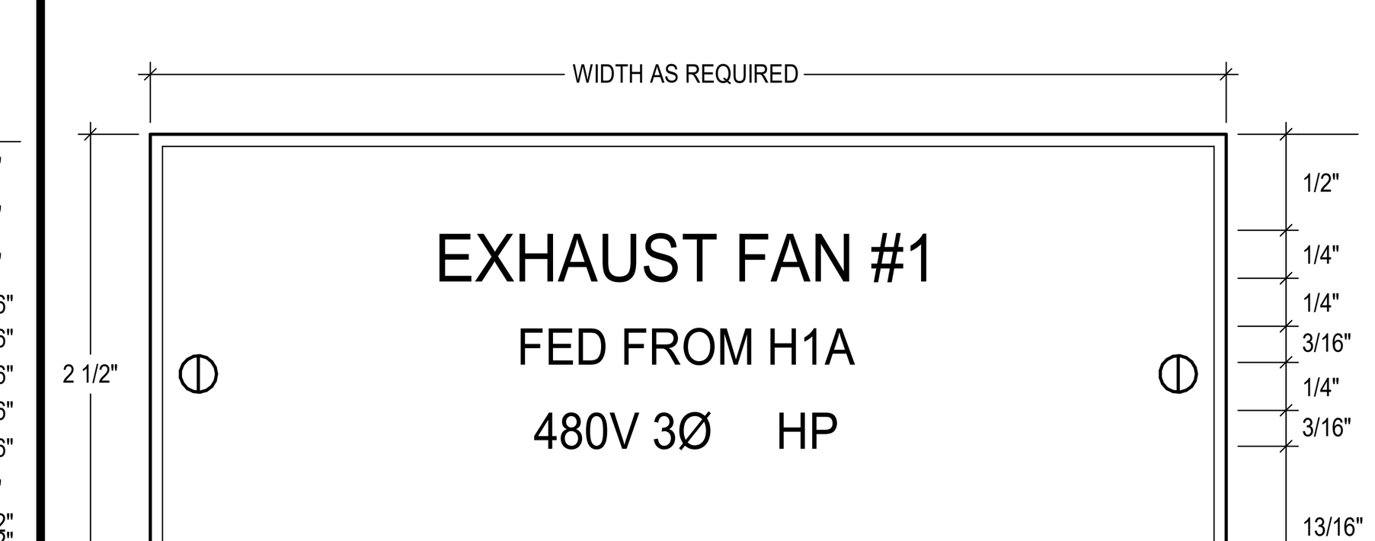
16143.1



SUB-DISTRIBUTION CENTER AND BRANCH PANELBOARD NAMEPLATE DETAIL
SCALE: FULL

NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL NAMEPLATE INFORMATION.
2. REWORD NAMEPLATE FOR FIELD CONDITIONS.
3. AMP RATING SHALL INDICATE BUS RATING.

16195.2



UTILIZATION EQUIPMENT NAMEPLATE DETAIL
SCALE: FULL

NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL NAMEPLATE INFORMATION.
2. REWORD NAMEPLATE FOR FIELD CONDITIONS.
3. HP SHALL INDICATE HORSEPOWER.

16195.3

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INTERIOR DESIGN

No.	Date	Revision

Project Name: NURSING RENOVATION
Project Number: 2021-200
Date (YYYY/MM/DD): 2021/10/01
Drawn By: KPC — Checked By: PDT
Drawing: ELECTRICAL LEGENDS & NOTES

E-001

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

LUMINAIRE SCHEDULE

COMMON NOTES:

A. CATALOG NUMBER REFERS TO FIRST NAME LISTED UNDER MANUFACTURER PER LUMINAIRE TYPE. REMAINING MANUFACTURERS LISTED ARE CONSIDERED TO BE EQUIVALENT PRODUCTS FOR THIS PROJECT AND SHALL MEET ALL CRITERIA LISTED INCLUDING THAT CALLED FOR BY THE SPECIFIC LUMINAIRE CATALOG NUMBER. CATALOG NUMBERS DO NOT NECESSARILY REPRESENT COMPLETE CATALOG NUMBERS. ALL ITEMS LISTED IN THE DESCRIPTION SHALL BE PROVIDED.
B. REFER TO LIGHTING SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
C. PROVIDE UNIT PRICING FOR ALL LUMINAIRES BY TYPE AND SUBMIT WITH BID FORM.
D. PROVIDE AN EMERGENCY BALLAST TEST SWITCH FOR RECESSED DOWNLIGHTS ON CEILING ADJACENT TO LUMINAIRE.

SPECIFIC REMARKS:

1. VERIFY EXACT MOUNTING HEIGHT WITH ARCHITECT AND PROVIDE APPROPRIATE SUSPENSION LENGTH.
2. REFER TO PLANS FOR WHICH LUMINAIRES OF THIS SPECIFICATION ARE EXISTING TO BE RELOCATED AND WHICH ARE NEW.

TYPE	DESCRIPTION	LAMP		BALLAST/DRIVER			APPARENT LOAD	MANUFACTURER	CATALOG SERIES	FINISH	MOUNTING	REMARKS
		COLOR	LUMENS	TYPE	DIM LEVEL	VOLTAGE						
L1.22	6" WIDE, 4' LENGTH RECESSED LINEAR, SATIN ACRYLIC LENS, 0-10V DIMMING DRIVER.	LED 3500K	400 LUMEN/FT	0-10V	1%	277 V	145 VA	AXIS	B6RLED	WHITE	GRID	
L1.22 EM	SIMILAR TO L1.22, PROVIDE WITH 90-MINUTE EMERGENCY	LED 3500K	400 LUMEN/FT	0-10V	1%	277 V	145 VA	AXIS	B6RLED	WHITE	GRID	
L1.30	6" WIDE, 30' LENGTH RECESSED LINEAR, SATIN ACRYLIC LENS, 0-10V DIMMING DRIVER.	LED 3500K	400 LUMEN/FT	0-10V	1%	277 V	195 VA	AXIS	B6RLED	WHITE	GRID	
L1.30 EM	6" WIDE, 30' LENGTH RECESSED LINEAR, SATIN ACRYLIC LENS, 0-10V DIMMING DRIVER. PROVIDE WITH 90-MINUTE EMERGENCY BATTERY.	LED 3500K	400 LUMEN/FT	0-10V	1%	277 V	195 VA	AXIS	B6RLED	WHITE	GRID	
P3	5.5" DIAMETER CYLINDER PENDANT, UPLIGHT COMPONENT, CUSTOM CORD COLOR, 0-10V DIMMING DRIVER.	LED 3500K	950 LUMEN UP 2900 LUMEN DOWN	---	---	277 V	38 VA	BARNLIGHT	LTF-640-41706	BY ARCH.	SUSPENSION HEIGHTS PER ARCH.	1
S1	4' UTILITY STRIP.	LED 3500K	4000 LUMENS	0-10V	1%	277 V	31 VA	DAY-BRITE	FSSEZ	WHITE	SURFACE/ CHAIN	2
T1	2'x4' FLAT-PANEL TROFFER.	LED 3500K	4000 LUMENS	0-10V	1%	277 V	39 VA	LITHONIA	CPX-2X4-4000LM-35K	WHITE	GRID	
T3	2'x2' FLAT-PANEL TROFFER.	LED 3500K	3200 LUMENS	0-10V	1%	277 V	32 VA	LITHONIA	CPX-2X2-3200LM-35K-M4	WHITE	GRID DRYWALL	2
T3E	SIMILAR TO T3, PROVIDE WITH 90-MINUTE EMERGENCY BATTERY.	LED 3500K	3200 LUMENS	0-10V	1%	277 V	32 VA	RE: T3	RE: T3	WHITE	GRID DRYWALL	
X1	EDGE-LIT EXIT SIGN, SINGLE FACE, 90-MINUTE BATTERY WITH SELF-TEST AND DIAGNOSTICS. CHEVRONS AND WALL/CEILING MOUNTING PER PLANS.					277 V	3 VA	CHLORIDE	CE-10400	WHITE, GREEN LETTERS	WALL/ CEILING	

LIGHTING CONTROL MATRIX

COMMON NOTES:

A. NOT ALL SPACE NAMES ARE LISTED FOR EACH LIGHTING CONTROL TYPE. REFER TO PLANS FOR ALL SPACES TO BE CONTROLLED.
B. SPACES MAY CONTAIN MULTIPLE ZONES OF CONTROL. REFER TO PLANS FOR QUANTITY OF ZONES, SWITCHES, ETC.
C. PROVIDE THE QUANTITY OF SENSORS AS REQUIRED FOR FULL COVERAGE OF THE SPACE. DEVICES SHOWN ON PLAN ARE FOR DESIGN INTENT ONLY AND DO NOT NECESSARILY REFLECT THE EXACT QUANTITY REQUIRED FOR FULL COVERAGE.
D. WHERE A SINGLE SWITCH/DIMMER IS DENOTED WITH MULTIPLE SWITCH LEGS, DESIGN INTENT IS A SINGLE-GANG DEVICE WITH MULTIPLE-MODE CONTROL.
E. ALL NON-NETWORKED SPACES WITH SENSORS SHALL BE PROVIDED WITH MANUAL 'OFF' MEANS.
F. WHERE NETWORKED SPACES HAVE NO MANUAL 'OFF' MEANS WITHIN SPACE, PROVIDE LABELED MEANS OF SHUTOFF AT CONTROLLER LOCATION FOR NO MORE THAN 5,000 SQUARE FEET.

SPECIFIC REMARKS:

1. TIME SCHEDULE TO MATCH REMAINDER OF BUILDING. OCCUPANCY SENSOR OVERRIDE AFTER-HOURS.

KEY:

ON / OFF — M = MANUAL (SWITCH), A = AUTOMATIC (SENSOR), T = TIME SCHEDULE, P = EXTERIOR PHOTOCELL, #% = CONTROL TO #% LIGHT LEVEL
CONTROL — 0-10V DIMMING, ELV DIMMING, STEP DIMMING, DMX CONTROL
OCC / VAC — DT = DUAL TECHNOLOGY, PIR = PASSIVE INFRARED, CLG = CEILING MOUNT, WALL = WALL CORNER MOUNT, SW = INTEGRAL TO WALL SWITCH
DAYLIGHT — CALIBRATE BOTTOM LIMIT OF DAYLIGHT SENSOR TO DENOTED FOOTCANDLE LEVEL AT HEIGHT LISTED
INTERFACE — AV = ALLOW OVERRIDE BY A/V SYSTEM, BAS = COMMUNICATE OCCUPIED/UNOCCUPIED STATE TO BAS, VAV = TIE SENSOR RELAY DIRECTLY TO VAV BOX IN ROOM
NETWORK — X = CONNECT ZONE TO CENTRAL LIGHTING CONTROL SYSTEM
EMERGENCY — X = PROVIDE AUTOMATIC LOAD CONTROL RELAYS (ALCR) FOR LUMINAIRES ON EMERGENCY CIRCUIT, PROVIDE TEST SWITCH IF NOT INTEGRAL TO RELAY

TYPE	SPACE	ON	OFF	CONTROL	OCCUPANCY / VACANCY SENSOR			DAYLIGHT SENSOR		INTERFACE	NETWORK	EMERGENCY	REMARKS
					TECH	MOUNT	DELAY (MIN.)	TARGET LEVEL (FC)	MEASURED HEIGHT (IN.)				
LC1	CORRIDOR	T	T	0-10V	DT	CLG	20				X		1
LC5	MEPT	M	M										
LC6	STORAGE	M	A		PIR	CLG	5						
LC8	PRIVATE OFFICE	M	A	0-10V	DT	SW	5						
LC13	CLASSROOM	M	A	0-10V	DT	CLG	20						

GENERAL EQUIPMENT SCHEDULE

COMMON NOTES:

A. PRIOR TO WORK, VERIFY ELECTRICAL REQUIREMENTS (VOLTAGE, AMPERAGE, RECOMMENDED OCPD, CONDUCTORS, AND DISCONNECT) FOR EACH PIECE OF EQUIPMENT.
B. PRIOR TO WORK, VERIFY EXACT LOCATION FOR EACH PIECE OF EQUIPMENT WITH ARCHITECT AND/OR OWNER.

KEY	ITEM	HP	FLA	LOAD	EQ LOAD (VA)	VOLTAGE	FEEDERS			PROTECTION			REMARKS
							WIRE	GROUND	CONDUIT	BREAKER	DISCONNECT	FUSE	
HW-01	HEADWALL	0	0 A	540 VA	540 VA	120 V/ 1ph	2#12	#12G	3/4”	20 A			

MECHANICAL EQUIPMENT SCHEDULE

COMMON NOTES:

A. PRIOR TO WORK, VERIFY ELECTRICAL REQUIREMENTS (VOLTAGE, AMPERAGE, RECOMMENDED OCPD, CONDUCTORS, AND DISCONNECT) FOR EACH PIECE OF EQUIPMENT.
B. PRIOR TO WORK, VERIFY EXACT LOCATION FOR EACH PIECE OF EQUIPMENT.
C. COORDINATE AND PROVIDE ALL FIELD CONNECTIONS AS REQUIRED.
D. FEEDERS, BREAKERS, DISCONNECTS, AND FUSING APPLIES TO FIELD-INSTALLED AND/OR FACTORY-INSTALLED EQUIPMENT.

KEY	#	ITEM	HP	FLA	LOAD	EQ LOAD (VA)	VOLTAGE	FEEDERS			PROTECTION			REMARKS
								WIRE	GROUND	CONDUIT	BREAKER	DISCONNECT	FUSE	
AC	1	AIR COMPRESSOR	0	30 A	0 VA	10808 VA	208 V/ 3ph	3#8	#10G	3/4”	40 A	60 A	40 A	
MVP	1	MEDICAL VACUUM PACKAGE	0	18 A	0 VA	6413 VA	208 V/ 3ph	3#10	#10G	3/4”	25 A	30 A	25 A	

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PLANNING
INTERIOR DESIGN

No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: KPC
Checked By: PDT

Drawing
ELECTRICAL SCHEDULES

E-002

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

Dist. Panel SDP

Location: (E) IT 019	**Volts:** 120/208 Wye	**A.I.C. Rating:** 10,000 A	
Supply From:	**Phases:** 3	**Mains Type:** MLO	
Mounting: Surface	**Wires:** 4	**Bus Rating:** 600 A	

Circuit Notes:
1. LOAD CALCULATED AT 80% OF BREAKER RATING.

Load	Type	A	B	C	Note
PANELBOARD 'MPA'	G; M	4846 VA	6218 VA	2546 VA	
PANELBOARD 'EMER'	G	2882 VA	2882 VA	2882 VA	1
PANELBOARD 'R1A'	R; G; M	3576 VA	3676 VA	3640 VA	
PANELBOARD 'R3'	R; G; M	19420 VA	18660 VA	17260 VA	
PANELBOARD 'R2'	G	12009 VA	12009 VA	12009 VA	1
		42733 VA	43445 VA	38337 VA	
Refer to one-line diagram for space, spare, and circuit breaker quantities.		362 A	368 A	319 A	
		2	15	13	
		% A-B	% B-C	% C-A	

Load Type		Connected Load	Demand Factor	Demand Load	Switchboard Totals	
L	Lighting	0 VA	0.00%	0 VA	**Power Factor:**	
R	Receptacle	36100 VA	63.85%	23050 VA		
M	Motor	30542 VA	108.85%	33244 VA	**Total Connected Load:**	124515 VA
C	Continuous	0 VA	0.00%	0 VA	**Total Connected Current:**	346 A
G	General	57873 VA	100.00%	57873 VA		
K	Kitchen	0 VA	0.00%	0 VA	**Total Demand Load:**	114167 VA
E	Existing	0 VA	0.00%	0 VA	**Total Demand Current:**	317 A
O	Other	0 VA	0.00%	0 VA		

General Notes:

Panel R3

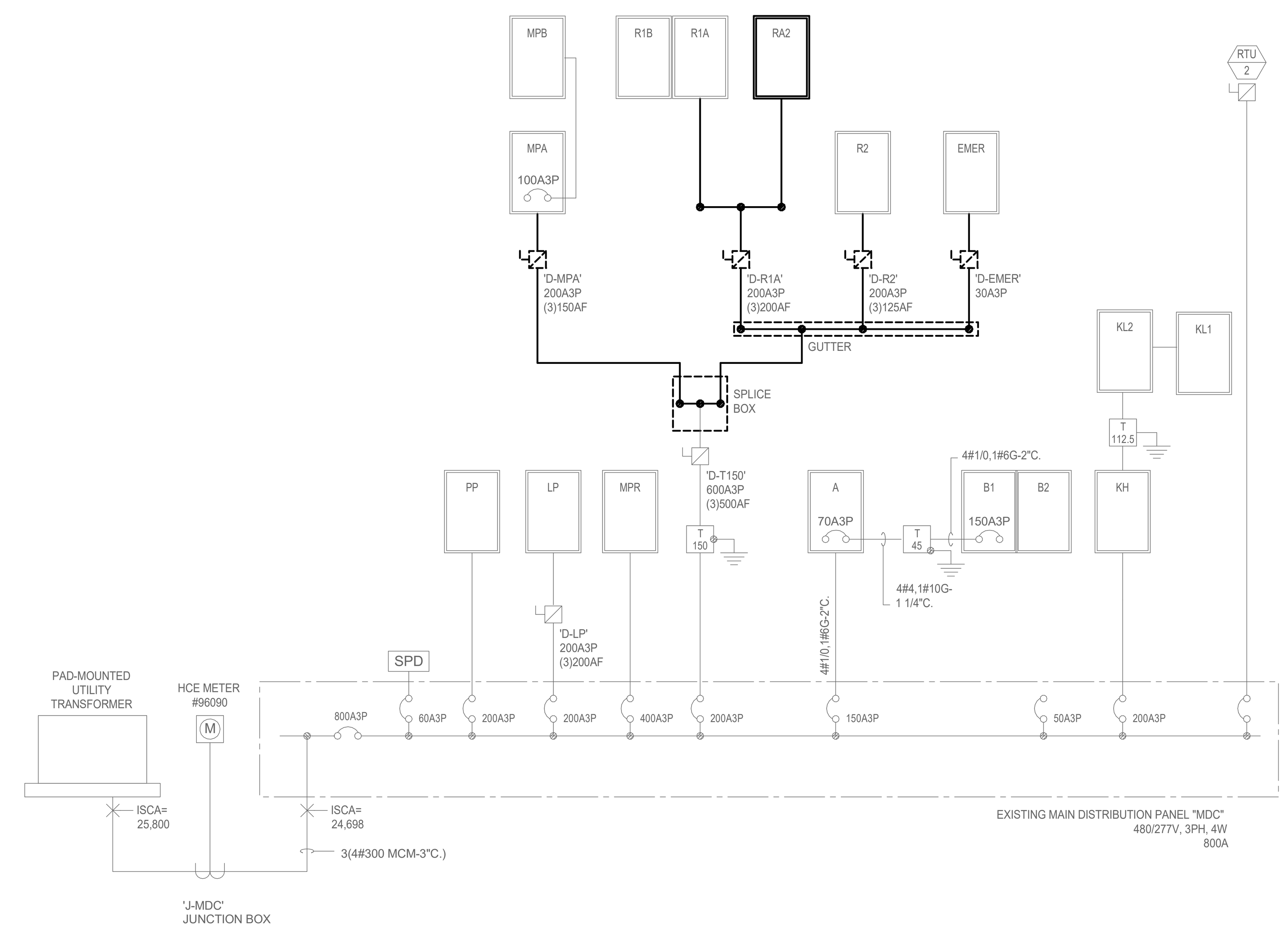
Location: (E) IT 019	**Voltage:** 120/208 Wye	**A.I.C. Rating:** 10,000 A	
Supply From: SDP	**Phase:** 3	**Mains Type:** MLO	
Mounting: Surface	**Wire:** 4	**Bus Rating:** 225 A	
Enclosure: Type 1			

Circuit Notes:

Note	Circ...	Load	Type	Trip	Po...	A		B		C		Po...	Trip	Type	Load	Circ...	Note
	1	G - HW 049	G	20 A	1	540 VA	540 VA					1	20 A	G	G - HW 042C	2	
	3	G - HW 049	G	20 A	1			540 VA	1260 VA			1	20 A	R	R - HIGH FID TEST 042C	4	
	5	G - HW 049	G	20 A	1					540 VA	900 VA	1	20 A	R	R - HIGH FID TEST 042C	6	
	7	G - HW 049	G	20 A	1	540 VA	360 VA					1	20 A	R	R - CONTROL/AV 048	8	
	9	G - HW 049	G	20 A	1			540 VA	1080 VA			1	20 A	R	R - GROUP STUDY 046	10	
	11	G - HW 049	G	20 A	1					540 VA	1080 VA	1	20 A	R	R - GROUP STUDY 045	12	
	13	G - HW 049	G	20 A	1	540 VA	1260 VA					1	20 A	R	R - CLASSROOM 044	14	
	15	G - HW 049	G	20 A	1			540 VA	880 VA			1	20 A	R; G	R - PROJ/SCREEN 044	16	
	17	R - LAB 049	R	20 A	1					720 VA	720 VA	1	20 A	R	R - PRACTICE 043	18	
	19	R - LAB 049	R	20 A	1	720 VA	900 VA					1	20 A	R	R - PRACTICE 041	20	
	21	R - PROJ/SCREEN 049	R; G	20 A	1			1240 VA	720 VA			1	20 A	R	R - PRACTICE 041	22	
	23	R - LAB 049	R	20 A	1					720 VA	540 VA	1	20 A	G	G - HW 041	24	
	25	R - HIGH FID TEST 042B	R	20 A	1	900 VA	1080 VA					1	20 A	R	R - CONTROL 042	26	
	27	R - HIGH FID TEST 042B	R	20 A	1			900 VA	900 VA			1	20 A	R	R - CONTROL 042	28	
	29	G - HW 042B	G	20 A	1					540 VA	180 VA	1	20 A	R	R - 042 PYXIS	30	
	31	R - HIGH FID TEST 042A	R	20 A	1	900 VA	1080 VA					1	20 A	R	R - LAB 049	32	
	33	R - HIGH FID TEST 042A	R	20 A	1			900 VA	1080 VA			1	20 A	R	R - LAB 049	34	
	35	G - HW 042A	G	20 A	1					540 VA	720 VA	1	20 A	R	R - LAB 049	36	
	37	R - HIGH FID TEST 042D	R	20 A	1	1260 VA	720 VA					1	20 A	R	R - LAB 049	38	
	39	G - HW 042D	G	20 A	1			540 VA	180 VA			1	20 A	R	R - 042 CRASH CART	40	
	41	R - HIGH FID TEST 042D	R	20 A	1					900 VA	720 VA	1	20 A	R	R - 042	42	
	43	G - HW 043	G	20 A	1	540 VA	1080 VA					1	20 A	R	R - STORAGE 040	44	
	45	R - PRACTICE 043	R	20 A	1			720 VA	540 VA			1	20 A	R	R - STORAGE 040	46	
	47	R - LAB 049	R	20 A	1					1080 VA	1080 VA	1	20 A	R	R - LAB 049	48	
	49	R - LAB 049	R	20 A	1	720 VA	2138 VA									50	
	51	R - CONTROL/AV 048	R	20 A	1			360 VA	2138 VA			3	30 A	M	M - MEDICAL VACUUM PACKAGE (MVP-1)	52	
	53	Spare	--	20 A	1					0 VA	2138 VA					54	
	55	Spare	--	20 A	1	0 VA	3603 VA									56	
	57	Spare	--	20 A	1			0 VA	3603 VA			3	40 A	M	M - AIR COMPRESSOR (AC-1)	58	
	59	Spare	--	20 A	1					0 VA	3603 VA					60	
	61	Spare	--	20 A	1	0 VA	0 VA					1	20 A	--	Spare	62	
	63	Spare	--	20 A	1			0 VA	0 VA			1	20 A	--	Spare	64	
	65	Spare	--	20 A	1					0 VA	0 VA	1	20 A	--	Spare	66	
	67	Spare	--	20 A	1	0 VA	0 VA					1	20 A	--	Spare	68	
	69	Spare	--	20 A	1			0 VA	0 VA			1	20 A	--	Spare	70	
	71	Spare	--	20 A	1					0 VA	0 VA	1	20 A	--	Spare	72	
	73	Spare	--	20 A	1	0 VA	0 VA					1	20 A	--	Spare	74	
	75	Spare	--	20 A	1			0 VA	0 VA			1	20 A	--	Spare	76	
	77	Spare	--	20 A	1					0 VA	0 VA	1	20 A	--	Spare	78	
	79	Spare	--	20 A	1	0 VA	0 VA					1	20 A	--	Spare	80	
	81	Spare	--	20 A	1			0 VA	0 VA			1	20 A	--	Spare	82	
	83	Spare	--	20 A	1					0 VA	0 VA	1	20 A	--	Spare	84	
					Total Load:	19420 VA		18660 VA		17260 VA							
					Total Amps:	164 A		157 A		144 A							
					Phase Balance:	4 % A-B		9 % B-C		14 % C-A							

Load Type		Connected Load	Demand Factor	Demand Load	Panel Totals	
L	Lighting	0 VA	0.00%	0 VA	**Power Factor:**	1
R	Receptacle	29520 VA	66.94%	19760 VA		
M	Motor	17221 VA	115.69%	19923 VA	**Total Connected Load:**	55341 VA
C	Continuous	0 VA	0.00%	0 VA	**Total Connected Current:**	154 A
G	General	8600 VA	100.00%	8600 VA		
K	Kitchen	0 VA	0.00%	0 VA	**Total Demand Load:**	48283 VA
E	Existing	0 VA	0.00%	0 VA	**Total Demand Current:**	134 A
O	Other	0 VA	0.00%	0 VA		

General Notes:



ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION

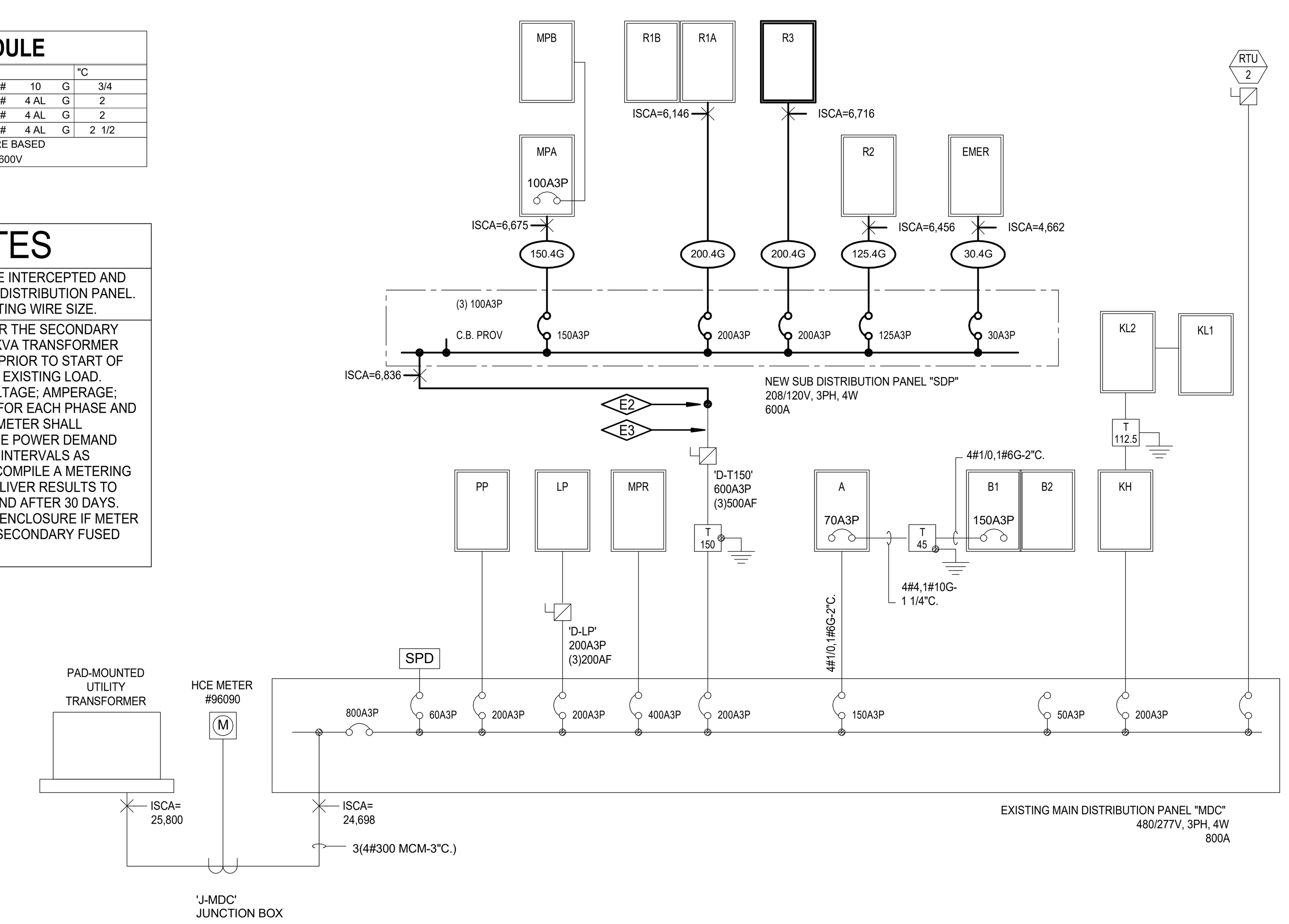
SCALE: NONE

FEEDER SCHEDULE

KEY	CONDUCTORS	"C
30.4 G	4 # 10 , 1 # 10 G	3/4
125.4 G	4 # 2/0 AL , 1 # 4 AL G	2
150.4 G	4 # 3/0 AL , 1 # 4 AL G	2
200.4 G	4 # 250 AL , 1 # 4 AL G	2 1/2
NOTE:	ALUMINUM CONDUCTORS ARE BASED ON TYPE XHHW-2 COMPACT 600V	

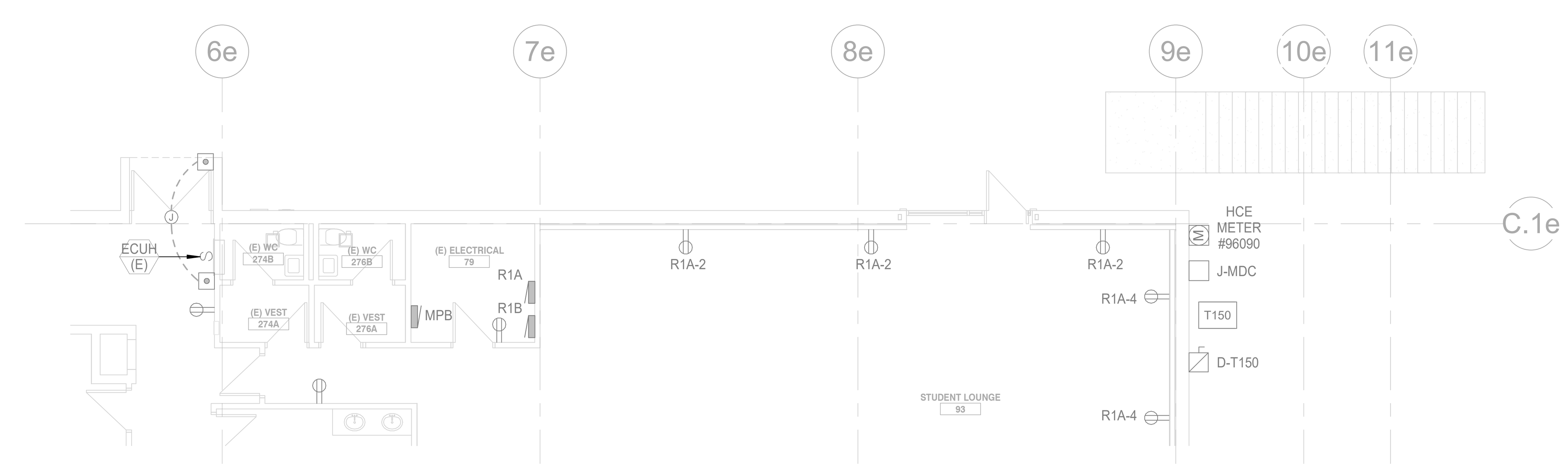
KEYNOTES

E2	EXISTING FEEDER SHALL BE INTERCEPTED AND EXTENDED TO SERVE NEW DISTRIBUTION PANEL. NOTIFY ENGINEER OF EXISTING WIRE SIZE.
E3	CONTRACTOR SHALL METER THE SECONDARY SIDE OF THE EXISTING 150KVA TRANSFORMER FOR A PERIOD OF 30 DAYS PRIOR TO START OF CONSTRUCTION TO VERIFY EXISTING LOAD. METER SHALL RECORD VOLTAGE; AMPERAGE; KVA; AND POWER FACTOR FOR EACH PHASE AND SUM OF THE PHASES. THE METER SHALL CONTINUALLY AVERAGE THE POWER DEMAND OVER MAXIMUM 15 MINUTE INTERVALS AS REQUIRED BY NEC 220.87. COMPILE A METERING SUMMARY REPORT AND DELIVER RESULTS TO ENGINEER AFTER 7 DAYS AND AFTER 30 DAYS. PROVIDE WEATHERPROOF ENCLOSURE IF METER IS PLACED OUTSIDE NEAR SECONDARY FUSED DISCONENCT.



ELECTRICAL ONE-LINE DIAGRAM - NEW WORK

SCALE: NONE



PARTIAL SECOND LEVEL POWER PLAN (FOR EQUIPMENT LOCATION REFERNCE)

SCALE: 1/8" = 1'-0"

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NURSING RENOVATION

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PLANNING
INTERIOR DESIGN

No.	Date	Revision

Project Name: NURSING RENOVATION
Project Number: 2021-200
Date (YYYY/MM/DD): 2021/10/01
Drawn By: KPC
Checked By: PDT
Drawing: ELECTRICAL ONE-LINE DIAGRAM

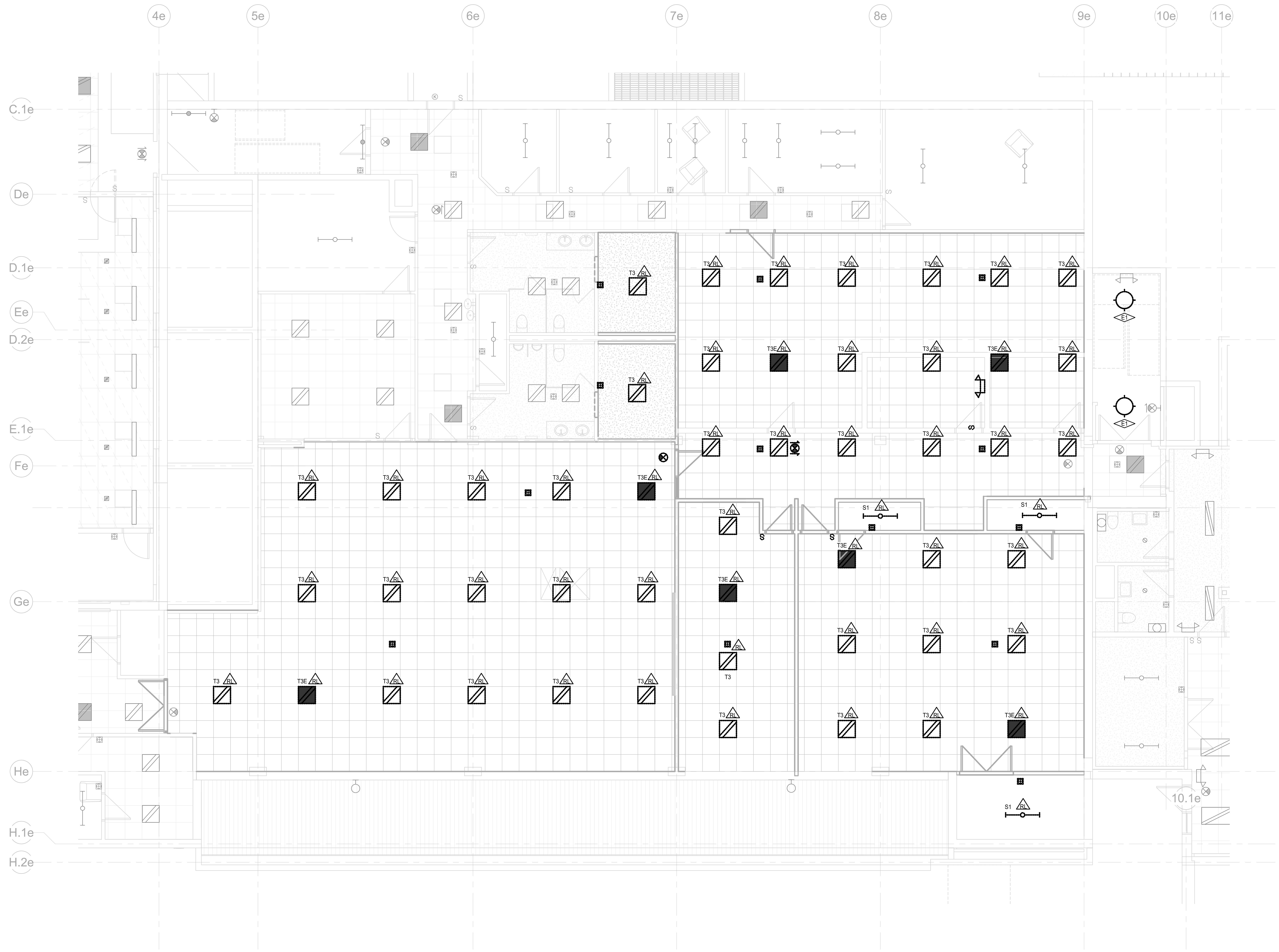
E-011

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES

E1	PART OF ALTERNATE BID ONLY: DISCONNECT EXISTING PENDANT. RECONNECT NEW FIXTURE TO EXISTING CIRCUITRY.



FIRST LEVEL LIGHTING DEMOLITION PLAN

SCALE: 3/16" = 1'-0"

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Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: KPC
Checked By: PDT

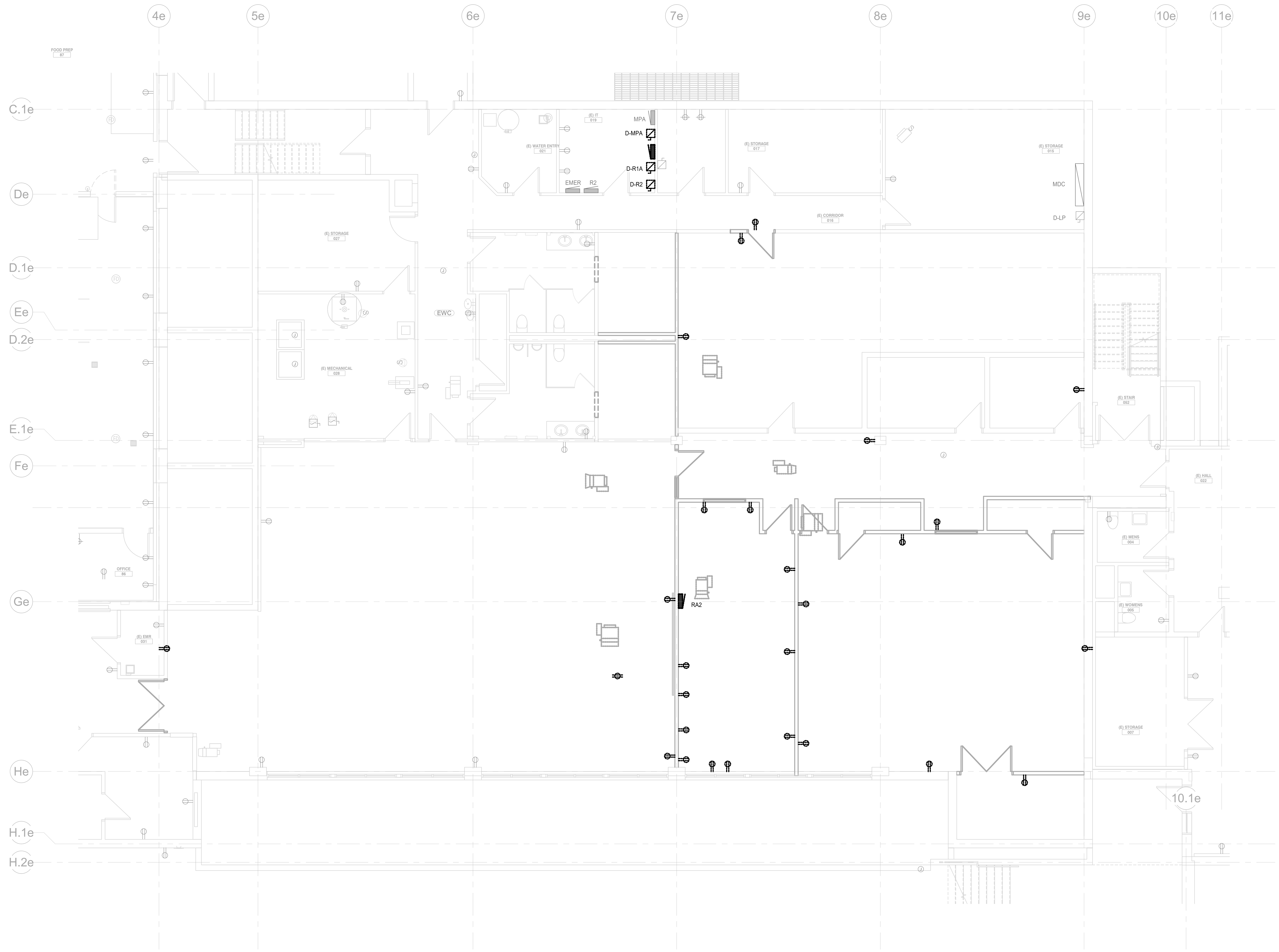
Drawing
FIRST LEVEL LIGHTING DEMOLITION PLAN

ED101

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FIRST LEVEL POWER DEMOLITION PLAN

SCALE: 3/16" = 1'-0"

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NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: KPC
Checked By: PDT

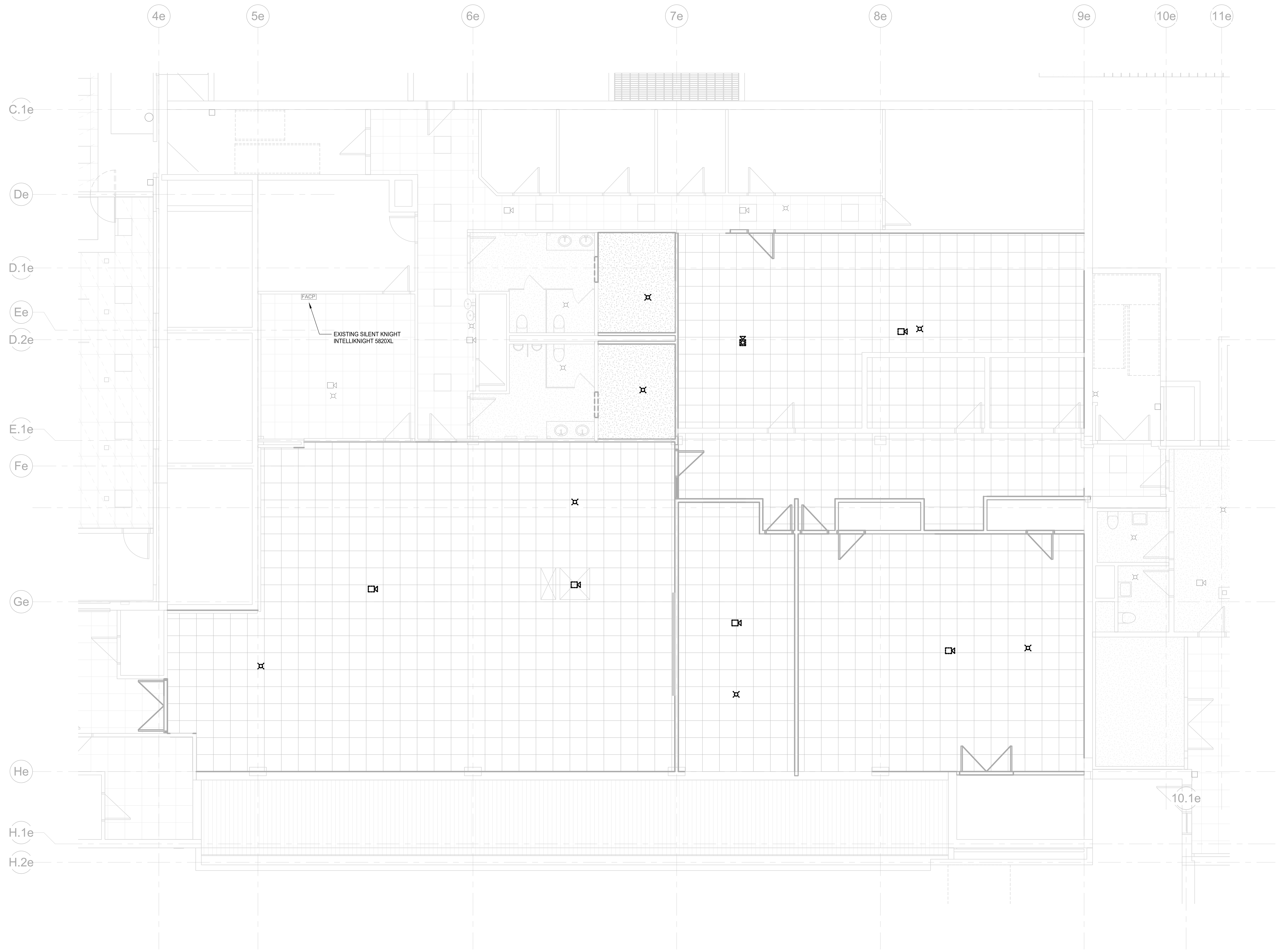
Drawing
FIRST LEVEL POWER DEMOLITION PLAN

ED111

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FIRST LEVEL FIRE ALARM DEMOLITION PLAN

SCALE: 3/16" = 1'-0"

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No.	Date	Revision

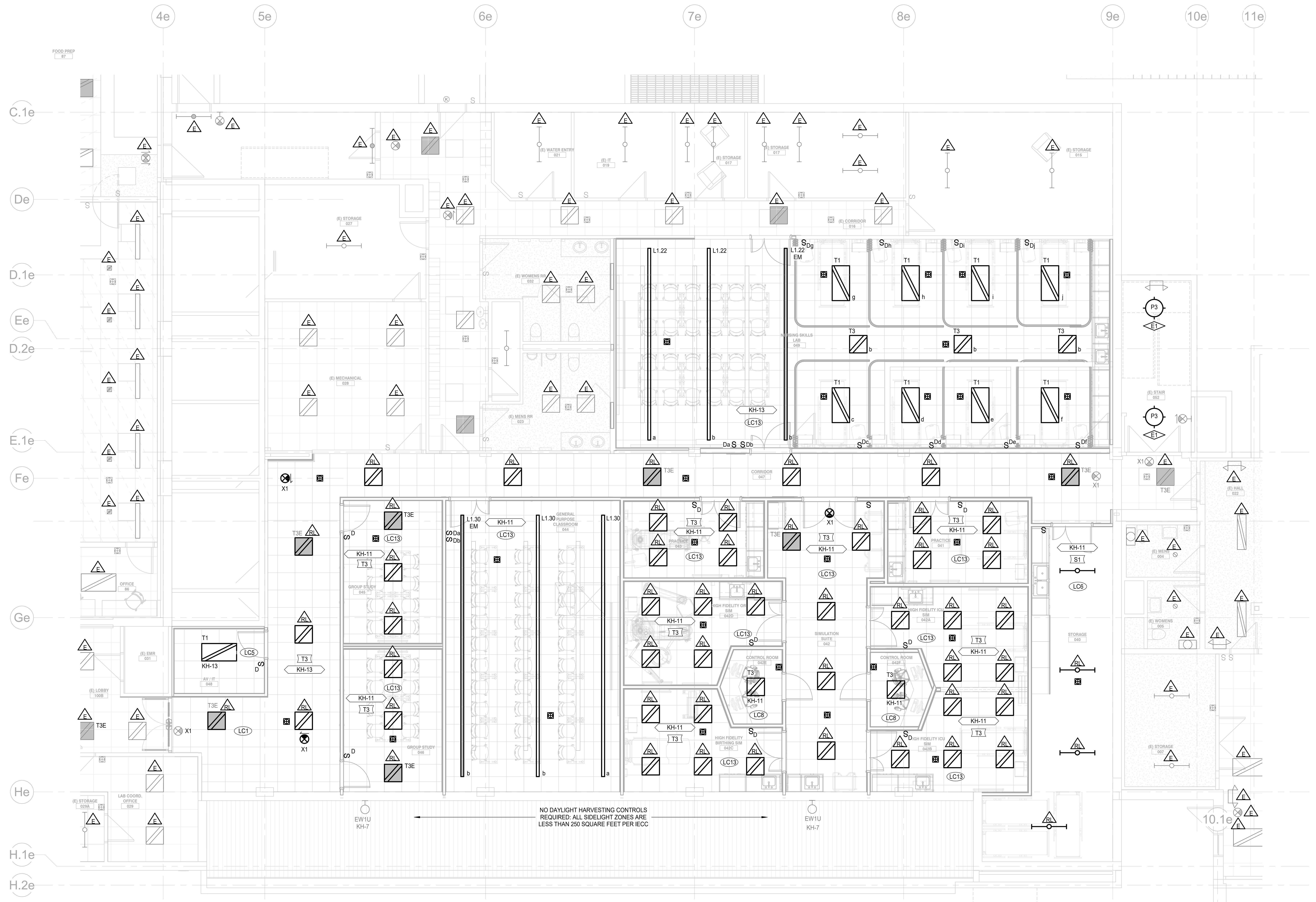
Project Name: NURSING RENOVATION
Project Number: 2021-200
Date (YYYY/MM/DD): 2021/10/01
Drawn By: KPC
Checked By: PDT
Drawing: FIRST LEVEL FIRE ALARM DEMOLITION PLAN

ED121

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES	
E1	PART OF ALTERNATE BID ONLY: DISCONNECT EXISTING PENDANT. RECONNECT NEW FIXTURE TO EXISTING CIRCUITRY.



FIRST LEVEL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

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NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By	Checked By
KPC	PDT

Drawing
FIRST LEVEL LIGHTING PLAN

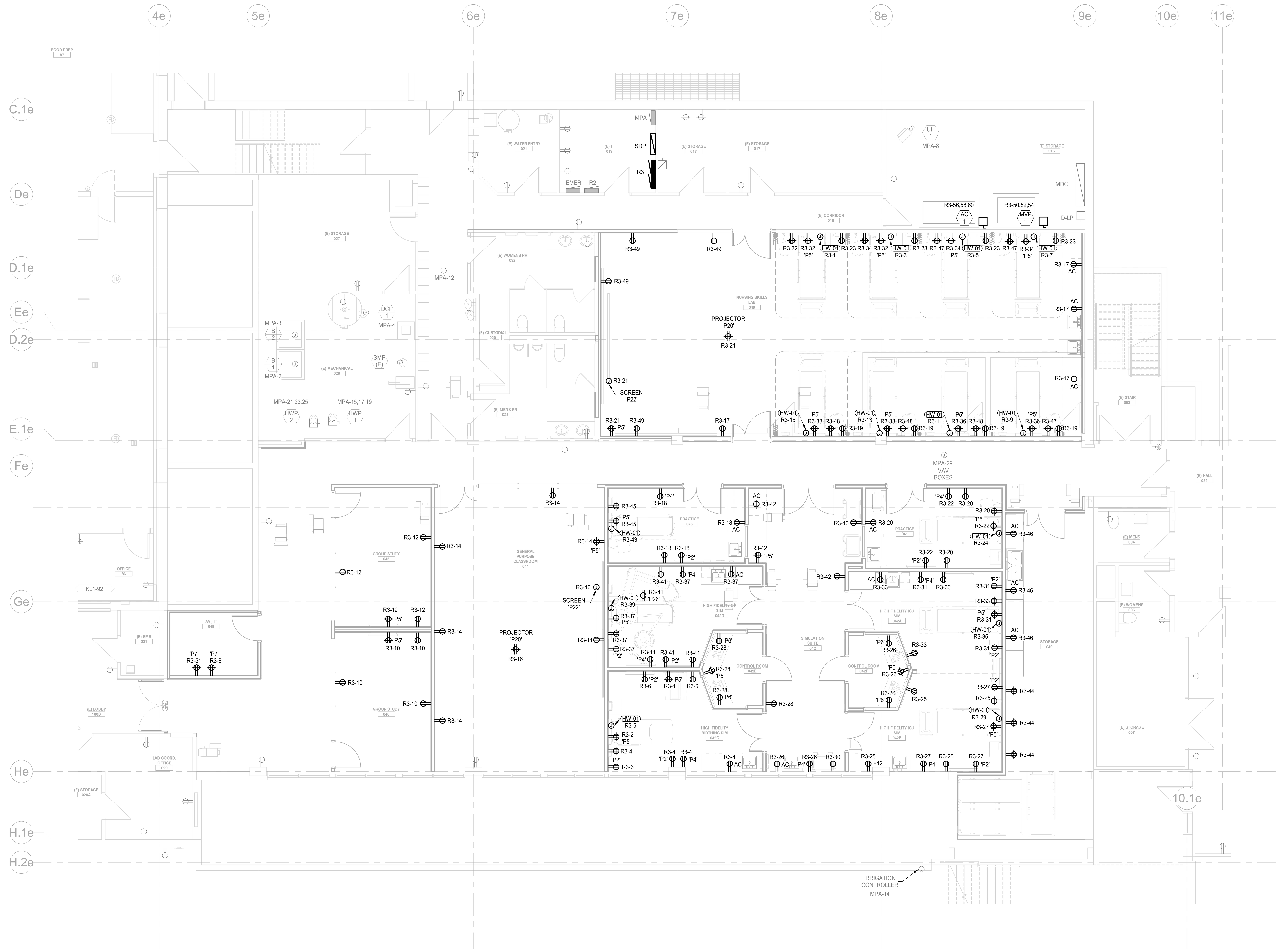
E-101

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

DEVICES DENOTED AS 'P#' ARE FOR/MOUNTED WITHIN TECHNOLOGY EQUIPMENT. REFER TO T-SERIES SHEETS FOR FULL REQUIREMENTS AND LOCATIONS.

KEYNOTES



FIRST LEVEL POWER PLAN

SCALE: 3/16" = 1'-0"

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NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: KPC
Checked By: PDT

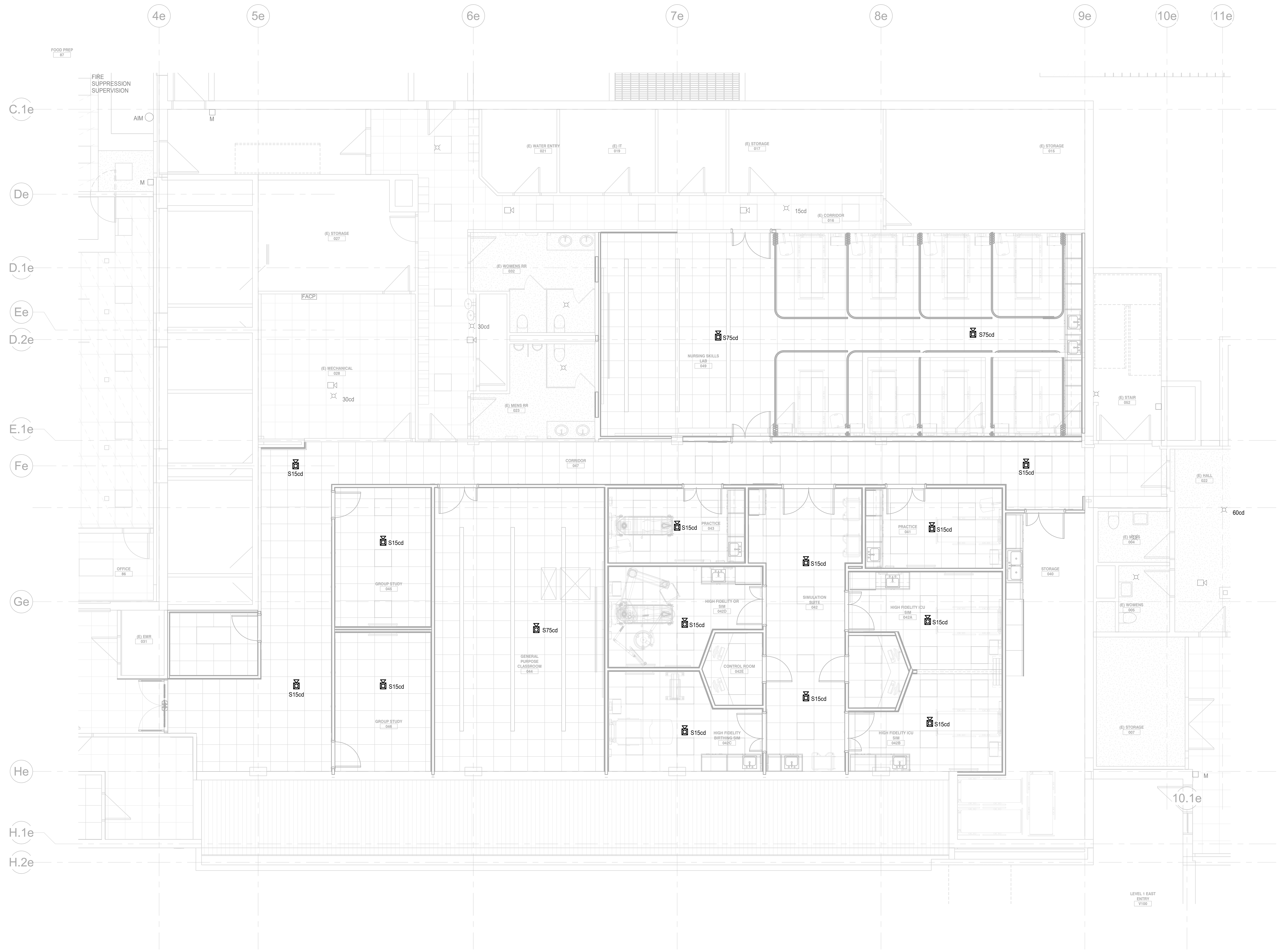
Drawing
FIRST LEVEL POWER PLAN

E-111

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FIRST LEVEL FIRE ALARM PLAN

SCALE: 3/16" = 1'-0"

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NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By	Checked By
KPC	PDT

Drawing
FIRST LEVEL FIRE ALARM PLAN

E-121

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

GENERAL LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
		SECTION DESIGNATION SECTION CUT ON THIS SHEET
		VIEW REFERENCE DESIGNATION VIEW REFERENCE ON THIS SHEET
	A 123	EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER (UNIT SERVED - FLOOR - SEQUENCE #)
	A 10 200	DIFFUSER IDENTIFICATION DIFFUSER NECK DIAMETER DIFFUSER CFM
	B 8x24FL 9999	LINEAR DIFFUSER IDENTIFICATION LINEAR DIFFUSER NECK DIAMETER LINEAR DIFFUSER LENGTH LINEAR DIFFUSER CFM
	Z-6" 3'-6" FTR 28	FINNED TUBE RADIATOR ACTIVE ELEMENT LENGTH EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER RADIATOR ENCLOSURE LENGTH (OR W-W=WALL-TO-WALL)
	1	KEY NOTE REFERENCE
	1	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE
		TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FLR)
		POINT OF CONNECTION, NEW TO EXISTING
		DIRECTION OF FLOW IN PIPE
		DUCTWORK, PIPING AND EQUIPMENT TO BE REMOVED
(E)		EXISTING
(N)		NEW
(R)		RELOCATED
(F)		FUTURE
DIA		DIAMETER
WAD		WALL ACCESS DOOR
NIC		NOT IN CONTRACT
AFF		ABOVE FINISHED FLOOR
GC		GENERAL CONTRACTOR
MC		MECHANICAL CONTRACTOR
EC		ELECTRICAL CONTRACTOR
UNO		UNLESS NOTED OTHERWISE

ABBR.	SYMBOL	DESCRIPTION
	DETAIL SHEETS / PLAN SHEETS	
		CAP END OF PIPE
	XX	PITCH DOWN IN DIRECTION OF ARROW
		PIPE ANCHOR
		PIPE ALIGNMENT GUIDE
		UNION OR FLANGE
		CONCENTRIC PIPE REDUCER
		ECCENTRIC PIPE REDUCER
PRV		PRESSURE REDUCING VALVE
PTRV	T.C.	PRESSURE AND/OR TEMPERATURE RELIEF VALVE
		PLUG VALVE
		ISOLATION (GATE / BALL) VALVE
		VERTICAL PIPE VALVE
GLV		GLOBE VALVE
BFV		BUTTERFLY VALVE
BV		BALL VALVE
CV		CHECK VALVE
		SOLENOID / MOTORIZED VALVE
		BUTTERFLY SOLENOID VALVE
		HOSE END DRAIN VALVE
P/T	T P/T	PRESSURE / TEMPERATURE TAP
		STRAINER
	ST	STRAINER W/ BLOWDOWN
		BRAIDED FLEXIBLE PIPE CONNECTOR
		DOUBLE-BOWL FLEXIBLE PIPE CONNECTOR
		THERMOMETER
		PRESSURE GAUGE
		SIGHT GLASS
C.A.P.		CEILING ACCESS PANEL
		PUMP
TB		THRUST BLOCK
		MANUAL AIR VENT
		AUTOMATIC AIR VENT

FIRE PROTECTION LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
F		FIRE SERVICE PIPING
O.S.&Y.		O.S.&Y. VALVE W/ TAMPER SWITCH
FS		FLOW SWITCH
PIV		POST INDICATOR VALVE
FDC		FIRE DEPARTMENT CONNECTION

ABBR.	SYMBOL	DESCRIPTION
		SPRINKLER HEAD
		SIDEWALL SPRINKLER HEAD
FVC		FIRE VALVE CABINET

FIRE PROTECTION NOTES:

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE AND PROPERLY FUNCTIONING FIRE PROTECTION SYSTEM.
2. THE FIRE PROTECTION WORK INVOLVES ENGINEERING AND DESIGN BY THE CONTRACTOR TO DETERMINE THE EXTENT OF NEW WORK AND THE MODIFICATION AND EXTENSION OF EXISTING SYSTEMS TO PROVIDE FULL COVERAGE TO THE PROJECT AREA SHOWN ON THESE AND THE ARCHITECTURAL PLANS.
3. THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC. IT DOES NOT NECESSARILY REPRESENT ALL ELBOWS, OFFSETS, HANGERS, ETC., REQUIRED FOR A COMPLETE WORKING SYSTEM.
4. ALL FIRE PROTECTION SYSTEMS INSTALLED SHALL BE IN ACCORDANCE WITH NFPA-13, 14, 20, ETC. AND LOCAL BUILDING CODES AND ORDINANCES.
5. FIRE PROTECTION CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL NEW FIRE PROTECTION EQUIPMENT AND PIPING WITH ALL OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND SYSTEM INSTALLATION, SO AS NOT TO INTERFERE WITH THE ROUTING OF NEW DUCTWORK, PLUMBING PIPING, ETC.
6. PROVIDE ALL FITTINGS, RISER NIPPLES, ARM-OVERS, HANGERS, ETC. TO MAINTAIN CONFORMANCE WITH APPLICABLE STANDARDS AND TO POSITION THE SPRINKLERS IN THE PROPER LOCATIONS.
7. SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS WITH FIRE STOPPING MATERIALS AS REQUIRED.
8. FOR REMODEL AREAS NEW SPRINKLERS SHALL MATCH EXISTING SPRINKLERS.
9. PROVIDE WORKING DRAWINGS AND HYDRAULICALLY CALCULATE THIS FIRE SPRINKLER SYSTEM PER NFPA-13 WHERE REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
10. PROVIDE FIELD COORDINATION OF PIPING AND SPRINKLER INSTALLATIONS WITH DUCTWORK, LIGHTS, SMOKE DETECTORS, DIFFUSERS, ETC.

FIRE PROTECTION DENSITIES:

1. ALL ROOMS TO BE LIGHT HAZARD UNLESS NOTE OTHERWISE ON THE PLANS.

	LIGHT HAZARD, 0.1 GPM OVER 1,500 SQ.FT
OH1	ORDINARY HAZARD GROUP 1, 0.15 GPM OVER 1,500 SQ.FT
OH2	ORDINARY HAZARD GROUP 2, 0.2 GPM OVER 1,500 SQ.FT
XH1	EXTRA HAZARD, GROUP 1, 0.3 GPM OVER 2,500 SQ.FT
XH2	EXTRA HAZARD, GROUP 2, 0.4 GPM OVER 2,500 SQ.FT

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No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: SP
Checked By: SC

Drawing
FIRE PROTECTION LEGENDS & NOTES

F-001

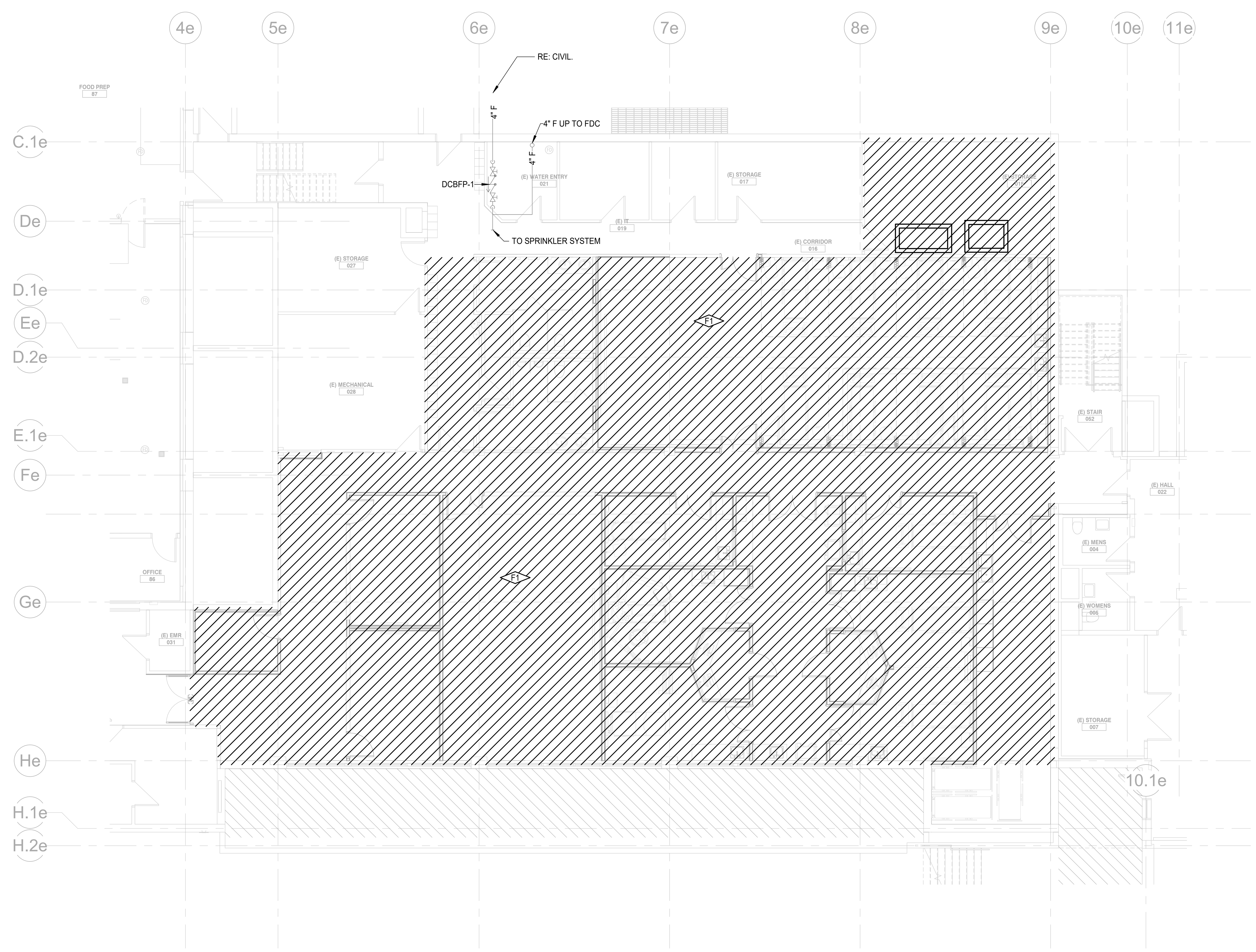
NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

C:\Revit Local Files\2020\2021200_MEP_Nursing Simulation Lab_R20_ShawPerryCRA.rvt
10/1/2021 10:22:27 AM

KEYNOTES

F1	HATCHED AREA REQUIRES MODIFICATIONS TO FIRE PROTECTION LAYOUT AND HEADS PER SPECIFICATIONS.



FIRST LEVEL FIRE PROTECTION PLAN

SCALE: 1/8" = 1'-0"

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NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: SP
Checked By: SC

Drawing
FIRST LEVEL FIRE PROTECTION PLAN

F-101

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

GENERAL LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
		SECTION DESIGNATION
		SECTION CUT ON THIS SHEET
		VIEW REFERENCE DESIGNATION
		VIEW REFERENCE ON THIS SHEET
	7 / 123	EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER (UNIT SERVED - FLOOR - SEQUENCE #)
	A 10 / 250	DIFFUSER IDENTIFICATION DIFFUSER NECK DIAMETER DIFFUSER CFM
	B 1824 L 9999	LINEAR DIFFUSER IDENTIFICATION LINEAR DIFFUSER NECK DIAMETER LINEAR DIFFUSER LENGTH LINEAR DIFFUSER CFM
	2'-0" / 3'-0" FTR 28	FINNED TUBE RADIATOR ACTIVE ELEMENT LENGTH EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER RADIATOR ENCLOSURE LENGTH (OR W-W=WALL-TO-WALL)
	<KEY>	KEY NOTE REFERENCE
	1	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE
		TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FLR)
		POINT OF CONNECTION, NEW TO EXISTING
		DIRECTION OF FLOW IN PIPE
		DUCTWORK, PIPING AND EQUIPMENT TO BE REMOVED
(E)		EXISTING
(N)		NEW
(R)		RELOCATED
(F)		FUTURE
DIA		DIAMETER
WAD		WALL ACCESS DOOR
NIC		NOT IN CONTRACT
AFF		ABOVE FINISHED FLOOR
GC		GENERAL CONTRACTOR
MC		MECHANICAL CONTRACTOR
EC		ELECTRICAL CONTRACTOR
UNO		UNLESS NOTED OTHERWISE

ABBR.	SYMBOL	DETAIL SHEETS	PLAN SHEETS	DESCRIPTION
				CAP END OF PIPE
		XX	SLOPE	PITCH DOWN IN DIRECTION OF ARROW
				PIPE ANCHOR
				PIPE ALIGNMENT GUIDE
				UNION OR FLANGE
				CONCENTRIC PIPE REDUCER
				ECCENTRIC PIPE REDUCER
PRV				PRESSURE REDUCING VALVE
PTRV				PRESSURE AND/OR TEMPERATURE RELIEF VALVE
				PLUG VALVE
				ISOLATION (GATE / BALL) VALVE
				VERTICAL PIPE VALVE
GLV				GLOBE VALVE
BFV				BUTTERFLY VALVE
BV				BALL VALVE
CV				CHECK VALVE
				SOLENOID / MOTORIZED VALVE
				BUTTERFLY SOLENOID VALVE
				HOSE END DRAIN VALVE
P/T		PT		PRESSURE / TEMPERATURE TAP
				STRAINER
				STRAINER W/ BLOWDOWN
				BRAIDED FLEXIBLE PIPE CONNECTOR
				DOUBLE-BOWL FLEXIBLE PIPE CONNECTOR
				THERMOMETER
				PRESSURE GAUGE
				SIGHT GLASS
C.A.P.				CEILING ACCESS PANEL
				PUMP
TB				THRUST BLOCK
				MANUAL AIR VENT
				AUTOMATIC AIR VENT

LABORATORY / MEDICAL SERVICES LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
O2		OXYGEN PIPING
LVAC		LABORATORY VACUUM PIPING
MVAC		MEDICAL VACUUM PIPING
N2O		NITROUS OXIDE PIPING
N		NITROGEN PIPING
MA		MEDICAL AIR PIPING
CO2		CARBON DIOXIDE
WAGD		WASTE ANESTHESIA GAS DISPOSAL
DI		DEIONIZED WATER PIPING
RO		REVERSE OSMOSIS WATER PIPING
He		HELIUM GAS PIPING
LN		LIQUID NITROGEN PIPING
LA		LABORATORY COMPRESSED AIR PIPING
G		NATURAL GAS PIPING

ABBR.	SYMBOL	DESCRIPTION
H		HYDROGEN PIPING
ACET		ACETYLENE GAS PIPING
O2		OXYGEN SERVICE OUTLET
LVAC/MVAC		LABORATORY/MEDICAL VACUUM SERVICE INLET
WAGD		WASTE ANESTHESIA GAS DISPOSAL INLET
N2O		NITROUS OXIDE SERVICE OUTLET
N		NITROGEN SERVICE OUTLET
G		NATURAL GAS SERVICE OUTLET
LA/MA		LABORATORY/MEDICAL AIR SERVICE OUTLET
CO2		CARBON DIOXIDE SERVICE OUTLET
ZVB		ZONE VALVE BOX
AAP		AREA ALARM PANEL
MAP		MASTER ALARM PANEL

FIRE PROTECTION LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
F		FIRE SERVICE PIPING
O.S.&Y.		O.S.&Y. VALVE W/ TAMPER SWITCH
FS		FLOW SWITCH
PIV		POST INDICATOR VALVE
FDC		FIRE DEPARTMENT CONNECTION

ABBR.	SYMBOL	DESCRIPTION
		SPRINKLER HEAD
		SIDEWALL SPRINKLER HEAD
FVC		FIRE VALVE CABINET

PLUMBING LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION
CW		DOMESTIC COLD WATER PIPING
HW		DOMESTIC HOT WATER PIPING
HWC		DOMESTIC HOT WATER CIRC PIPING
CW-S		SOFTENED DOMESTIC COLD WATER PIPING
HW-S		SOFTENED DOMESTIC HOT WATER PIPING
140°F HW		DOMESTIC HOT WATER PIPING @ 140°F
140°F HWC		DOMESTIC HOT WATER CIRC PIPING @ 140°F
160°F HW		DOMESTIC HOT WATER PIPING @ 160°F
160°F HWC		DOMESTIC HOT WATER CIRC PIPING @ 160°F
TW		TEPID WATER PIPING
TWC		TEPID WATER CIRC PIPING
ICW		INDUSTRIAL COLD WATER PIPING
IHW		INDUSTRIAL HOT WATER PIPING
IHWC		INDUSTRIAL HOT WATER CIRC PIPING
NPCW		NON-POTABLE COLD WATER PIPING
NPHW		NON-POTABLE HOT WATER PIPING
NPHR		NON-POTABLE HOT WATER CIRC PIPING
V		VENT PIPING
AV		ACID RESISTANT VENT PIPING
W		WASTE PIPING
W		FOUNDATION WASTE PIPING
AW		ACID RESISTANT WASTE PIPING
AW		FOUNDATION ACID RESISTANT WASTE PIPING
GW		GREASE WASTE (TO GREASE INTERCEPTOR)
GW		FOUNDATION GREASE WASTE
SD		STORM DRAIN PIPING
SD		FOUNDATION STORM DRAIN PIPING
OD		OVERFLOW DRAIN PIPING
OD		FOUNDATION OVERFLOW DRAIN PIPING
CA		COMPRESSED AIR
G		NATURAL GAS PIPING

ABBR.	SYMBOL	DESCRIPTION
GCO		GRADE CLEANOUT
FCO		FLOOR CLEANOUT
WCO		WALL CLEANOUT
LCO		LINE CLEANOUT
AD		AREA DRAIN
FD		FLOOR DRAIN
FS		FLOOR SINK
RD / OD		ROOF DRAIN OR OVERFLOW DRAIN
PRV		GAS PRESSURE REDUCING VALVE
VB		ATMOSPHERIC VACUUM BREAKER
BFP		BACKFLOW PREVENTER
SA		SHOCK ARRESTOR W / ISOLATION VALVE
GC		GAS SHUT-OFF VALVE
		STOP AND DRAIN VALVE
BV		BALANCING VALVE
WH		WALL HYDRANT
HB		HOSE BIBB
RH		ROOF HYDRANT
DSN		DOWNSPOUT NOZZLE
MH		MANHOLE
CI		CAST IRON
CB		CATCH BASIN
VTR		VENT THRU ROOF
IE		INVERT ELEVATION
PVC		POLYVINYL CHLORIDE

PLUMBING NOTES:

1. CONTRACTOR SHALL NOT SHUT-OFF/PUT OUT OF SERVICE ANY SYSTEMS/SERVICES WITHOUT FIRST COORDINATING WITH OWNER.
2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOR RESOLUTIONS.
3. THIS CONTRACTOR SHALL COORDINATE LOCATIONS OF PIPING WITH OTHER TRADES AND ADVISE ARCHITECT/ENGINEER OF ANY POSSIBLE CONFLICTS. VERIFY EXACT LOCATIONS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS.
4. SEE SPECIFICATIONS FOR WATER HAMMER ARRESTOR SIZING. ALL FLUSH VALVES AND SOLENOID OPERATED EQUIPMENT SHALL HAVE A WATER HAMMER ARRESTOR.
5. SEE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.
6. ALL EXISTING FIXTURES AND EQUIPMENT TO BE REMOVED SHALL HAVE ALL ASSOCIATED PIPING CONTROLS, HANGERS, SUPPORTS AND ANY MISCELLANEOUS ASSOCIATED SERVICE OR PART REMOVED COMPLETELY.
7. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF PENETRATION DETAILS.
8. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE ELEVATIONS AND LOCATIONS.
9. INVERT ELEVATIONS SHOWN ARE BASED ON A GROUND FLOOR FINISH ELEVATION OF 95.00'.
10. SEE ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR DIMENSIONED LOCATION OF PLUMBING FIXTURES AND WALLS.
11. PROVIDE CLEANOUTS IN ACCESSIBLE LOCATIONS PER THE PROJECT SPECIFICATIONS AND LOCAL PLUMBING CODES.

FOUNDATION PLUMBING NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK.
2. COORDINATE WORK WITH ALL TRADES.
3. INVERT ELEVATIONS SHOWN ARE BASED ON A GROUND FLOOR FINISH ELEVATION OF 95.00'.
4. SEE ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR EXACT LOCATION OF PLUMBING FIXTURES AND WALLS.
5. PROVIDE A WALL CLEANOUT ON ALL VERTICAL VENT PIPING SERVING BELOW GRADE HORIZONTAL WASTE PIPING.

FIRE PROTECTION PLAN NOTES:

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE AND PROPERLY FUNCTIONING FIRE PROTECTION SYSTEM.
2. THE FIRE PROTECTION WORK INVOLVES ENGINEERING AND DESIGN BY THE CONTRACTOR TO DETERMINE THE EXTENT OF NEW WORK AND THE MODIFICATION AND EXTENSION OF EXISTING SYSTEMS TO PROVIDE FULL COVERAGE TO THE PROJECT AREA SHOWN ON THESE AND THE ARCHITECTURAL PLANS.
3. THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC. IT DOES NOT NECESSARILY REPRESENT ALL ELBOWS, OFFSETS, HANGERS, ETC., REQUIRED FOR A COMPLETE WORKING SYSTEM.
4. ALL FIRE PROTECTION SYSTEMS INSTALLED SHALL BE IN ACCORDANCE WITH NFPA-13, 14, 20, ETC. AND LOCAL BUILDING CODES AND ORDINANCES.
5. FIRE PROTECTION CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL NEW FIRE PROTECTION EQUIPMENT AND PIPING WITH ALL OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND SYSTEM INSTALLATION, SO AS NOT TO INTERFERE WITH THE ROUTING OF NEW DUCTWORK, PLUMBING PIPING, ETC.
6. PROVIDE ALL FITTINGS, RISER NIPPLES, ARM-OVERS, HANGERS, ETC. TO MAINTAIN CONFORMANCE WITH APPLICABLE STANDARDS AND TO POSITION THE SPRINKLERS IN THE PROPER LOCATIONS.
7. SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS WITH FIRE STOPPING MATERIALS AS REQUIRED.
8. FOR REMODEL AREAS NEW SPRINKLERS SHALL MATCH EXISTING SPRINKLERS.
9. PROVIDE WORKING DRAWINGS AND HYDRAULICALLY CALCULATE THIS FIRE SPRINKLER SYSTEM PER NFPA-13 WHERE REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
10. PROVIDE FIELD COORDINATION OF PIPING AND SPRINKLER INSTALLATIONS WITH DUCTWORK, LIGHTS, SMOKE DETECTORS, DIFFUSERS, ETC.

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PLANNING
INTERIOR DESIGN

No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
2021-200

Date (YYYY/MM/DD)
2021/10/01

Drawn By: SP
Checked By: SC

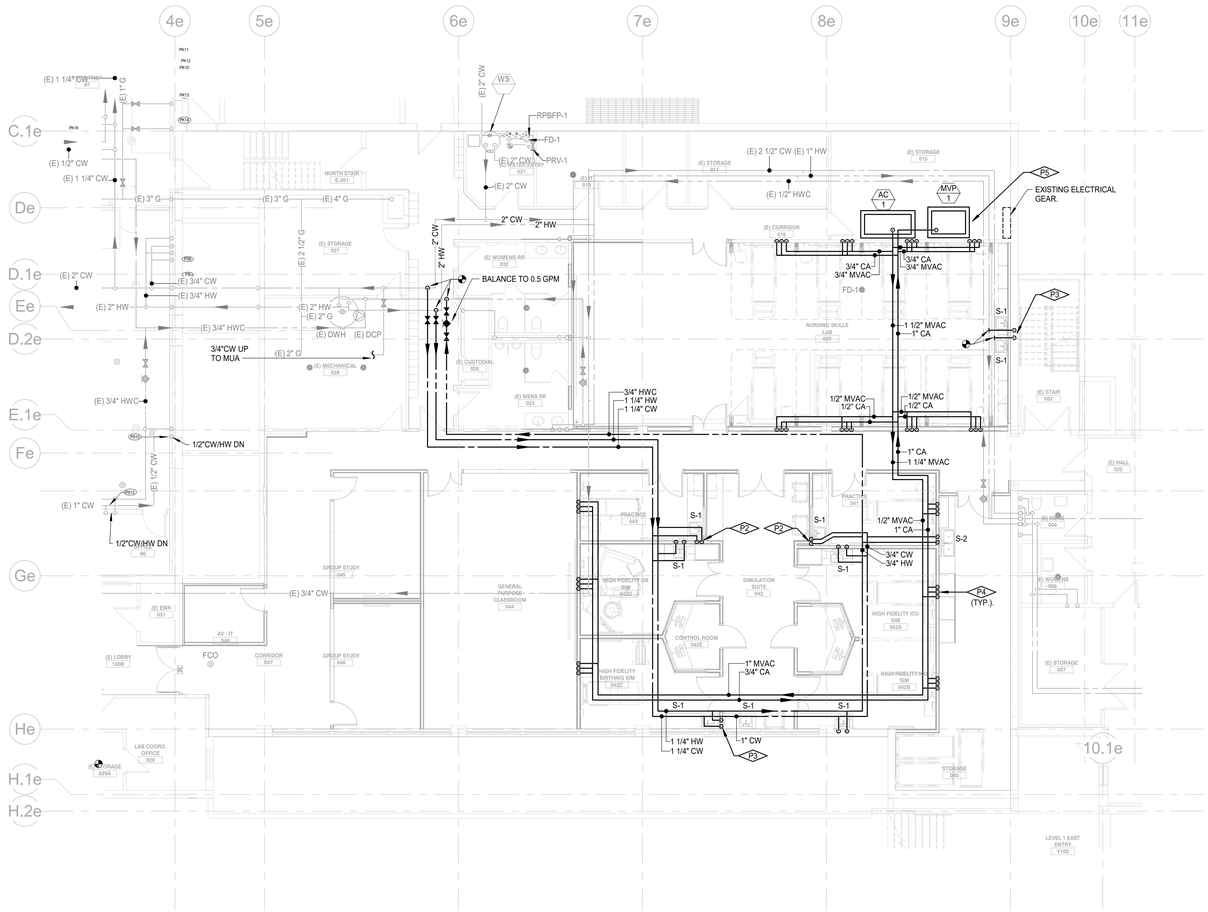
Drawing
PLUMBING LEGENDS & NOTES

P-001

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES	
P2	ROUTE PIPING DOWN WALL TO BELOW WINDOW FRAME AND OVER TO SINK.
P3	ROUTE 3/4" CW ANS HW DOWN WALL. THEN BRANCH WITH 1/2" HW AND CW TO BOTH SINKS.
P4	PROVIDE "VAC, "MA AND "O2. CONNECT TO OUTLET(S). RE: ARCHITECT FOR EXACT LOCATION(S) AND NUMBER OF OUTLET(S).
P5	FINAL LOCATION OF MEDICAL GAS EQUIPMENT SHALL COMPLY WITH NEC CLEARANCES TO ELECTRICAL PANELS.



FIRST LEVEL DOMESTIC WATER PLAN

SCALE: 1/8" = 1'-0"

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2021/10/01

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Checked By: SC

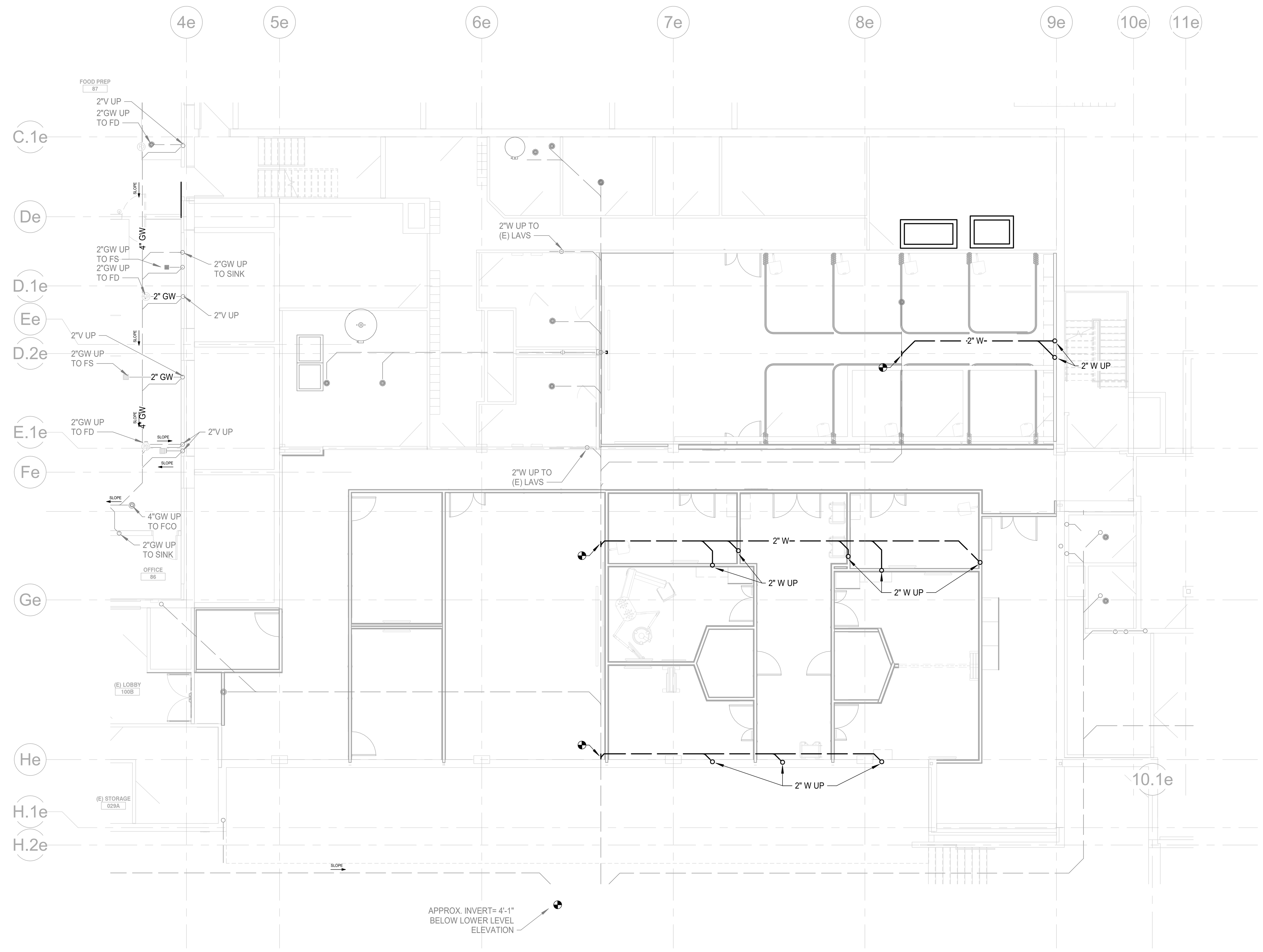
Drawing
FIRST LEVEL DOMESTIC WATER PLAN

P-101

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FOUNDATION WASTE & VENT PLAN

SCALE: 1/8" = 1'-0"

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2021/10/01

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Checked By: SC

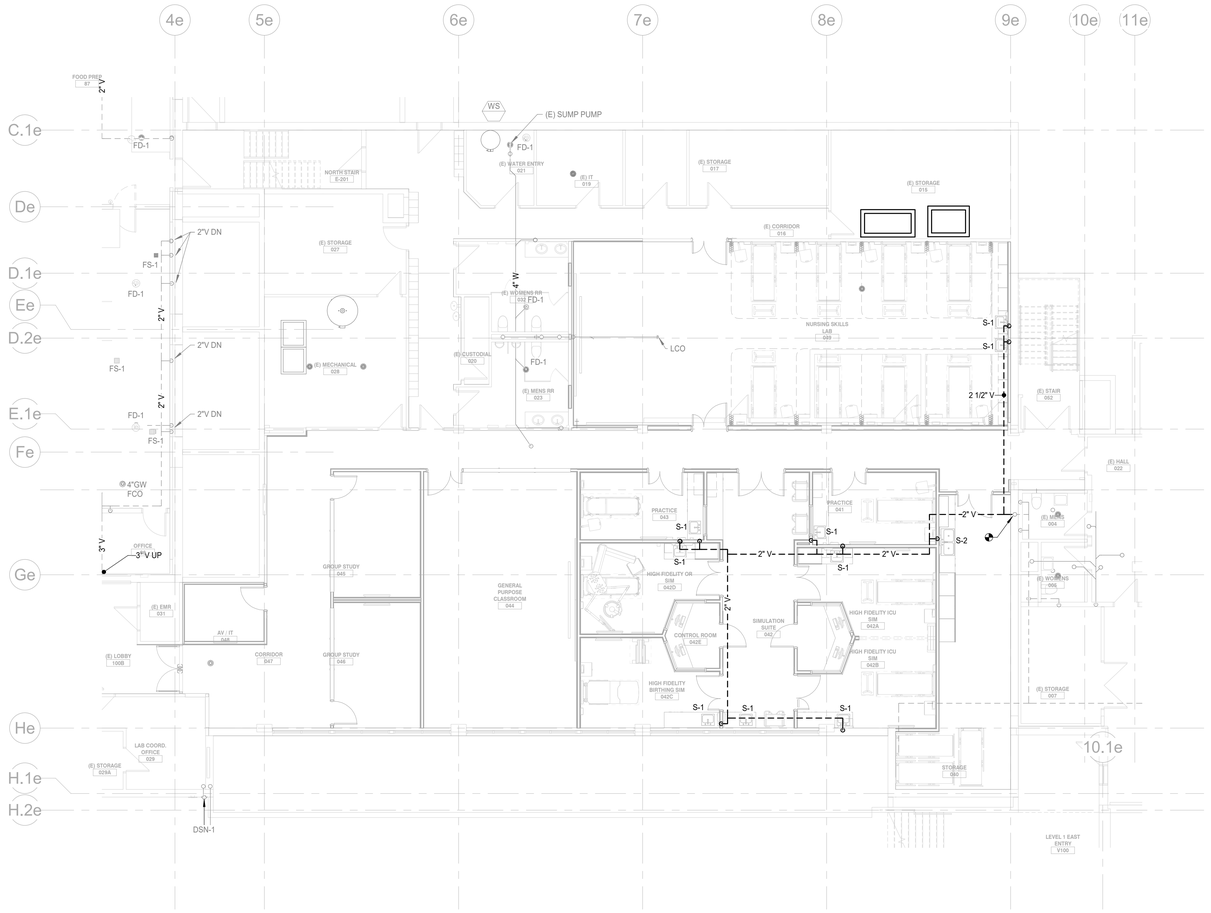
Drawing
FOUNDATION WASTE & VENT PLAN

P-110

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FIRST LEVEL WASTE & VENT PLAN

SCALE: 1/8" = 1'-0"

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2021/10/01

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Checked By: SC

Drawing
FIRST LEVEL WASTE & VENT PLAN

P-111

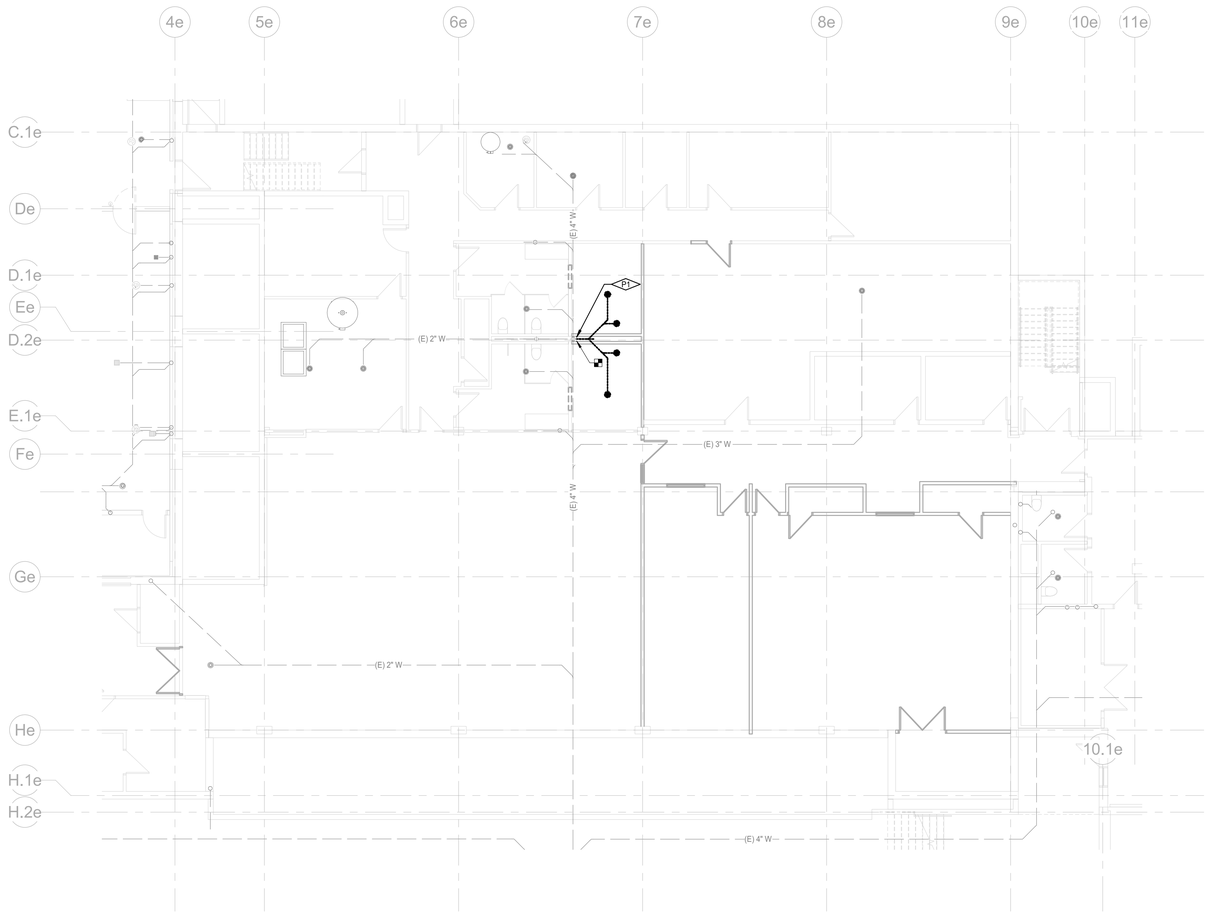
NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

C:\Revit Local Files\2020\2021200_MEP_Nursing Simulation Lab_R20_ShanePerry2RA.rvt
10/1/2021 10:21:12 AM

KEYNOTES

P1	REMOVE VENT PIPING FROM SHOWER AND FLOOR DRAINS BACK TO WEST SIDE OF DEMOLISHED WALL AND CAP END OF PIPE.



FOUNDATION WASTE & VENT DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

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Checked By: SC

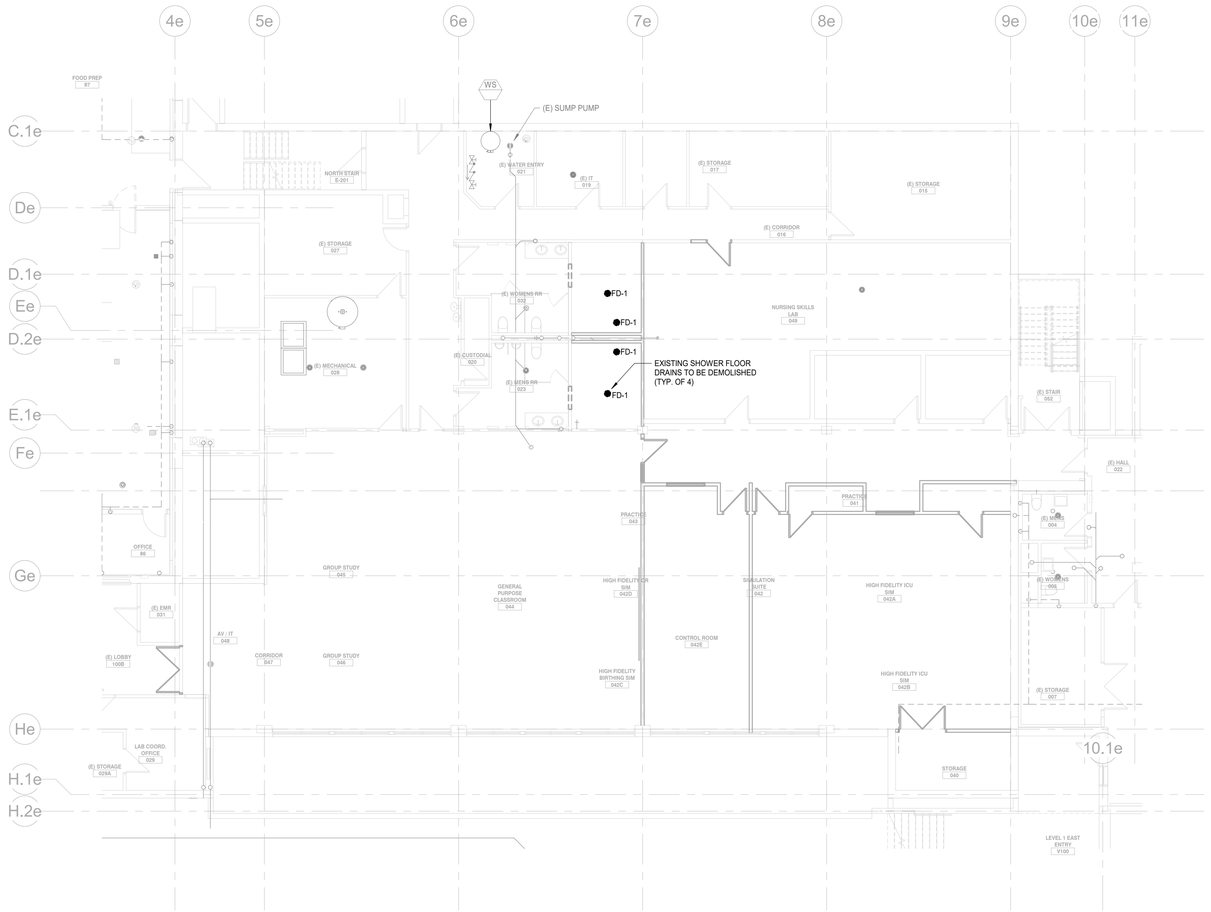
Drawing
FOUNDATION WASTE & VENT DEMOLITION PLAN

PD110

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

KEYNOTES



FIRST LEVEL WASTE & VENT DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

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Drawing
FIRST LEVEL WASTE & VENT DEMOLITION PLAN

PD111

NOT FOR CONSTRUCTION

DESIGN DEVELOPMENT

TECHNOLOGY ABBREVIATIONS

GENERAL

#	NUMBER	JB	JUNCTION BOX
+18"	MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE ABOVE FINISHED FLOOR OR FINISHED GRADE	KO	KNOCK OUT
AC	ALTERNATING CURRENT	LV	LOW VOLTAGE
ADA	AMERICAN WITH DISABILITIES ACT		
AFC	ABOVE FINISHED CEILING	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	M, MIC	MICROPHONE
AFG	ABOVE FINISHED GRADE	M, MTR	MOTOR
AHJ	AUTHORITY HAVING JURISDICTION	MAX	MAXIMUM
ARCH	ARCHITECT	MFR	MANUFACTURER
AV	AUDIOVISUAL	MIN	MINIMUM
AVC	AUDIOVISUAL CONTRACTOR	MISC	MISCELLANEOUS
AWG	AMERICAN WIRE GAUGE		
		NA	NOT APPLICABLE
B	BURIED	NEC	NATIONAL ELECTRICAL CODE
BD	BLACK DROP	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BLDG	BUILDING		
BET	BUILDING ENTRANCE TERMINAL	NIC	NOT IN CONTRACT
		NTS	NOT TO SCALE
C	CONDUIT		
CA	CABLE	PR	PROJECTOR
CAB	CABINET	PRS	PROJECTION SCREEN
CH	CASE HEIGHT		
CW	CASE WIDTH	OC	ON CENTER
CD	CASE DEPTH	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CAT	CATALOG	OFOI	OWNER FURNISHED OTHER INSTALLED
CATV	CABLE TELEVISION		
CCTV	CLOSED CIRCUIT TELEVISION	QTY	QUANTITY
CL	CENTERLINE		
CLG	CEILING	REQ'D	REQUIRED
		RHAFF	BOTTOM OF ROLLER HOUSING ABOVE FINISHED FLOOR
EMT	ELECTRIC METALLIC TUBING		
EC	ELECTRICAL CONTRACTOR	RGS	RIGID GALVANIZED STEEL
EST	ESTIMATE		
EQUIP	EQUIPMENT	SCC	STRUCTURED CABLE CONTRACTOR
EXIST, (E)	EXISTING		
		TYP	TYPICAL
FACP	FIRE ALARM CONTROL PANEL		
FPD	FLAT PANEL DISPLAY	UG	UNDERGROUND
		UNO	UNLESS NOTED OTHERWISE
HH	HANDHOLE	UPS	UNINTERRUPTIBLE POWER SUPPLY
		UTP	UNSHIELDED TWISTED-PAIR
IH	IMAGE HEIGHT		
IHAF	BOTTOM OF IMAGE HEIGHT ABOVE FINISHED FLOOR	WP	WEATHER-PROOF
IW	IMAGE WIDTH		
		XP	EXPLOSION PROOF
GC	GENERAL CONTRACTOR		

TECHNOLOGY SPECIFIC

J#	AV JUNCTION BOX	FB#(P#)	FLOOR BOX W/ AV AND POWER
N#	TELECOM JUNCTION BOX	FB#(N#,P#)	FLOOR BOX W/ AV, TELECOM AND POWER
P#	POWER OUTLET	FP#	FLOOR POKE-THRU DEVICE
J#(N#)	JUNCTION BOX W/ AV AND TELECOM	FP#(N#)	FLOOR POKE-THRU DEVICE W/ TELECOM
J#(P#)	JUNCTION BOX W/ AV AND POWER	FP#(P#)	FLOOR POKE-THRU DEVICE W/ AV AND POWER
J#(N#,P#)	JUNCTION BOX W/ AV, TELECOM AND POWER	FP#(N#,P#)	FLOOR POKE-THRU DEVICE W/ AV, TELECOM AND POWER
FB#	FLOOR BOX	FS#	FLOOR CONDUIT STUB
FB#(N#)	FLOOR BOX W/ TELECOM		

TECHNOLOGY SYMBOLS LEGEND

(THIS IS A MASTER LEGEND, NOT ALL SYMBOLS MAY APPEAR ON DRAWINGS.)

GENERAL

SYMBOL	DESCRIPTION
	NEW WORK
	EXISTING WORK TO REMAIN
	EXISTING WORK TO BE REMOVED (DEMO)
# T### RISER	CONDUIT RISER - DETAIL # / SHEET #
T### #	ELEVATION SYMBOL - DETAIL # / SHEET #
# T###	SECTION SYMBOL - DETAIL # / SHEET #

TECHNOLOGY TAG DESIGNATIONS

DISPLAY TYPE AND MOUNTING STYLE

NUMBER DESIGNATES THE DISPLAY TYPE → 2a ← LETTER DESIGNATES THE DISPLAY MOUNTING STYLE

(REFER TO THE DISPLAY TYPE AND PROJECTOR & DISPLAY MOUNTING STYLE LEGENDS FOR MORE INFORMATION)

PROJECTION TYPE AND MOUNTING STYLE

LETTER DESIGNATES THE PROJECTION SCREENTYPE → A2 ← NUMBER DESIGNATES THE PROJECTOR MOUNTING STYLE

(REFER TO THE PROJECTION SCREEN TYPE AND PROJECTOR & DISPLAY MOUNTING STYLE LEGENDS FOR MORE INFORMATION)

TELECOM DESIGNATORS

SYMBOL DESIGNATES FLOOR, WALL OR CEILING

N-NUMBER DESIGNATES BOX-TYPE & MOUNTING STYLE → N2A ← LETTER DESIGNATES CABLE PULL TYPE

(REFER TO THE TELECOM CABLING LEGEND FOR MORE INFORMATION)

VERTICAL PLACEMENT

J#J# OR J#N# OR N#N#

(DENOTES DEVICES WHICH FALL ON THE SAME VERTICAL PLANE)

TECHNOLOGY DEVICES

SYMBOL	DESCRIPTION
	FLOOR BOX / FLOOR POKE-THRU DEVICE / FLOOR CONDUIT STUB
	WALL JUNCTION BOX
	CEILING JUNCTION BOX
	FLOOR TELECOM OUTLET
	WALL TELECOM OUTLET
	CEILING TELECOM OUTLET
	FLOOR POWER CIRCUIT
	FLOOR POWER DUPLEX RECEPTACLE
	FLOOR POWER DOUBLE DUPLEX RECEPTACLE
	WALL POWER CIRCUIT
	WALL POWER DUPLEX RECEPTACLE
	WALL POWER DOUBLE DUPLEX RECEPTACLE
	CEILING POWER CIRCUIT
	CEILING DUPLEX RECEPTACLE
	CEILING DOUBLE DUPLEX RECEPTACLE
S	CEILING LOUDSPEAKER BY AV CONTRACTOR - SHOWN FOR COORDINATION PURPOSES ONLY. EXACT LOCATION TO BE COORDINATED BY THE AV CONTRACTOR.
C	CEILING AV CAMERA BY AV CONTRACTOR - SHOWN FOR COORDINATION PURPOSES ONLY. EXACT LOCATION TO BE COORDINATED BY THE AV CONTRACTOR.
M	CEILING AV MICROPHONE BY AV CONTRACTOR - SHOWN FOR COORDINATION PURPOSES ONLY. EXACT LOCATION TO BE COORDINATED BY THE AV CONTRACTOR.
	FLAT PANEL DISPLAY BY AV CONTRACTOR - SHOWN FOR COORDINATION PURPOSES ONLY.
	PROJECTOR BY AV CONTRACTOR - SHOWN FOR COORDINATION PURPOSES ONLY.
	PROJECTION SCREEN - REFER TO THE PROJECTION SCREEN TYPE LEGEND AND NOTES FOR MORE INFORMATION.

TECHNOLOGY DEVICES

SYMBOL	DESCRIPTION
	ACCESS PANEL
	LARGE JUNCTION BOX
	CABLE BASKET - REFER TO PLANS FOR SIZE
	CABLE RUNWAY - REFER TO PLANS FOR SIZE
	CONDUIT - REFER TO PLANS FOR SIZE
FB	CONDUIT - RESERVED FOR FIBER BACKBONE
CB	CONDUIT - RESERVED FOR COPPER BACKBONE
HC	CONDUIT - RESERVED FOR HORIZONTAL CABLING
F	CONDUIT - RESERVED FOR FUTURE
S	CONDUIT - RESERVED FOR SECURITY
/	FIRE RATED ASSEMBLY
	BUILDING ENTRANCE TERMINAL
	CATV TAP
	GROUNDING BUSBAR
	MAIN GROUNDING BUSBAR
	ELECTRICAL / SECURITY PANEL
	TERMINATION BLOCK - 66 STYLE
	TERMINATION BLOCK - 110 STYLE
	VERTICAL CABLE MANAGER
	RACK - 2 POST
	RACK - 4 POST
	EQUIPMENT RACK
	PLYWOOD BACKBOARD

TELECOM BUILDING RISER

SYMBOL	DESCRIPTION
COPPER	48 - PORT COPPER PATCH PANEL, RACK MOUNT
OPTICAL	48 - PORT OPTICAL FIBER PANEL, RACK MOUNT
110	110 - STYLE PUNCHDOWN BLOCK, WALL MOUNT
TMGB	TELECOM MAIN GROUNDING BUSBAR (TMGB), WALL MOUNT
TGB	TELECOM GROUNDING BUSBAR (TGB), WALL MOUNT
	PRIMARY CABLE PROTECTION, WALL MOUNT
	CATV HEAD END EQUIPMENT
	CATV TAP
	CONDUIT - REFER TO PLANS FOR SIZE

AUDIOVISUAL ROOM RISERS

SYMBOL	DESCRIPTION
N A	AN AUDIOVISUAL DEVICE WHICH CONTAINS A POWER RECEPTACLE AND A TELECOM OUTLET
A	AUDIOVISUAL JUNCTION BOX
N	TELECOM JUNCTION BOX
	POWER DESIGNATIONS
	CONDUIT STUB
	FLEXIBLE CONDUIT RUN
	J-HOOK

CONTRACTOR RESPONSIBILITY MATRIX

ITEM / TASK	FURNISH	INSTALL
UNISTRUT, THREADED ROD, SUPPORT CABLE, FASTENERS OR OTHER HARDWARE REQUIRED TO ATTACH AUDIOVISUAL WALL OR CEILING MOUNTS TO STRUCTURE	GC	GC
ROUGH OR FINISHED TRIM, CASEWORK AND MILLWORK	GC	GC
STRUCTURAL BACKING ("BLOCKING") AS REQUIRED TO SUPPORT WALL MOUNTED AUDIOVISUAL COMPONENTS AND STRUCTURAL WORK FOR SPECIAL CONSTRUCTION	GC	GC
AC POWER SYSTEMS, CONDUIT, RACEWAYS, ELECTRICAL BACK BOXES, JUNCTION BOXES, PULL BOXES, FLOOR BOXES, LOW-VOLT CABLE TRAY, AND OTHER ELECTRICAL INFRASTRUCTURE	GC	GC
LIGHTING FIXTURES, DIMMING SYSTEMS AND WALL CONTROLLERS	GC	GC
LOW VOLTAGE AV CONTROL INTERFACE FOR LIGHTING SYSTEM (DIMMER SIDE) AND PATHWAY TO AUDIOVISUAL CONTROL SYSTEM EQUIPMENT RACK	GC	GC
LOW VOLTAGE AV CONTROL INTERFACE FOR MOTORIZED WINDOW SHADES AND PATHWAY TO AUDIOVISUAL CONTROL SYSTEM EQUIPMENT RACK	GC	GC
TELECOMMUNICATIONS STRUCTURED CABLING SYSTEMS, HORIZONTAL AND BACKBONE CABLING AND TERMINATION, TELECOM / IT RACKS, LADDER RUNWAY, AND CABLE MANAGEMENT SYSTEMS	SCC	SCC
TELECOMMUNICATIONS CONNECTOR INSERT PLATES FOR FLOOR BOXES AND / OR WALL BOXES	SCC	SCC
PROJECTION SCREENS - WALL MOUNTED, CEILING MOUNTED, OR FIXED FRAME	GC	GC
AUDIOVISUAL CONNECTOR INSERT PLATES FOR FLOOR BOXES AND / OR WALL BOXES	AVC	AVC
AUDIOVISUAL CABLING AND TERMINATIONS FOR AUDIOVISUAL SYSTEMS	AVC	AVC
PROJECTORS, FLAT PANEL DISPLAYS, CONTROL PANELS, MICROPHONES, SPEAKERS AND OTHER AUDIOVISUAL EQUIPMENT	AVC	AVC
LECTERNS / SPECIALTY TECHNICAL FURNITURE	AVC	AVC
AUDIOVISUAL EQUIPMENT RACKS	AVC	AVC

NOTES:
1. ALL ITEMS AND TASKS LISTED ARE THE RESPONSIBILITY OF THE NOTED CONTRACTOR.
2. SCC IS STRUCTURED CABLING CONTRACTOR, OWNER'S PREFERRED VENDOR.
3. AVC IS AUDIOVISUAL SYSTEMS CONTRACTOR, OWNER'S PREFERRED VENDOR.

TECHNOLOGY DEMOLITION SCOPE NOTES:
1. REFER TO SHEET TD-111 FOR DEMOLITION REQUIREMENTS OF EXISTING LOW-VOLT TECHNOLOGY DEVICES.
2. OWNER TO REMOVE ALL EXISTING AV/TELECOM/SECURITY DEVICES AND DATA OUTLETS WITHIN DEMOLITION WORK SCOPE AREA (UON).
3. GC TO PULL BACK ABANDONED LOW-VOLT CABLING TO SOURCE ROOM AND COIL IN PLACE.
4. COORDINATE DEMOLITION REQUIREMENTS AND PHASING WITH OWNER IT DEPARTMENT PRIOR TO WORK.

TECHNOLOGY SYSTEMS NEW WORK SCOPE NOTES:
1. GC TO PROVIDE ALL SCOPE AS IDENTIFIED IN THE CONTRACTOR RESPONSIBILITY MATRIX.
2. TECHNOLOGY SYSTEMS EQUIPMENT AND CABLING INSTALLATION SHALL BE PERFORMED BY OWNER'S PREFERRED VENDOR(S).
3. COORDINATE FINAL EQUIPMENT LOCATIONS, REQUIREMENTS AND PHASING WITH OWNER PRIOR TO WORK.

TECHNOLOGY GENERAL NOTES

DRAWINGS:
NOTIFY THE DESIGNER OF ANY DISCREPANCIES BETWEEN THESE CONTRACT DRAWINGS AND FIELD CONDITIONS.

INSTALLATION:
INSTALL ALL COMPONENTS AS PER MANUFACTURERS RECOMMENDATIONS AND PER ALL APPLICABLE CODES.

SUBSTITUTIONS:
THE MAKE AND MODEL OF LOW VOLTAGE INFRASTRUCTURE DEVICES IN THE TECHNOLOGY LEGENDS HAVE BEEN LISTED TO ESTABLISH THE DESIRED LEVEL OF QUALITY AND PERFORMANCE FOR EACH DEVICE. UNLESS OTHERWISE INDICATED, THE INSTALLING CONTRACTOR MAY SUBSTITUTE THESE DEVICES WITH EQUIVALENT APPROVED PRODUCT BY OTHER MANUFACTURERS.

DEVICE MOUNTING:
DEVICE SPECIFIED MOUNTING ELEVATIONS ARE "ON CENTER" UNLESS OTHERWISE NOTED. ALL DEVICE HEIGHTS SHALL COMPLY WITH ANSI 117.1 CHAPTER 3, SECTION 307, PROTRUDING OBJECTS AND CHAPTER 3, SECTION 308, REACH RANGES. IF ANY DEVICE OR BOX SPECIFIED WITHIN IS FOUND TO BE IN CONFLICT WITH ABOVE SECTIONS A CONFIRMING RFI SHOULD BE PLACED PRIOR TO RELOCATING.

FLOOR BOX, JUNCTION BOX, AND PULL BOX COVERS:
UNLESS OTHERWISE DIRECTED, ALL FLOOR BOXES, JUNCTION BOXES, AND PULL BOXES MUST BE PROVIDED WITH A COVER. WHERE RAISED DEVICE COVERS ARE SPECIFIED IN THE SCHEDULE, MATCH THE RAISED COVER DEPTH TO THE WALL THICKNESS. WHERE JUNCTION BOXES ARE MOUNTED AT OR ABOVE FINISHED CEILING HEIGHT, INSTALL JUNCTION BOX WITH OPEN SIDE FACING DOWN.

FIRE STOPPING:
THE FIRE STOP SYSTEM SHALL COMPLY WITH THE IBC, NEC AND WITH NFPA 101-LIFE SAFETY CODE (LATEST EDITION) AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE LOCAL INSPECTION AUTHORITIES PRIOR TO CABLE SYSTEM ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FIRE RATING OF ALL WALLS AND FLOORS HAVING PENETRATIONS. COORDINATE SEALANT INSTALLATION WITH WORK OF OTHER TRADES. REFER TO GENERAL AND / OR ELECTRICAL SPECIFICATION SECTIONS FOR FURTHER MATERIAL AND INSTALLATION PARAMETERS.

GROUNDING:
GROUND COMMUNICATIONS SYSTEMS AND EQUIPMENT IN ACCORDANCE WITH THE ANSI/TIA-607-C GROUNDING STANDARD AND APPLICABLE NEC REQUIREMENTS EXCEPT WHERE THE DRAWINGS OR SPECIFICATIONS EXCEED NEC REQUIREMENTS. ALL RACKS, METALLIC BACKBOARDS, CABLE SHEATHS, METALLIC STRENGTH MEMBERS, SPLICE CASES, CABLE TRAYS, ETC. ENTERING OR RESIDING IN TECHNICAL EQUIPMENT SPACES SHALL BE GROUNDED TO THEIR RESPECTIVE GROUND SYSTEM USING A MINIMUM #6 AWG STRANDED COPPER BONDING CONDUCTOR AND COMPRESSION CONNECTORS. ALL WIRES USED FOR TECHNICAL POWER SYSTEMS GROUNDING PURPOSES SHALL BE IDENTIFIED WITH GREEN INSULATION OR IDENTIFIED AT EACH TERMINATION POINT WITH A WRAP OF GREEN TAPE. ALL CABLES AND BUS BARS SHALL BE IDENTIFIED AND LABELED "TECHNICAL POWER SYSTEM GROUND".

TECHNICAL POWER & GROUNDING SYSTEM:
DUE TO THE SENSITIVE NATURE OF ELECTRONIC EQUIPMENT THAT IS BEING USED, POWER QUALITY MUST BE ASSURED. POWER FOR TECHNOLOGY SYSTEMS SHOULD BE DERIVED FROM DEDICATED TECHNICAL POWER PANELS WHICH DO NOT SHARE CIRCUITS WITH EQUIPMENT LOADS THAT GENERATE ELECTRICAL NOISE ON THE POWER LINE. THIS MIGHT INCLUDE: AIR CONDITIONING EQUIPMENT, MOTORS, HEAVY INDUSTRIAL EQUIPMENT, OR DIMMED LIGHTING LOADS; ALL OF WHICH CREATE TRANSIENTS, HARMONICS, SURGES AND SPIKES. FOR ADDITIONAL GUIDELINES REFER TO THE IEEE STD. 1100 (2005) EMERALD BOOK 'RECOMMENDED PRACTICE FOR POWERING AND GROUNDING ELECTRONIC EQUIPMENT'. WHERE PRACTICAL, ALL TECHNICAL POWER CIRCUITS FOR EQUIPMENT WITHIN A ROOM SHOULD BE ON THE SAME PHASE TO ENSURE PROPER EQUIPMENT TIMING WITHIN THE SYSTEM.

TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS) DEVICES SHOULD BE PROVIDED AT POWER DISTRIBUTION PANELS SERVING TECHNICAL POWER CIRCUITS. THESE TVSS DEVICES MUST BE INSTALLED ACCORDING TO NEC ARTICLE 285. ALL DEVICES MUST BE UL 1449 COMPLIANT. IN BROADCAST APPLICATIONS OR IN LARGE SYSTEMS, A SEPARATELY DERIVED TECHNICAL POWER SOURCE PROVIDED BY AN ELECTROSTATICALLY SHIELDED ISOLATION TRANSFORMER MAY BE REQUIRED.

ALL TECHNICAL POWER OUTLETS MUST BE WIRED AS "ALWAYS ON". NO OUTLETS SERVING TECHNOLOGY SYSTEMS SHALL BE ON SWITCHED, TIME OF DAY, OR OCCUPANCY CONTROLLED OUTLETS.

TECHNICAL GROUND SYSTEM (TGS)
TECHNICAL GROUND SHALL CONSIST OF AN INSULATED GROUND CONDUCTOR FROM THE PANEL BOARD TO EACH TECHNICAL GROUND RECEPTACLE. AT THE RECEPTACLE, THE GROUND CONDUCTOR SHALL BE ELECTRICALLY ISOLATED FROM THE ELECTRICAL BOX AND CONDUIT SYSTEM.

TECHNICAL ELECTRICAL SUPPLY GROUNDING SHALL BE VIA A GROUNDING ELECTRODE AND MEET NEC ARTICLE 250 REQUIREMENTS. A TECHNICAL POWER SYSTEM IS FURTHER DEFINED IN NEC ARTICLE 640 AS "AN ELECTRICAL DISTRIBUTION SYSTEM WITH GROUNDING IN ACCORDANCE WITH 250.146(D), WHERE THE EQUIPMENT GROUNDING CONDUCTOR IS ISOLATED FROM THE PREMISES GROUNDING CONDUCTOR EXCEPT AT A SINGLE GROUNDED TERMINATION POINT WITHIN A BRANCH-CIRCUIT PANEL BOARD, AT THE ORIGINATING (MAIN BREAKER) BRANCH-CIRCUIT PANEL BOARD, OR AT THE PREMISES GROUNDING ELECTRODE".

INSULATED GROUNDING CONDUCTORS FROM THE BREAKER PANEL BOARDS SHALL BE IN A "STAR" CONFIGURATION AND NOT LOOP FROM ONE PANEL TO THE NEXT PANEL. AT EACH BREAKER PANEL, PROVIDE AN INSULATED GROUND BUS BAR FOR CONNECTIONS OF ALL TGS INSULATED GROUND CONDUCTORS AND NO OTHERS. THE GREEN SAFETY GROUND WIRES FROM EACH TGS RECEPTACLE OR CIRCUIT ARE BROUGHT TO THIS BUS. EACH TECHNICAL POWER RECEPTACLE SHALL BE OF A UNIQUE COLOR AND / OR CLEARLY AND PERMANENTLY LABELED "TECHNICAL POWER".

RISER GENERAL NOTES

RISER DRAWINGS AND CONDUIT ROUTING
THE ROOM RISER DRAWINGS ARE DIAGRAMMATIC IN NATURE. CONDUIT PATHS SHOWN ON THE ROOM RISERS ARE INTENDED TO CONVEY REQUIRED DEVICE INTERCONNECTION AND SIZES ONLY. ACTUAL CONDUIT ROUTING IN THE FIELD MAY BE REQUIRED TO FOLLOW ROUTING CONTRARY TO THAT IMPLIED BY THE ROOM RISER. CONDUIT ROUTING IS AT CONTRACTOR'S DISCRETION, BUT THE CONTRACTOR SHALL PROVIDE A PULL BOX IMMEDIATELY BEFORE AND AFTER ANY CONDUIT RUN SECTION CONTAINING TWO NINETY-DEGREE TURNS, OR ANY SINGLE RUN EXCEEDING FIFTY FEET IN LENGTH REGARDLESS OF WHETHER PULL BOXES ARE SHOWN ON THE DRAWINGS OR NOT. IN ALL CASES, CONDUIT ROUTES SHALL FOLLOW THE SHORTEST PATH POSSIBLE WHILE COMPLYING WITH INDUSTRY STANDARDS AND BEST PRACTICES.

CONDUIT RUNS:
ALL CONDUIT RUNS SHALL BE STEEL, THIN-WALL ELECTRICAL METALLIC TUBING (EMT) UNLESS OTHERWISE INDICATED. THE USE OF FLEXIBLE CONDUIT IS NOT PERMISSIBLE EXCEPT WHERE INDICATED ON THE DRAWINGS. CONDUIT SIZES AND INTERCONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS.

CONDUIT STUBS
TERMINATE CONDUIT STUBS INTO CLEAR SPACE 18 INCHES ABOVE ACCESSIBLE CEILING IN ROOM INDICATED.

NYLON BUSHINGS
PROVIDE A NYLON BUSHING ON ALL CONDUIT STUBS AND NON-TERMINATING CONDUIT ENDS TO PROTECT WIRE PULLS.

PULL STRINGS
ALL CONDUIT RUNS SHALL BE PROVIDED WITH A #12 PULL STRING OR EQUAL.

POWER DESIGNATORS AND RECEPTACLES
POWER DESIGNATORS AND RECEPTACLES WHICH APPEAR ON THE ROOM RISER DRAWINGS ARE SHOWN TO INDICATE THEIR ASSOCIATION WITH AND REQUIRED ADJACENCY TO AUDIOVISUAL COMPONENTS. NOTE THAT NOT ALL POWER RECEPTACLES REQUIRED TO SUPPORT THE AUDIOVISUAL SYSTEMS ARE SHOWN ON THE ROOM RISER DIAGRAMS; ONLY THOSE THAT ARE PART OF OR INTERFACE WITH THE AUDIOVISUAL JUNCTION BOXES ARE SHOWN. REFER TO THE AUDIOVISUAL INFRASTRUCTURE PLANS, ELEVATIONS AND DETAILS FOR ADDITIONAL GUIDANCE REGARDING AUDIOVISUAL POWER LOCATIONS. REFER TO THE ELECTRICAL DRAWINGS FOR COMPLETE POWER LAYOUTS AND CIRCUITING DETAILS.

TELECOM OUTLETS
JUNCTION BOXES FOR TELECOM OUTLETS WHICH APPEAR ON THE ROOM RISER DRAWINGS ARE SHOWN TO INDICATE THEIR ASSOCIATION WITH AND REQUIRED ADJACENCY TO AUDIOVISUAL COMPONENTS.

AV SPECIFIC ROOM RISERS
NOT ALL TELECOM OUTLETS REQUIRED TO SUPPORT THE AUDIOVISUAL SYSTEMS ARE SHOWN ON THE ROOM RISER DIAGRAMS; ONLY THOSE THAT ARE PART OF OR INTERFACE WITH AUDIOVISUAL JUNCTION BOXES ARE SHOWN. REFER TO THE AUDIOVISUAL INFRASTRUCTURE PLANS, ELEVATIONS AND DETAILS FOR ADDITIONAL GUIDANCE REGARDING AUDIOVISUAL TELECOM OUTLET LOCATIONS. REFER TO THE STRUCTURED CABLING DRAWINGS FOR COMPLETE TELECOMMUNICATIONS PATHWAYS, OUTLETS AND CABLING REQUIREMENTS.

CONDUITS SHOWN ON THE ROOM RISER DRAWINGS ARE FOR AV ONLY AND SHALL NOT BE USED FOR TELECOM CABLES.

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TECHNOLOGY INFRASTRUCTURE LEGENDS AND NOTES

T-001

CONTRACT DOCUMENTS

TECHNOLOGY JUNCTION BOX LEGEND

TYPE		FUNCTION	ENCLOSURE DIMENSIONS			ENCLOSURE DESCRIPTION	ENCLOSURE MAKE & MODEL	MOUNTING STYLE	REFERENCE DETAIL	LEGEND NOTES
SYM	STYLE		LENGTH	WIDTH	DEPTH					
C1	WALL	CAMERA PULL BOX	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED TWO-DEVICE COVER	RACO 258 259 OR 265	84" AFF - FLUSH (UNO)	-	A
D8	WALL	DISPLAY BOX W/ AV TELECOM AND POWER	10 7/8"	11 1/4"	3 7/8"	DISPLAY BOX	WIREMOLD EFSB4	FLUSH (UNO) - REFER TO ROOM DISPLAY SCHEDULE AND ELEVATIONS	1,2 / T-601	B
R3	WALL	EQUIPMENT RACK PULL BOX	6"	8"	4"	PULL BOX (PUNCHED AS REQUIRED) W/ PAINTED SCREW COVER	HOFFMAN A-SE8X6X4NK	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	-
S1	WALL	PROJECTION SCREEN CONTROL SWITCH (SINGLE)	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	PER PROJECT STANDARD SWITCH HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	A
TP2	WALL	CONTROL PANEL	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED TWO-DEVICE COVER	RACO 258 259 OR 265	PER PROJECT STANDARD SWITCH HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	A
W2	WALL	AV IO PANEL	4 11/16"	4 11/16"	3 1/4"	PULL BOX W/ RAISED TWO-DEVICE COVER - DEEP	RACO 260	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	A
W3	WALL	AV IO PANEL	4 11/16"	9 1/8"	3 1/4"	PULL BOX W/ RAISED THREE-DEVICE COVER - DEEP	RACO 263	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	A
W20	WALL	NURSE CALL	4 11/16"	4 11/16"	2 1/2"	PULL BOX W/ RAISED TWO-DEVICE COVER - DEEP	RACO 260 W/2 DEVICE COVER OR COORDINATE WITH HEADWALL	PER PROJECT STANDARD - COORDINATE WITH HEADWALL	-	A
W21	WALL	NURSE CALL LIGHT	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	96" AFF - FLUSH (UNO)	-	A
D26	CEILING	DISPLAY BOX W/ AV TELECOM AND POWER	14"	14"	4 3/4"	PLENUM ENCLOSURE ASSEMBLY	NIGEL B. NB-PEBPM	REFER TO DETAIL FOR MOUNTING INFORMATION	3,4/T-601	C
J1	CEILING	CONDUIT CONSOLIDATION PULL BOX	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ FLAT COVER	RACO 258 259 OR 265	18" ABOVE ACCESSIBLE CEILING	-	-

TECHNOLOGY TELECOM JUNCTION BOX LEGEND

TYPE		FUNCTION	ENCLOSURE DIMENSIONS			ENCLOSURE DESCRIPTION	ENCLOSURE MAKE & MODEL	MOUNTING STYLE	REFERENCE DETAIL	LEGEND NOTES
SYM	STYLE		LENGTH	WIDTH	DEPTH					
N2	WALL	TELECOM OUTLET - DISPLAY	-	-	-	WALL BOX INDICATED BY BOX NUMBER	COORDINATE W/ ASSOCIATED DISPLAY BOX	INSTALL IN DISPLAY BOX PER MFR DIRECTIONS	1,2/T-601	B,D
N4	WALL	TELECOM OUTLET - STANDARD	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	2/T-701	A,D,E
N5	WALL	TELECOM OUTLET - WALL PHONE	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	PER PROJECT STANDARD SWITCH HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	D
N6	WALL	TELECOM OUTLET - ABOVE COUNTER	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	PER PROJECT STANDARD COUNTER OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	A,D,E
N9	WALL	TELECOM OUTLET - ON CABLE RUNWAY	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	120" AFF - FLUSH	-	D
N13	WALL	TELECOM OUTLET - SECURITY ALERTUS BEACON	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ RAISED ONE-DEVICE COVER	RACO 258 259 OR 265	54" AFF - FLUSH, CONFIRM HEIGHT WITH OWNER	4/Y-501	A,D
N20	CEILING	TELECOM OUTLET - CEILING PROJECTOR	-	-	-	CEILING BOX INDICATED BY BOX NUMBER	COORDINATE W/ ASSOCIATED CEILING DISPLAY BOX	INSTALL IN CEILING DISPLAY BOX PER MFR DIRECTIONS	3,4/T-601	C,D
N22	CEILING	TELECOM OUTLET - AV DEVICE	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ BLANK COVER	RACO 258 259 OR 265	18" ABOVE ACCESSIBLE CEILING	-	D
N23-1	CEILING	TELECOM OUTLET - WAP	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ BLANK COVER	RACO 258 259 OR 265	18" ABOVE ACCESSIBLE CEILING	-	A,D
N24-1	CEILING	TELECOM OUTLET - SECURITY CAMERA	4 11/16"	4 11/16"	2 1/8"	PULL BOX W/ BLANK COVER	RACO 258 259 OR 265	18" ABOVE ACCESSIBLE CEILING	-	A,D

TECHNOLOGY POWER LEGEND

TYPE		FUNCTION	VOLTS	AMPS	NEMA	DESCRIPTION	ADDITIONAL REQUIREMENTS	MOUNTING STYLE	REFERENCE DETAIL	LEGEND NOTES
SYM	STYLE									
P2	WALL	POWER RECEPTACLE - DISPLAY	120	20	5-20R	DUPLEX RECEPTACLE INSIDE DISPLAY BOX	TECHNICAL GROUND	INSTALL IN DISPLAY BOX PER MFR DIRECTIONS	1,2/T-601	B,F
P4	WALL	POWER RECEPTACLE - TECHNOLOGY	120	20	5-20R	DUPLEX RECEPTACLE	TECHNICAL GROUND	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	F
P5	WALL	POWER RECEPTACLE - TECHNOLOGY	120	20	5-20R	DOUBLE DUPLEX RECEPTACLE	TECHNICAL GROUND	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	F
P6	WALL	POWER RECEPTACLE - TECHNOLOGY RACK	120	20	5-20R	DUPLEX RECEPTACLE	DEDICATED CIRCUIT, TECHNICAL GROUND	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	F
P7	WALL	POWER RECEPTACLE - TECHNOLOGY RACK	120	20	5-20R	DOUBLE DUPLEX RECEPTACLE (DUAL CIRCUIT)	TWO DEDICATED CIRCUITS, TECHNICAL GROUND	PER PROJECT STANDARD OUTLET HEIGHT - FLUSH (UNO) - REFER TO ARCH. DRAWINGS	-	F
P16	WALL	POWER RECEPTACLE - ACCESS CONTROL PANEL	120	20	-	HARDWIRED POWER CIRCUIT DIRECT TO ACCESS CONTROL PANEL	DEDICATED CIRCUIT	REFER TO PLANS & ELEVATIONS	-	F
P20	CEILING	POWER RECEPTACLE - CEILING DISPLAY	120	20	5-20R	DUPLEX RECEPTACLE INSIDE CEILING DISPLAY BOX	TECHNICAL GROUND	INSTALL IN CEILING DISPLAY BOX PER MFR DIRECTIONS	3,4/T-601	C,F
P22	CEILING	POWER CIRCUIT - MOTORIZED PROJECTION SCREEN	120	20	-	WORKBOX W/ POWER CIRCUIT	-	TERMINATE AT PROJECTION SCREEN PER MFR INSTRUCTIONS	-	F
P26	CEILING	POWER RECEPTACLE -BOOM MONITOR PWR	120	20	5-20R	DUPLEX RECEPTACLE	TECHNICAL GROUND	18" ABOVE ACCESSIBLE CEILING	-	F

TELECOM CABLING LEGEND

TYPE	CAT6	CAT6A	COAX	REFERENCE DETAIL	NOTES
A	1	0	0	1/T-701	-
B	2	0	0	1/T-701	-
C	4	0	0	1/T-701	-
D	6	0	0	1/T-701	-
E	0	2	0	1/T-701	WAP, PROVIDE 20' SERVICE LOOP

TECHNOLOGY LEGEND NOTES

[A] RACO JUNCTION BOXES W/ RAISED DEVICE COVERS:
PROVIDE A SQUARE PULL BOX WITH APPROPRIATE KNOCKOUTS TO MATCH CONDUIT REQUIREMENTS. WHERE INDICATED PROVIDE A RAISED SINGLE OR MULTI-DEVICE COVER AS SPECIFIED OF APPROPRIATE DEPTH TO MATCH WALL THICKNESS.

[B] D8(N2,P2) FLAT PANEL DISPLAY BOX CONFIGURATION:
WIREMOLD EVOLUTION SERIES EFSB4 FLAT PANEL DISPLAY WALL BOX. VERIFY COVER COLOR WITH ARCHITECT PRIOR TO ORDERING. INCLUDED COMPONENTS: TUNNEL, DEVICE MODULES, TRIM FLANGE, AND DECORATIVE COVER. PROVIDE AS REQUIRED: POWER RECEPTACLES, COMMUNICATION JACKS, DEVICE PLATES, BLANK DEVICE PLATES, KNOCKOUT PLATES, AND OTHER ACCESSORIES AS NEEDED. CONFIGURE BOX ACCORDING TO DETAILS.

[C] D26(N20,P20) CEILING MOUNTED PROJECTOR ENCLOSURE CONFIGURATION:
NIGEL-B DESIGN NB-PEBPM PLENUM CEILING ENCLOSURE WITH POLE MOUNT. INCLUDED COMPONENTS: ONE INSTALLED AC OUTLET. PROVIDE AS REQUIRED: HANGING KIT, CEILING TILE SUPPORTS, AND OTHER ACCESSORIES AS NEEDED. CONFIGURE BOX ACCORDING TO DETAILS.

[D] TELECOM OUTLETS AND ASSOCIATED CONDUITS:
CONDUIT MUST BE PROVIDED FOR ALL TELECOM JUNCTION BOXES. SEE THE "TELECOM TYPICAL CONDUIT RISER" FOR CONDUIT REQUIREMENTS BY TELECOM JUNCTION BOX TYPE. REFER TO THE TELECOM PLANS FOR THE LOCATIONS OF JUNCTION BOXES AND FLOOR BOXES, AND THE "TELECOM CABLING LEGEND" FOR OUTLET CONFIGURATION REQUIREMENTS. TELECOM CABLING, OUTLETS AND COVER PLATES PROVIDED BY THE STRUCTURED CABLING SYSTEMS CONTRACTOR.

[E] POWER RECEPTACLES ADJACENT STANDARD TELECOM WALL OUTLETS:
N4 STANDARD TELECOM WALL OUTLETS SHOULD HAVE A DUPLEX POWER RECEPTACLE LOCATED WITHIN 36" OF THE TELECOM WALL OUTLET. IDEALLY, THE TELECOM OUTLET BOX WILL BE MOUNTED TO ONE SIDE OF A STUD, AND THE POWER BOX TO THE OPPOSITE SIDE OF THE STUD.

[F] POWER RECEPTACLES
TECHNICAL POWER RECEPTACLES, INCLUDING THOSE WITHIN FLOOR BOXES, WALL BOXES, OR CEILING BOXES, ARE PROVIDED BY ELECTRICAL CONTRACTOR AND APPEAR ON THE ELECTRICAL DRAWINGS. THE TECHNICAL POWER RECEPTACLES ALSO APPEAR ON THE TECHNOLOGY INFRASTRUCTURE DRAWINGS FOR COORDINATION AND LOCATION PURPOSES. THE LOCATION OF TECHNICAL POWER RECEPTACLES IN RELATION TO OTHER TECHNOLOGY INFRASTRUCTURE MAY BE CRITICAL. REFER TO THE ELECTRICAL DRAWINGS FOR COMPLETE POWER LAYOUTS AND CIRCUITING DETAILS.

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Drawing
TECHNOLOGY INFRASTRUCTURE LEGENDS AND LEGEND NOTES

T-002

CONTRACT DOCUMENTS

PROJECTION SCREEN TYPE LEGEND

ALL DIMENSIONS IN INCHES / WEIGHT IN POUNDS

TYPE	IMAGE SIZE HEIGHT (IH)	IMAGE SIZE WIDTH (IW)	CASE SIZE HEIGHT (CH)	CASE SIZE WIDTH (CW)	CASE SIZE DEPTH (CD)	WEIGHT	INSTALLATION	OPERATION	MAKE & MODEL	IMAGE SURFACE MATERIAL	CONTROL	CASE PROVIDED BY	FABRIC & ROLLER PROVIDED BY	REFERENCE DETAIL
A	52"	92"	5 11/16"	119"	7 3/4"	80	CEILING MOUNTED - FLUSH	MOTORIZED	DRAPER ACCESS FIT/SERIES V	MATT WHITE XT1000V	LVC W/ LVC WALL SWITCH	GENERAL CONTRACTOR	GENERAL CONTRACTOR	6/T-601

NOTES:
1. SEE THE ROOM PROJECTION SCREEN SCHEDULE ON THIS SHEET FOR LOCATIONS.
2. PROJECTION SCREEN CASE, PROJECTION SCREEN CONTROL SWITCHES, MOUNTING HARDWARE, CONDUITS, AND ELECTRICAL PROVIDED BY GENERAL CONTRACTOR.
3. REFER TO LEGEND ABOVE TO DETERMINE WHO SHALL PROVIDE THE PROJECTION SCREEN ROLLER AND FABRIC.
4. REFER TO THE DETAILS LISTED IN THE LEGEND FOR EACH PROJECTION SCREEN TYPE.

DISPLAY TYPE LEGEND

ALL DIMENSIONS IN INCHES / WEIGHT IN POUNDS

TYPE	NOMINAL IMAGE DIAGONAL	NOMINAL CASE SIZE HEIGHT (H)	NOMINAL CASE SIZE WIDTH (W)	NOMINAL CASE SIZE DEPTH (D)	NOMINAL WEIGHT	BACKING HEIGHT (H)	BACKING WIDTH (W)
1	24"	13 7/8"	22 5/8"	1 11/16"	15.6	36"	16"
5	46"	25"	42"	4"	47	24"	48"
7	49"	25"	43"	4"	52	24"	48"
9	55"	29"	50"	4"	60	24"	48"
11	65"	34"	59"	4"	77	24"	48"

NOTES:
1. SEE THE ROOM DISPLAY SCHEDULE ON THIS SHEET FOR LOCATIONS.
2. BACKING, JUNCTION BOXES, CONDUIT AND ELECTRICAL BY GENERAL CONTRACTOR.
3. DISPLAY, DISPLAY MOUNT AND CABLING PROVIDED BY AV CONTRACTOR.
4. DISPLAY IMAGE DIAGONAL, CASE SIZE AND WEIGHT ARE PROVIDED TO ESTABLISH THE APPROPRIATE BACKING REQUIREMENTS. THESE SIZES ARE SUBJECT TO CHANGE.

ROOM PROJECTION SCREEN SCHEDULE

ALL DIMENSIONS IN INCHES

ROOM NUMBER	QTY	SCREEN TYPE	PROJECTOR MOUNTING STYLE	SCREEN BOTTOM OF IMAGE AFF	SCREEN BLACK DROP (EST)	SCREEN DISTANCE [D2]	SCREEN DISTANCE [D2x]	PROJECTOR MOUNT DISTANCE [D1]	PROJECTOR MOUNT DISTANCE [D1x]
044	1	A	1	44"	6"	6"	0"	136"	18"
049	1	A	1	44"	2"	6"	2"	136"	24"

VIDEO PROJECTOR MOUNTING STYLE DETAILS

REFER TO THE PROJECTOR & DISPLAY MOUNTING STYLE LEGEND FOR MORE INFORMATION.

PROJECTION SCREEN / VIDEO PROJECTOR RELATIONSHIP IS CRITICAL (SEE GRAPHIC AND NOTES BELOW)

ROOM DISPLAY SCHEDULE

ALL DIMENSIONS IN INCHES

ROOM NUMBER	DISPLAY QTY	DISPLAY TYPE	MOUNTING STYLE	ELEV AFF OC
041	1	5	a	72"
042A	1	1	a	55"
042A	1	5	a	55"
042B	1	1	a	55"
042B	1	5	a	55"
042C	2	1	a	54"
042C	1	7	a	72"
042D	1	1	a	54"
042D	1	9	a	72"
043	1	5	a	55"
045	1	11	a	66"
046	1	11	a	66"

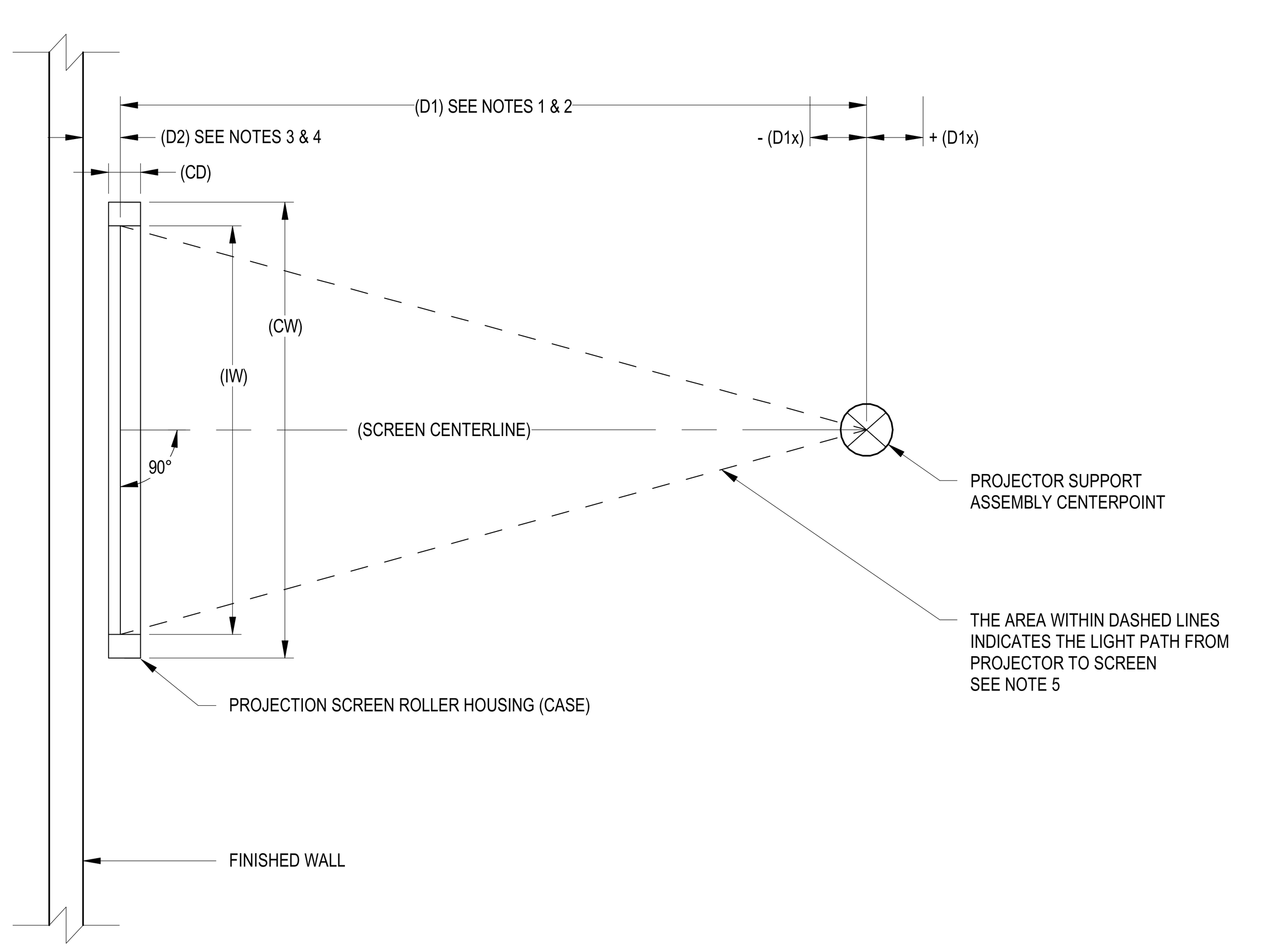
FLAT PANEL DISPLAY MOUNTING STYLE DETAILS

REFER TO THE PROJECTOR & DISPLAY MOUNTING STYLE LEGEND FOR MORE INFORMATION.

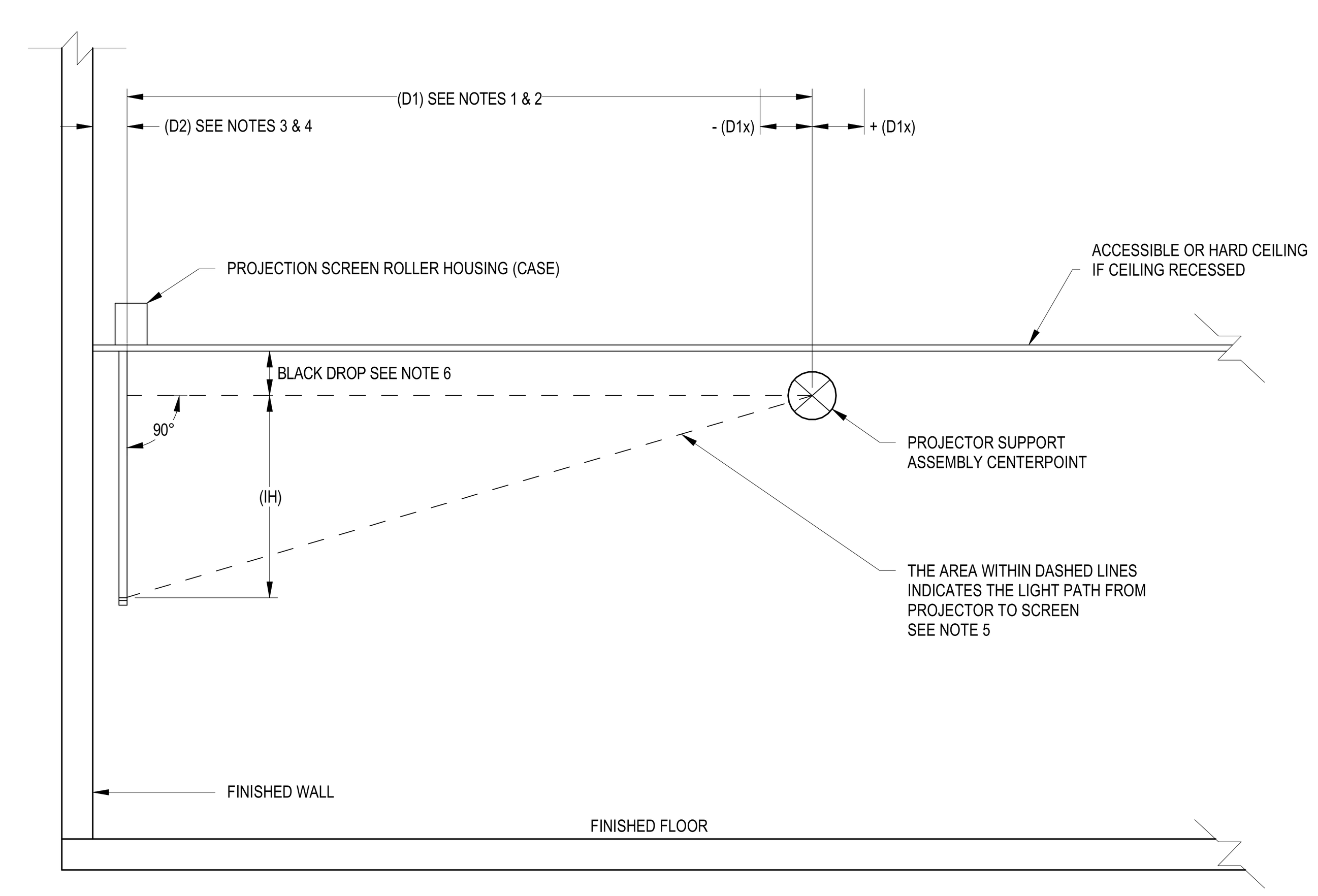
PROJECTOR & DISPLAY MOUNTING STYLE LEGEND

MOUNTING STYLE	INSTALLATION	REFERENCE DETAIL
1	CEILING MOUNTED PROJECTOR	3,4,6/T601
a	WALL MOUNTED DISPLAY	1,2/T-601

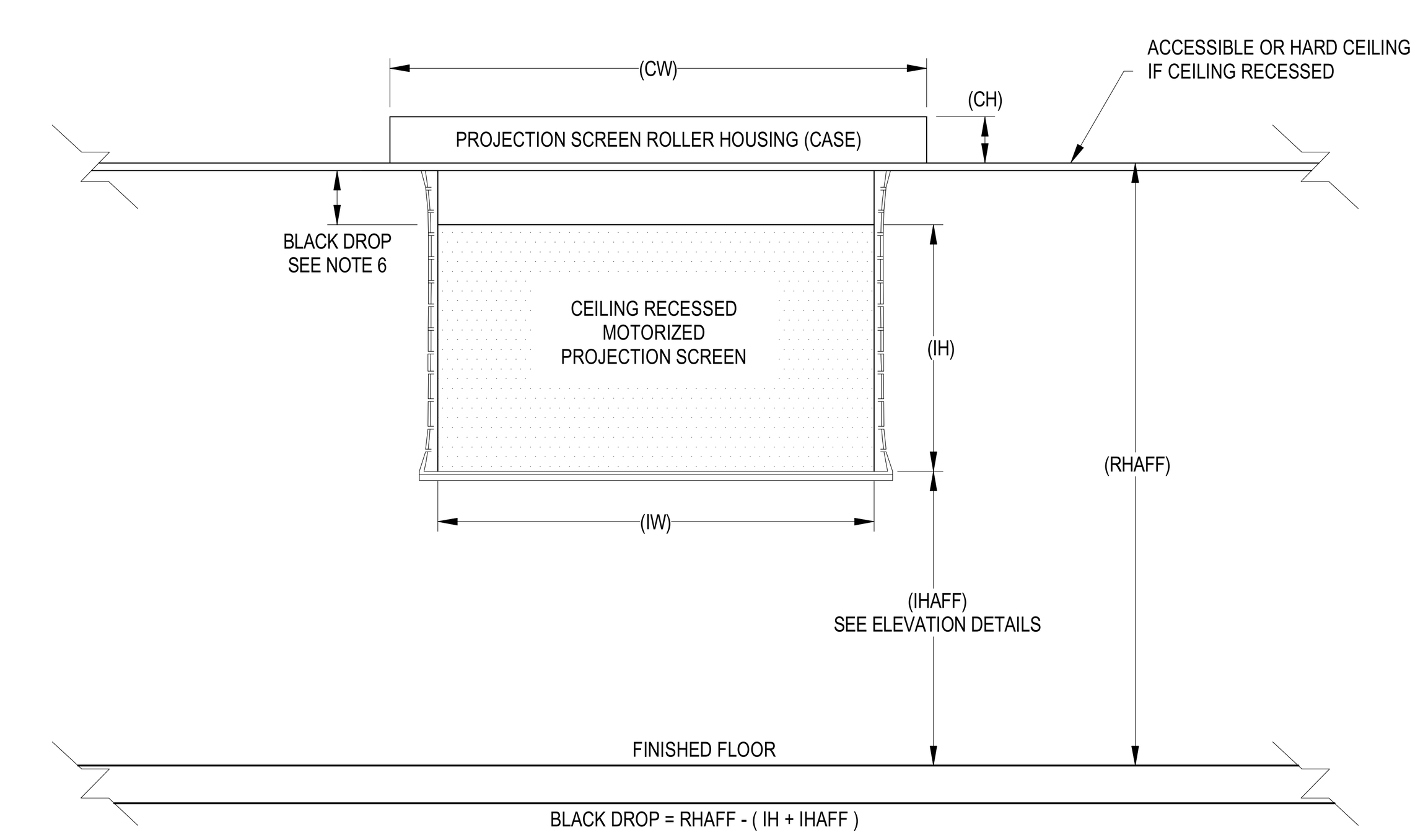
CEILING MOUNTED VIDEO PROJECTION SCREEN & PROJECTOR LAYOUT (TYP) - PLAN VIEW



CEILING MOUNTED VIDEO PROJECTION SCREEN & PROJECTION LAYOUT (TYP) - SECTION



CEILING MOUNTED VIDEO PROJECTION SCREEN (TYP) (AUDIENCE VIEW)



PROJECTION SCREEN / VIDEO PROJECTOR RELATIONSHIP NOTES:

1. [D1]: !!! CRITICAL DISTANCE !!! - D1 IS THE DISTANCE FROM THE PROJECTION SCREEN SURFACE TO THE CENTER OF THE PROJECTOR CEILING MOUNT ASSEMBLY. IF DISTANCE D2 MUST BE INCREASED FOR ANY REASON, DISTANCE D1 MUST BE MAINTAINED.
2. [D1x]: IS THE ALLOWABLE +/- VARIANCE IN DISTANCE OF D1 TO ACCOMMODATE STRUCTURAL OR OTHER OBSTRUCTIONS. EXAMPLE: IF D1 = 300" AND D1x = 10" THEN THE CENTER OF THE PROJECTOR CEILING MOUNT MAY BE LOCATED BETWEEN 290" TO 310" ON SCREEN CENTERLINE FROM THE PROJECTION SCREEN SURFACE.
3. [D2]: IS THE MINIMUM DISTANCE FROM THE PROJECTION WALL TO THE PROJECTION SCREEN SURFACE. IF DISTANCE D2 MUST BE INCREASED TO ACCOMMODATE STRUCTURAL OR OTHER OBSTRUCTIONS TO A DISTANCE GREATER THAN D2 + D2x CONTACT THE CONSULTANT FOR FURTHER INSTRUCTIONS.
4. [D2x]: IS THE ALLOWABLE +/- VARIANCE IN DISTANCE OF D2 TO ACCOMMODATE STRUCTURAL OR OTHER OBSTRUCTIONS. EXAMPLE: IF D2 = 6" AND D2x = 2" THEN THE PROJECTION SCREEN SURFACE MAY BE LOCATED BETWEEN 4" TO 8" ON SCREEN CENTERLINE FROM THE PROJECTION WALL.
5. THE PROJECTOR MUST ALWAYS HAVE A CLEAR VIEW OF THE ENTIRE SCREEN IMAGE AREA WITHOUT OBSTRUCTIONS.
6. [BLACK DROP]: THE AMOUNT OF BLACK DROP LISTED IN THE ROOM PROJECTION SCREEN SCHEDULE IS A DESIGN ESTIMATE. BLACK DROP REQUIREMENTS SHALL BE FIELD VERIFIED PER SCREEN INSTANCE PRIOR TO ISSUING SUBMITTALS. THE AMOUNT OF BLACK DROP (BD) REQUIRED IS DETERMINED BY ADDING THE ELEVATION OF THE BOTTOM OF THE IMAGE HEIGHT ABOVE FINISHED FLOOR (IHAFF) TO THE IMAGE HEIGHT (IH) AND SUBTRACTING THAT NUMBER FROM THE ELEVATION TO THE UNDERSIDE OF THE PROJECTION SCREEN ROLLER HOUSING (CASE) ABOVE FINISHED FLOOR (RHAFF). THE REMAINDER WILL BE THE AMOUNT OF REQUIRED BLACK DROP (SEE GRAPHIC ABOVE). THE AMOUNT OF EXCESS BLACK DROP MATERIAL REMAINING ON THE PROJECTION SCREEN ROLLER, WHEN THE SCREEN IS DEPLOYED TO ITS SPECIFIED BOTTOM OF IMAGE HEIGHT ABOVE FINISHED FLOOR ELEVATION, SHOULD NEVER EXCEED MORE THAN ONE WRAP. IN INSTANCES WHERE CEILING HEIGHT VARIES IN THE FIELD FROM THE DRAWINGS, THE SPECIFIED IMAGE HEIGHT ABOVE FINISHED FLOOR RULES.
7. LOCATE THE PROJECTION SCREEN POWER JUNCTION BOX ON THE SAME SIDE OF THE SCREEN AS SCREEN ELECTRICAL CONNECTIONS WHICH MAY VARY BY SCREEN TYPE. VERIFY LOCATION PRIOR TO INSTALLATION.

1 / T-003 TYPICAL PROJECTION SCREEN
12" = 1'-0"

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Project Name: NURSING RENOVATION
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Drawn By: NV5
Checked By: NV5
Drawing: TECHNOLOGY INFRASTRUCTURE LEGENDS AND SCHEDULES

T-003

CONTRACT DOCUMENTS

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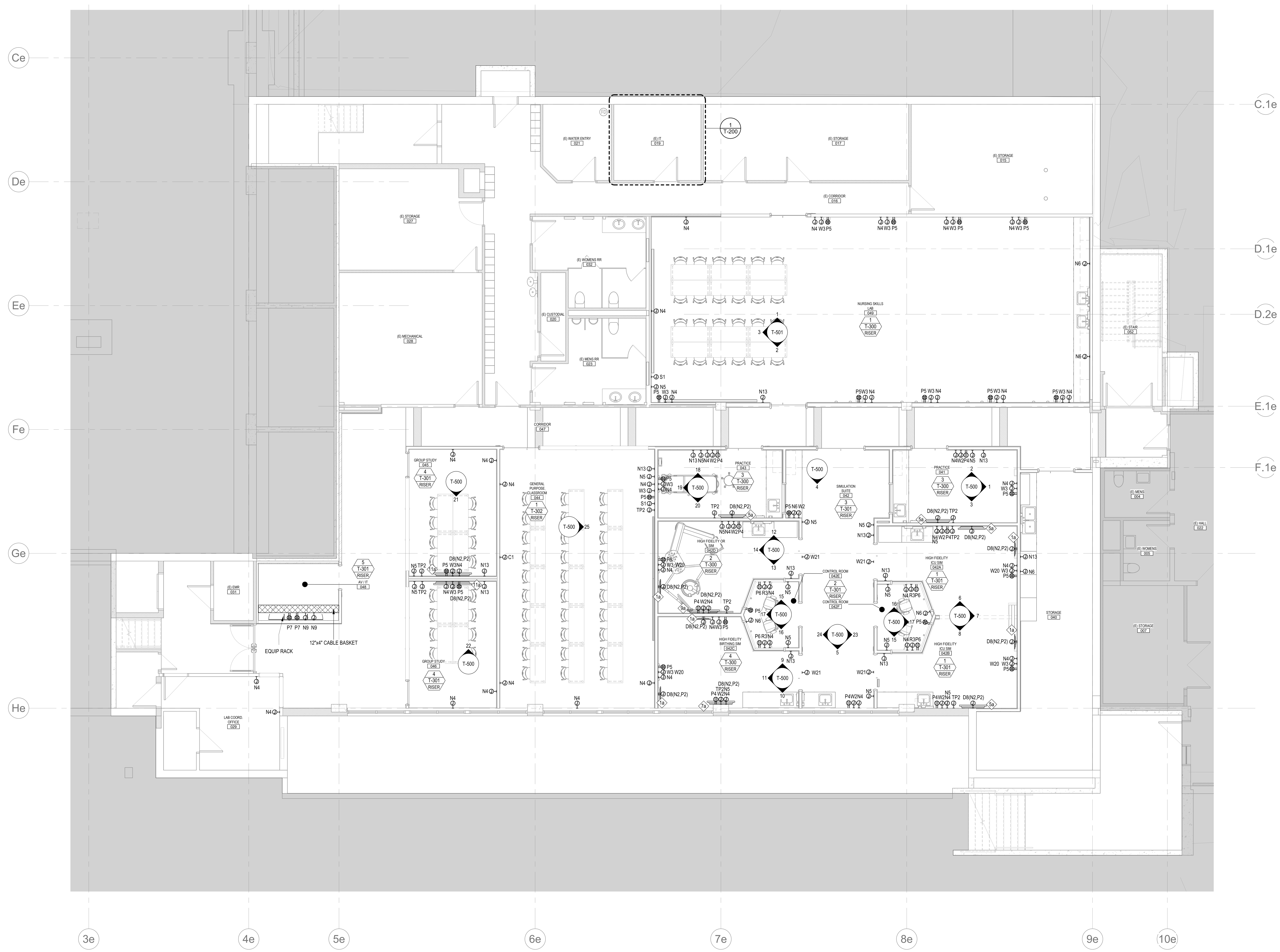

1 / T-101 — OVERALL TECHNOLOGY INFRASTRUCTURE PLAN
3/16" = 1'-0"

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Drawn By	Checked By
NV5	NV5

Drawing
OVERALL TECHNOLOGY INFRASTRUCTURE PLAN

T-101

CONTRACT DOCUMENTS

1 T-121 OVERALL TECHNOLOGY INFRASTRUCTURE REFLECTED CEILING PLAN
3/16" = 1'-0"

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Drawing
OVERALL TECHNOLOGY INFRASTRUCTURE REFLECTED CEILING PLAN

T-121

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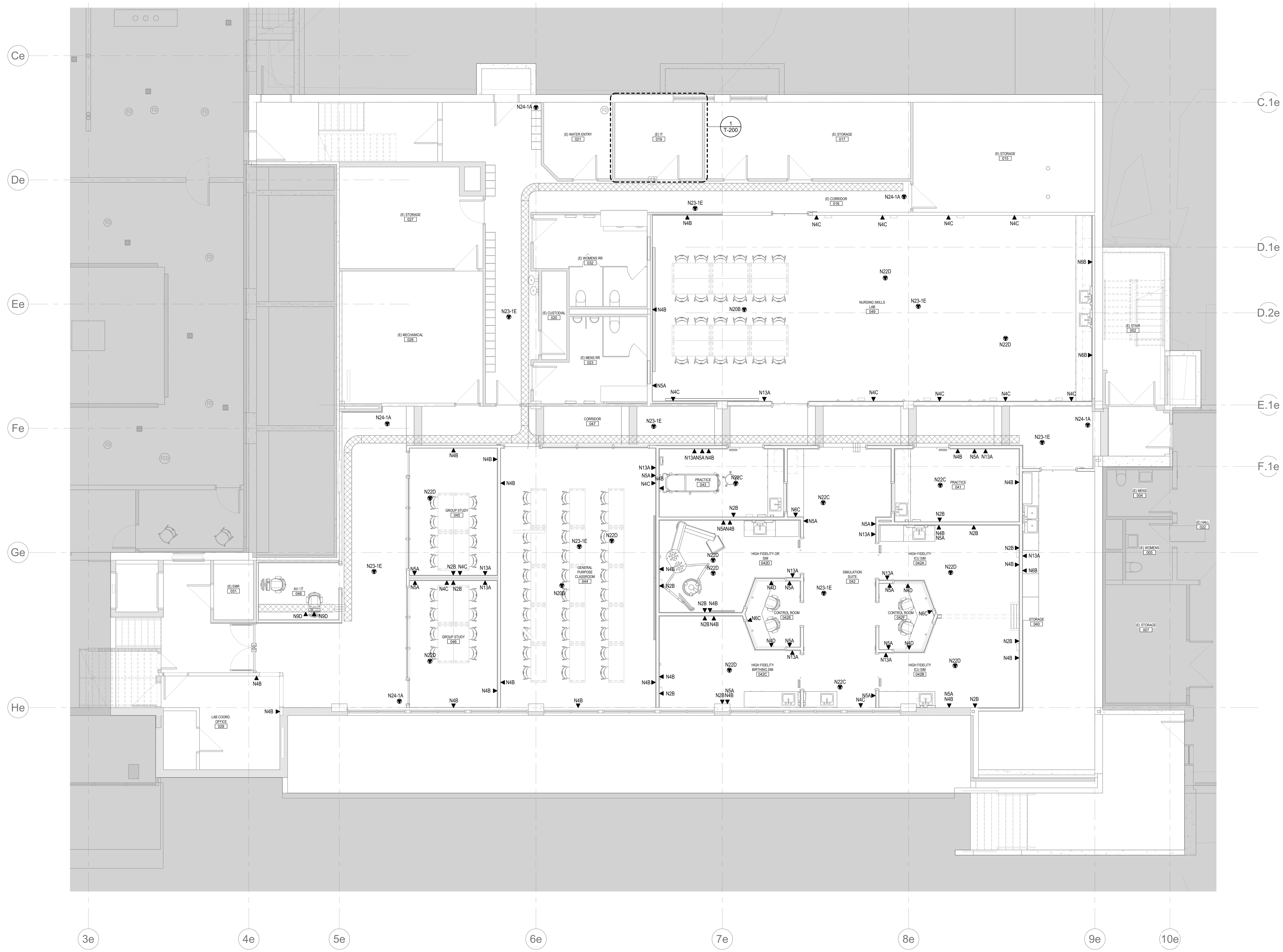

1
T-131
OVERALL TELECOM PLAN
3/16" = 1'-0"

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Drawn By: NV5
Checked By: NV5

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OVERALL TELECOM PLAN

T-131

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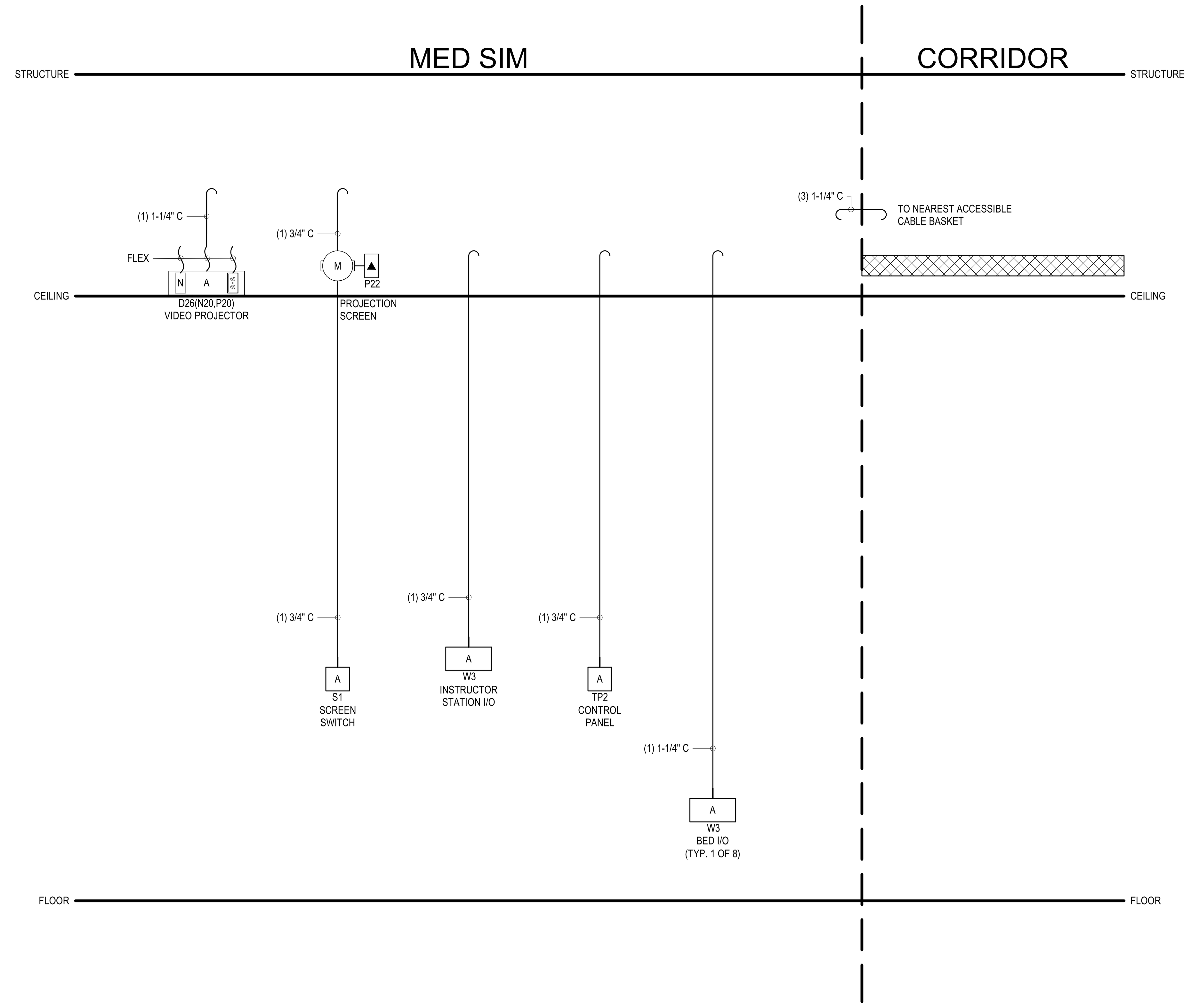
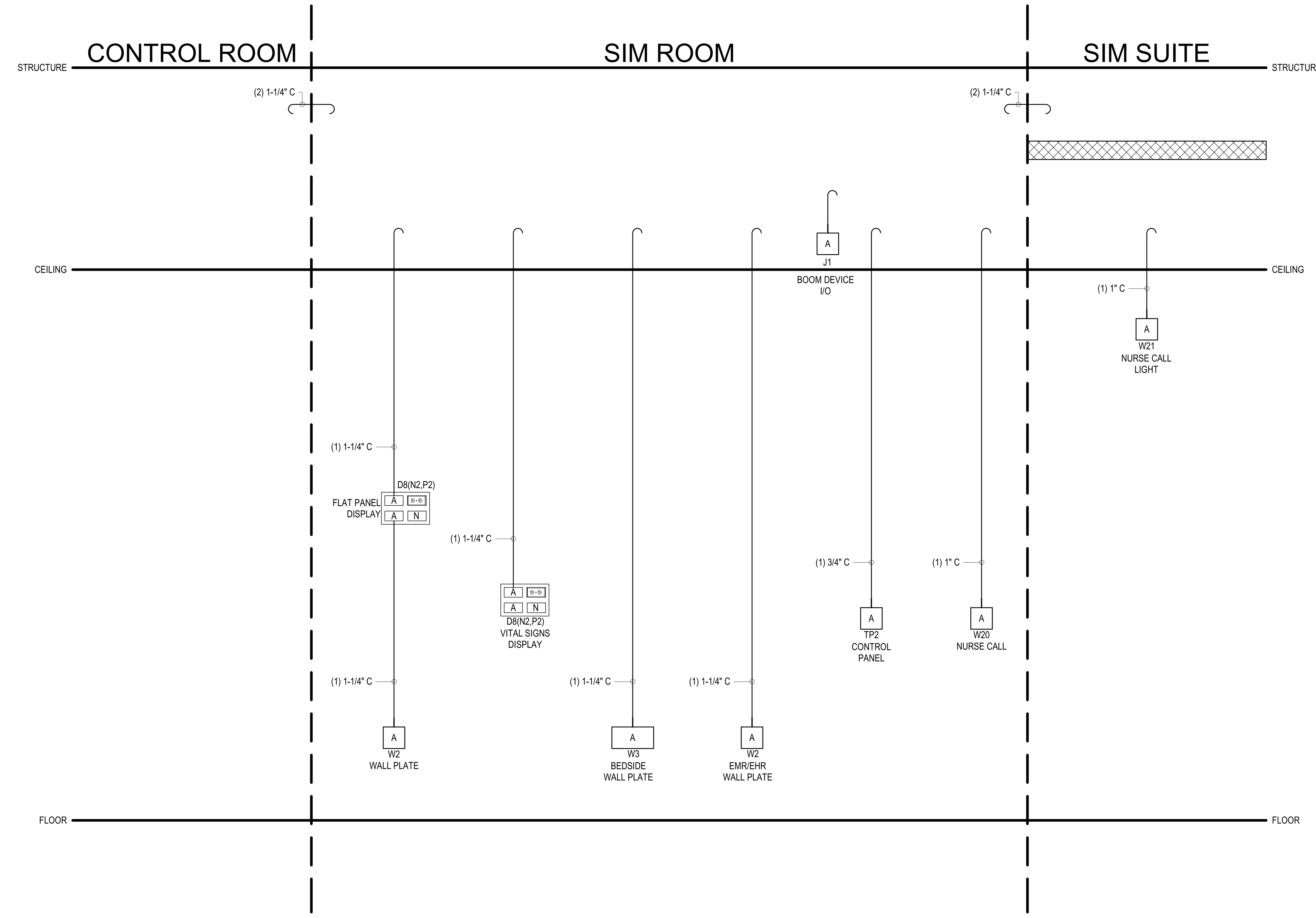
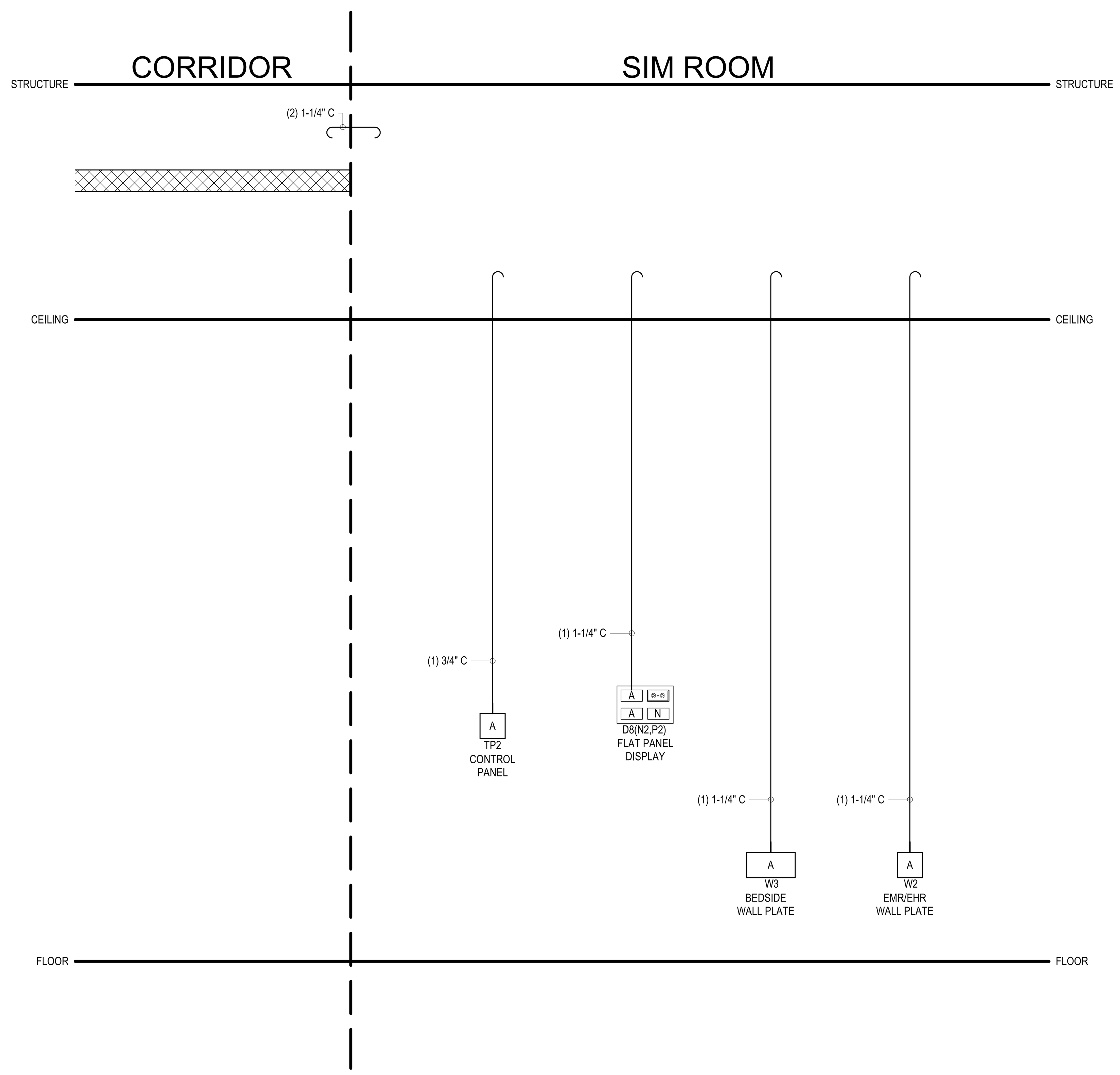


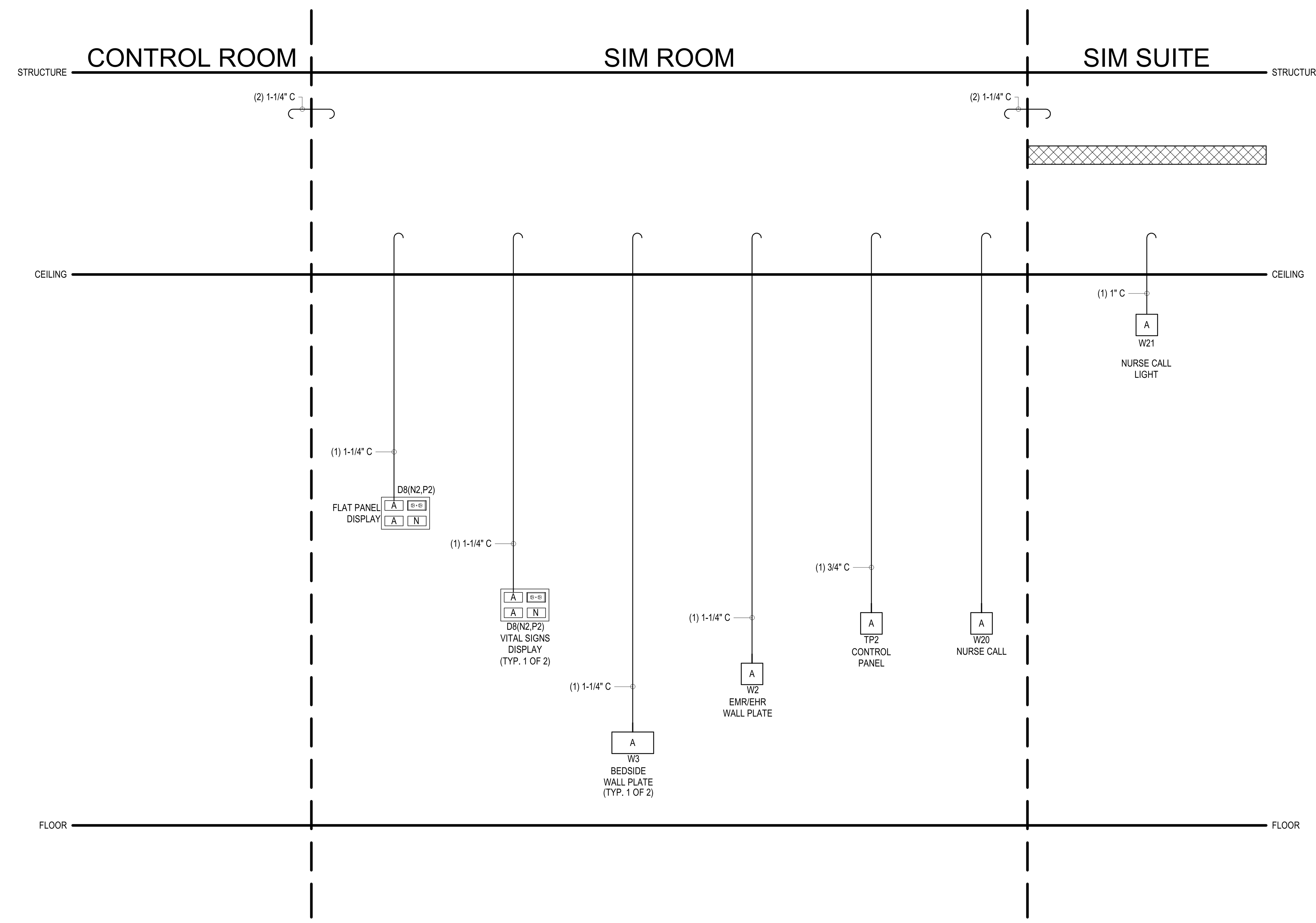
1 T-300 049 NURSING SKILLS LAB
NTS



2 T-300 042D HIGH FIDELITY SIM OR
NTS



3 T-300 041, 043 PRACTICE ROOM TYP
NTS



4 T-300 042C HIGH FIDELITY SIM BIRTHING
NTS

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AUDIOVISUAL INFRASTRUCTURE ROOM RISERS

T-300

CONTRACT DOCUMENTS

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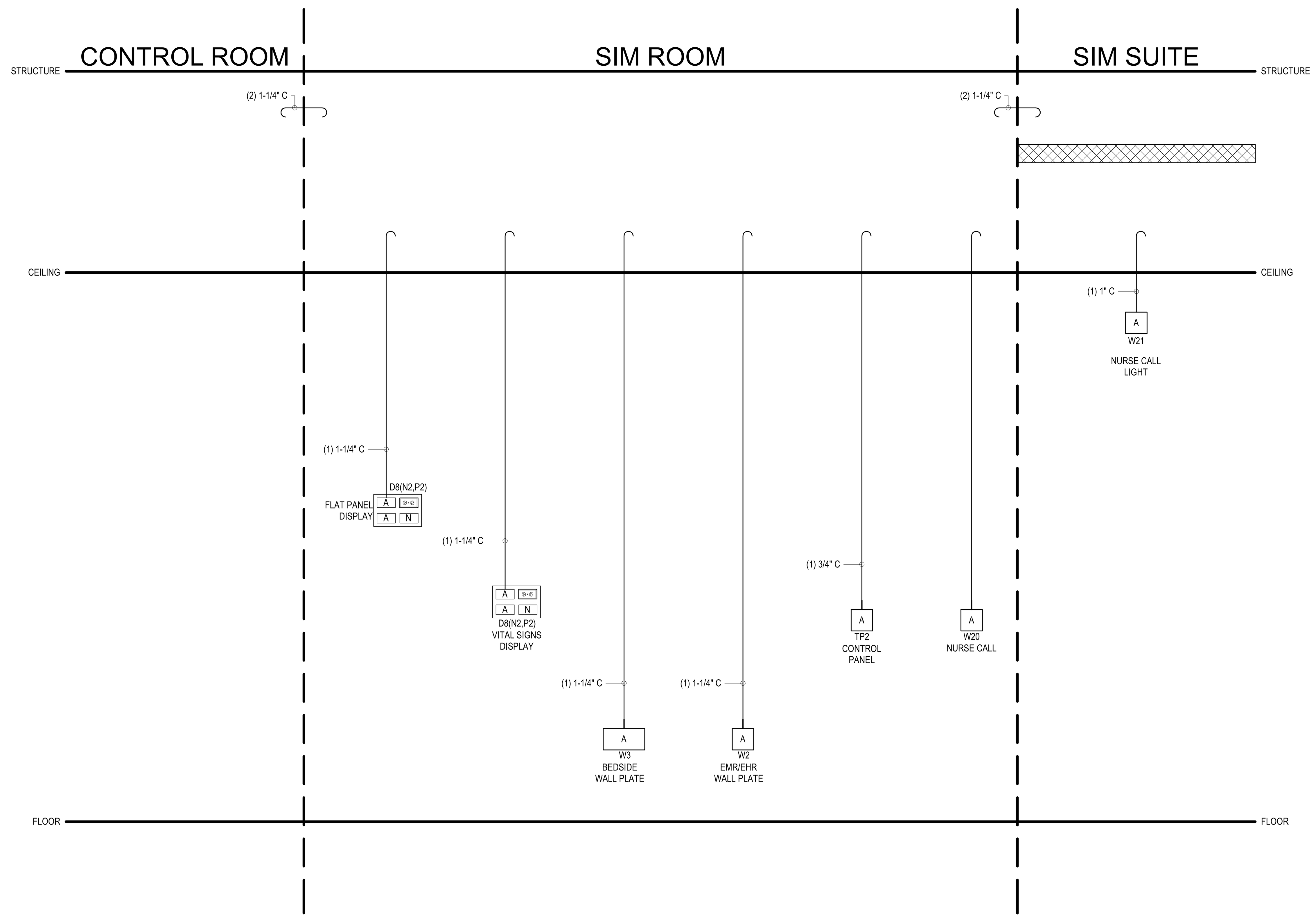
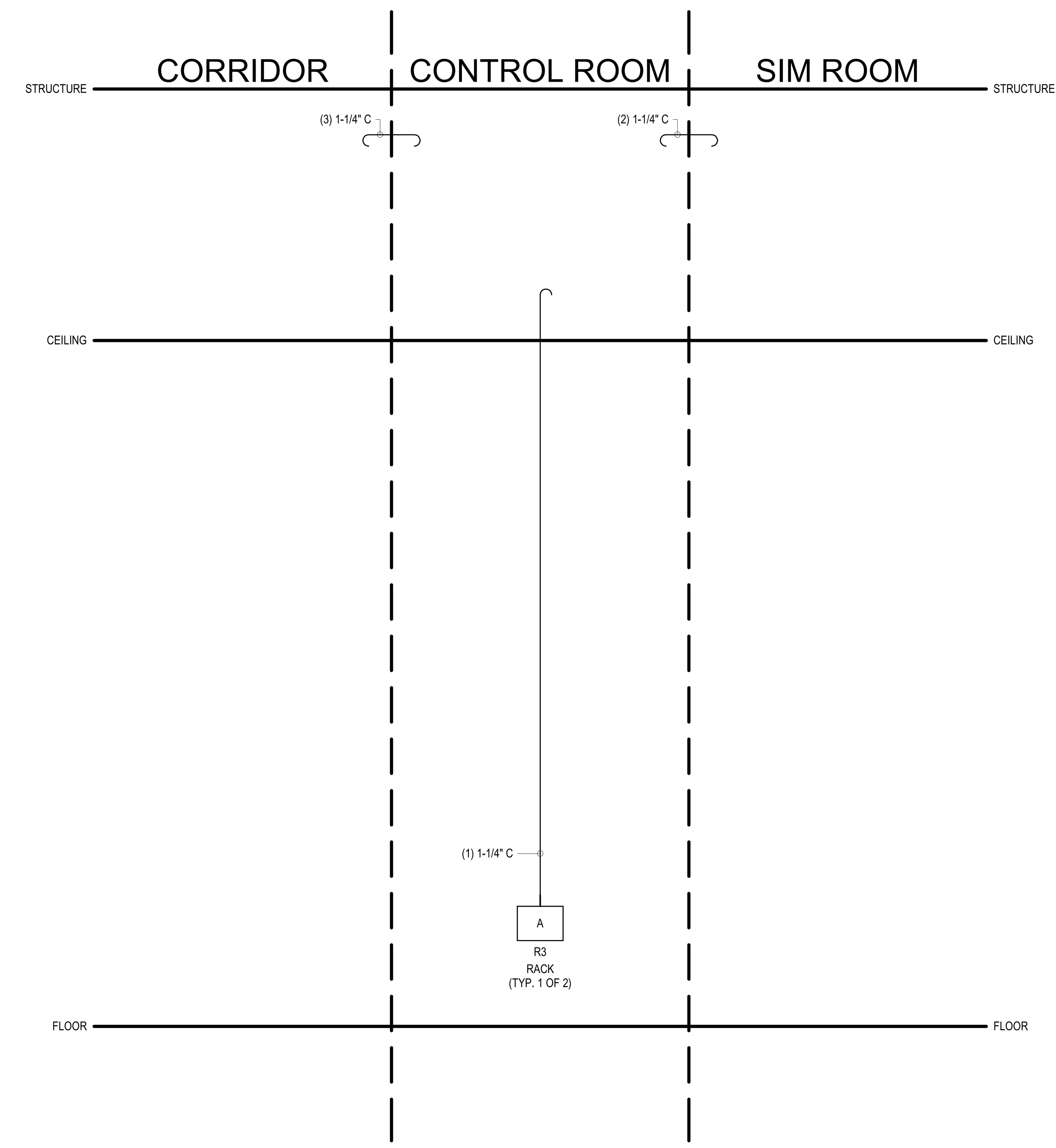
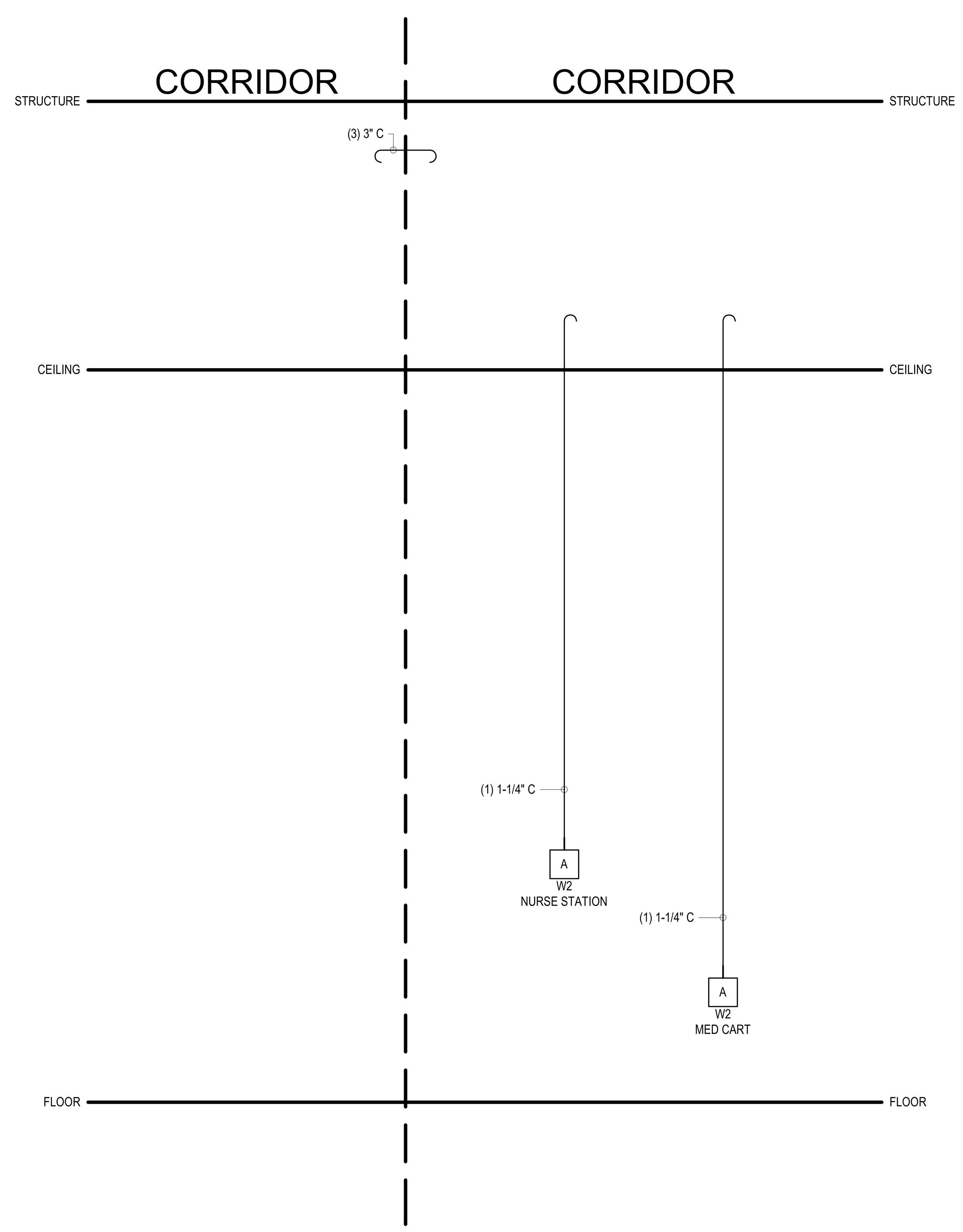


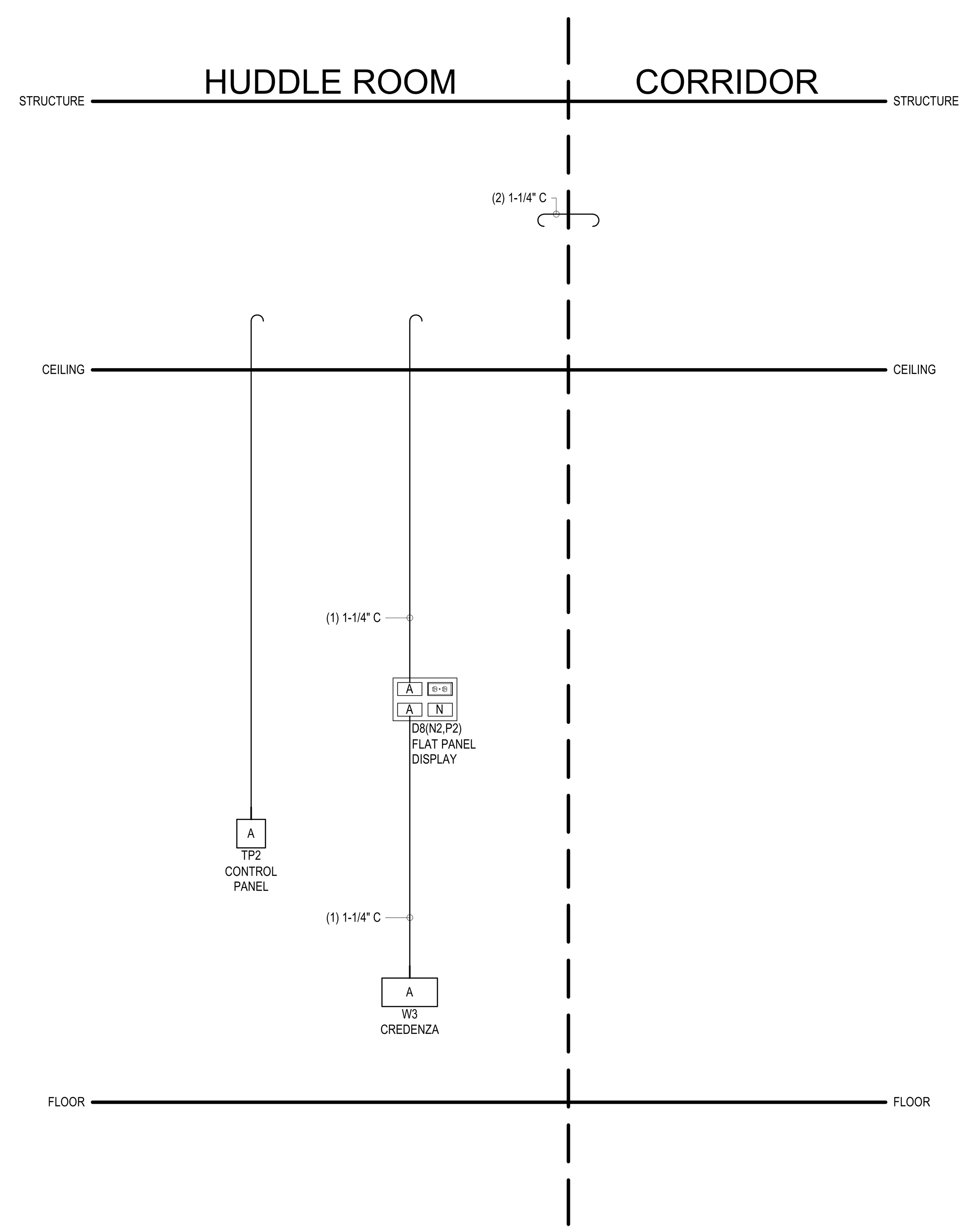
1 T-301 042A, 042B HIGH FIDELITY SIM ICU TYP.
NTS



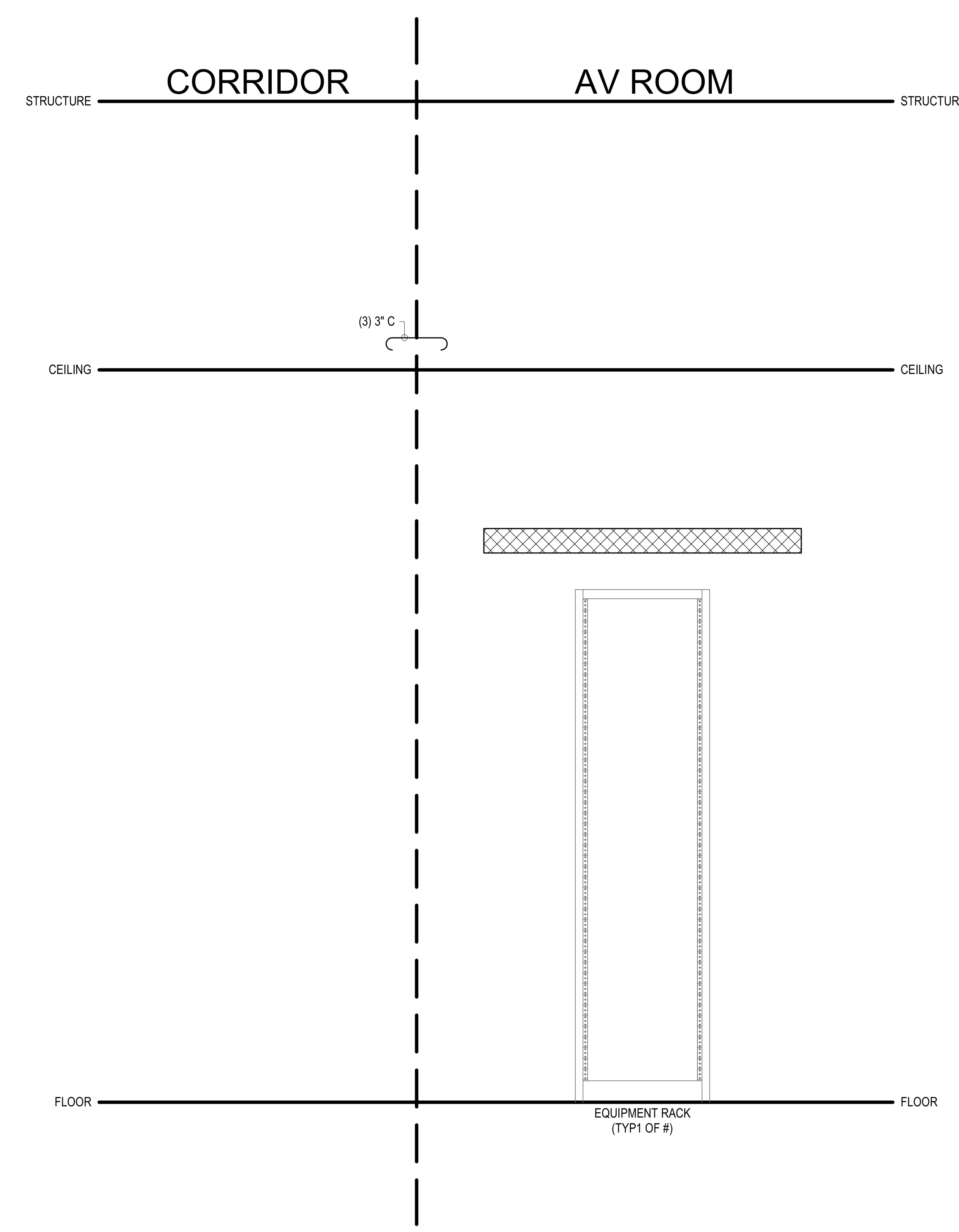
2 T-301 042E, 042F CONTROL ROOM TYPICAL
NTS



3 T-301 042 SIMULATION SUITE
NTS



4 T-301 045, 046 GROUP STUDY
NTS



5 T-301 048 AV/IT EQUIPMENT ROOM
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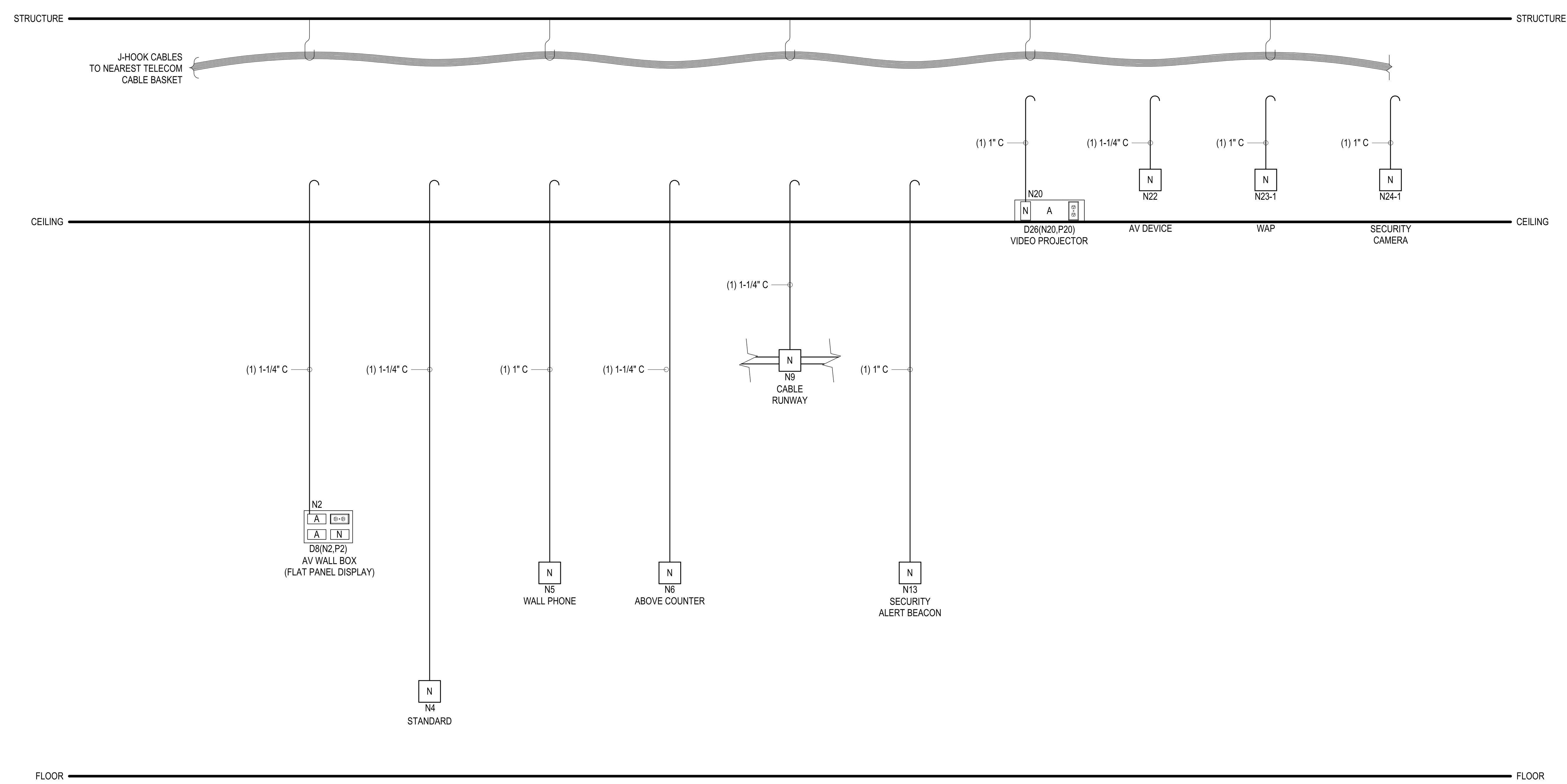
Drawing
AUDIOVISUAL INFRASTRUCTURE ROOM RISERS

T-301

CONTRACT DOCUMENTS



1 T-402 TELECOM TYPICAL CONDUIT RISER
3/4" = 1'-0"

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Drawing
TYPICAL TELECOM RISER

T-402

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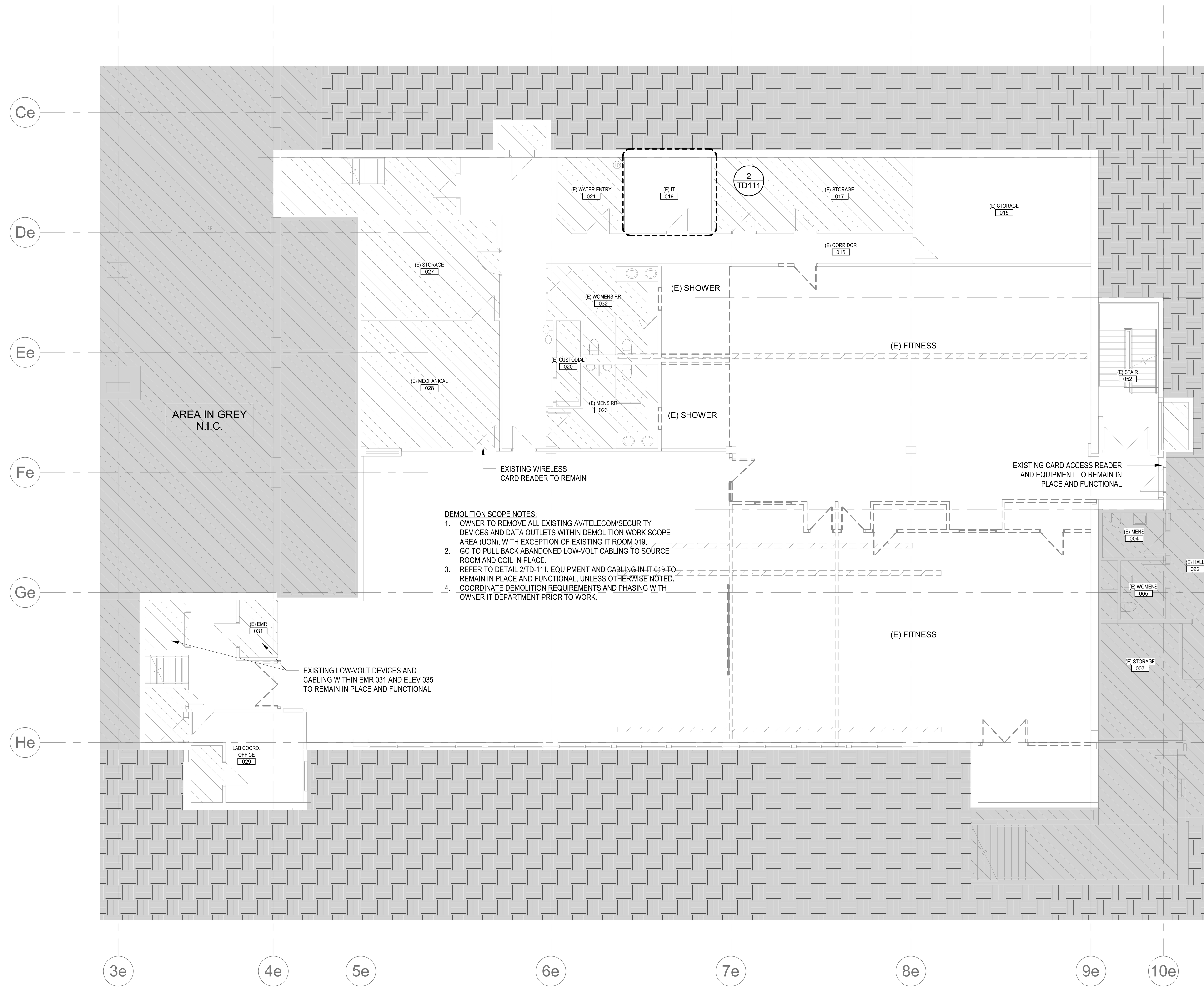
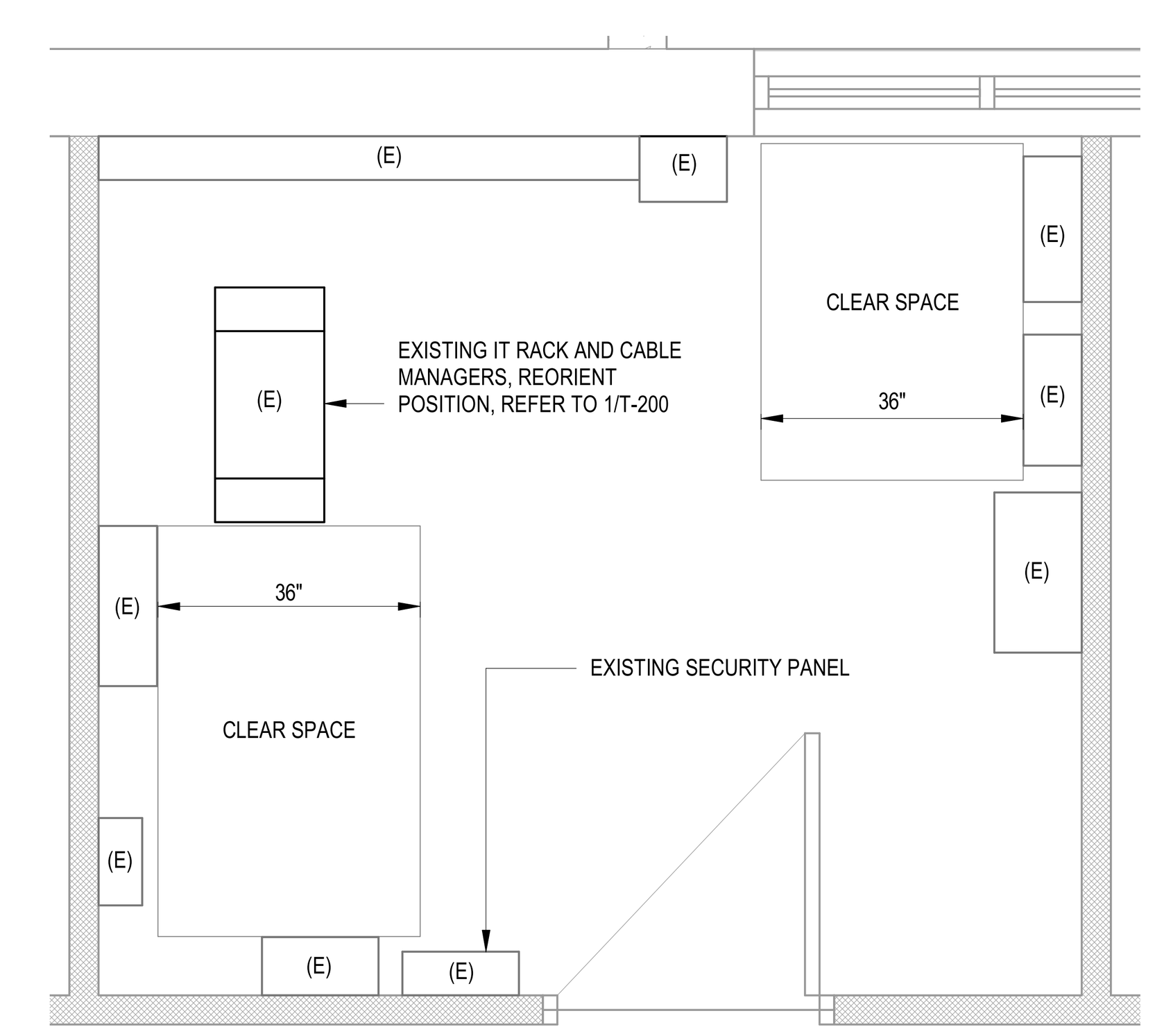


DEMOLITION SCOPE NOTES:

1. OWNER TO REMOVE ALL EXISTING AV/TELECOM/SECURITY DEVICES AND DATA OUTLETS WITHIN DEMOLITION WORK SCOPE AREA (UON), WITH EXCEPTION OF EXISTING IT ROOM 019.
2. GC TO PULL BACK ABANDONED LOW-VOLT CABLING TO SOURCE ROOM AND COIL IN PLACE.
3. REFER TO DETAIL 2/TD-111. EQUIPMENT AND CABLING IN IT 019 TO REMAIN IN PLACE AND FUNCTIONAL, UNLESS OTHERWISE NOTED.
4. COORDINATE DEMOLITION REQUIREMENTS AND PHASING WITH OWNER IT DEPARTMENT PRIOR TO WORK.

1 / TD111 — OVERALL TECHNOLOGY INFRASTRUCTURE DEMO PLAN
1/8" = 1'-0"



DEMOLITION SCOPE NOTES:

1. ALL LOW-VOLT RENOVATION WORK WITHIN IT ROOM 019 TO BE PERFORMED BY OWNER'S PREFERRED VENDOR(S).
2. ALL EQUIPMENT AND CABLING IN IT 019 TO REMAIN IN PLACE AND FUNCTIONAL, UNLESS OTHERWISE NOTED.
3. COORDINATE REQUIREMENTS AND PHASING WITH OWNER IT DEPARTMENT PRIOR TO WORK.

2 / TD111 — TELECOM ENLARGED DEMO PLAN - IT ROOM 019
1/2" = 1'-0"

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221170.00

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10-01-2021

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NV5	NV5

Drawing
OVERALL TECHNOLOGY INFRASTRUCTURE DEMO PLANS

TD111

CONTRACT DOCUMENTS

SECURITY GENERAL NOTES

GENERAL NOTES:
1. THESE DRAWINGS MUST BE USED IN CONJUNCTION WITH THE ELECTRICAL SPECIFICATIONS.
2. FURNISH AND INSTALL FIRE STOP TO ALL SLAB AND WALL PENETRATIONS PROVIDED FOR THE INSTALLATION OF SECURITY CABLE AS REQUIRED TO MAINTAIN FIRE RATING OF SLAB OR WALL.
3. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE CONTRACT DRAWINGS AND FIELD CONDITIONS.
4. INSTALL ALL COMPONENTS AS PER MANUFACTURERS RECOMMENDATIONS AND PER ALL APPLICABLE CODES.
5. INDICATE ALL MOUNTING REQUIREMENTS IN THE LEGEND UNLESS OTHERWISE NOTED.
6. VERIFY AND COORDINATE THE EXACT MOUNTING LOCATION OF ALL DEVICES PRIOR TO INSTALLATION.
7. THE MOUNTING HEIGHTS ARE TO THE CENTERLINE OF THE DEVICE UNLESS OTHERWISE NOTED.
8. RESTORE CEILINGS AND WALLS AND ANY OTHER SURFACES AFFECTED BY THIS WORK WITH LIKE MATERIALS TO MATCH EXISTING CONSTRUCTION UPON COMPLETION OF THE WORK.

ELECTRICAL DRAWINGS:
1. COORDINATE WALL BOX LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL AND ELECTRICAL DRAWINGS.
2. COORDINATE WITH ELECTRICAL DRAWINGS FOR LOCATION OF ALL SECURITY EQUIPMENT.

CONDUIT:
1. COORDINATE CONDUIT AND LADDER RACK FOR SECURITY WIRING TO MAINTAIN A MINIMUM OF 5” SEPARATION FROM LIGHTING FIXTURES.
2. COORDINATE INSTALLATION OF CONDUITS AND CABLE BASKETS WITH OTHER COMPONENTS INSTALLED WITHIN THE CEILING. PREPARE ALL SHOP DRAWINGS TO DEMONSTRATE AND ENSURE PROPER INSTALLATION OF ALL COMPONENTS.
3. MAINTAIN MINIMUM BEND RADIUS OF 10 X O.D. FOR SECURITY CONDUITS EQUAL TO OR LESS THAN 2” DIAMETER.
4. PROVIDE PULL BOXES, ELBOWS IN LIEU OF A BEND.
5. REAM AND BUSH THE ENDS OF ALL CONDUITS.
6. PROVIDE AND LEAVE IN PLACE A PULL STRING IN EACH CONDUIT. PULL STRINGS SHALL ALSO BE INSTALLED IN ALL SPARE/EMPTY CONDUITS.
7. STUB UP CONDUIT SLEEVES THROUGH SLABS 6” ABOVE FINISHED FLOORS.
8. PROVIDE HANGERS, ANCHORS, MOUNTING HARDWARE, GROUND LUGS, AND STRAPS AS REQUIRED TO ENSURE PROPER INSTALLATION OF PATHWAY COMPONENTS.
9. WHERE CABLE IS RUN ABOVE NON-ACCESSIBLE (I.E., GYPSUM BOARD) CEILING CONSTRUCTION, CONDUITS, AND PULL BOXES MUST BE INSTALLED TO PROPERLY ROUTE CABLE.
10. PROVIDE J-HOOKS AND CABLE STRAPS TO SUPPORT CABLE ABOVE ACCESSIBLE CEILING CONSTRUCTION EXCEPT IN AREAS WHERE CABLE BASKET OR CONDUIT IS INDICATED ON THE DRAWINGS.
11. ALL CONDUIT SHALL BE A MINIMUM OF 1” EMT UNLESS OTHERWISE NOTED.
12. ALL CONDUIT SHALL BE ROUTED ABOVE CEILING, BELOW FLOORS, OR WITHIN WALLS IN THE FINISHED AREAS. NO CONDUIT SHALL BE EXPOSED IN THE FINISHED AREAS UNLESS APPROVED BY DESIGNER.
13. ALL CONDUITS SHALL HAVE PLASTIC BUSHINGS INSTALLED AT OPEN ENDS PRIOR TO PULLING WIRE.
14. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.
15. ALL BACK BOXES MOUNTED WITHIN FIRE RATED PARTITIONS SHALL MEET FIRE RATING OF THE PARTITION AS REQUIRED BY CODE.
16. NOT USED.
17. NOT USED.
18. COORDINATE THE EXACT LOCATION OF ALL PULL BOXES WITH ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
19. ALL JUNCTION AND PULL BOXES SHALL BE PROVIDED WITH ACCOMPANYING BLANK COVER PLATE.
20. JUNCTION BOXES LOCATED ABOVE DOORS WITH NO ACCESSIBLE CEILING SHALL BE SECURED WITH TAMPER PROOF SCREWS.
21. PROVIDE WATERTIGHT SEALING ASSEMBLIES WITH PRESSURE BUSHING AS REQUIRED FOR EXTERIOR PENETRATIONS.
22. JUNCTION AND PULL BOXES IN EXTERIOR LOCATIONS SHALL BE WATERPROOF.
23. JUNCTION AND PULL BOXES IN ROOM AREAS UTILIZING FM200 (SEE FIRE PROTECTION DRAWINGS) SHALL BE VAPOR TIGHT.
24. ALL CONDUIT ROUTING SHOWN IS SCHEMATIC AND DOES NOT REPRESENT INSTALLED PATHS OR DISTANCES. ACTUAL ROUTING AND BOX LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH OTHER WORK OF THE CONTRACT.

CABLE:
1. SECURITY SYSTEM CABLING SHALL BE FURNISHED AND INSTALLED BY OWNER VENDOR.
2. ALL SECURITY CABLING SHALL BE RAN SPLICE-FREE FROM DEVICE LOCATION TO BACK TO THE IDF/MDF.
3. ALL CABLES SHALL BE PLENUM RATED WHERE REQUIRED.
4. WIRE SHEATH SHALL BE MAINTAINED TO FINAL TERMINATION. ALL TERMINATIONS SHALL MAINTAIN TWIST OF INDIVIDUAL PAIRS TO WITHIN 0.5” OR LESS OF FINAL TERMINATION.

LABELING:
1. SECURITY CABLE IDENTIFICATION LABELS SHALL BE PROVIDED AT EACH END, BY OWNER VENDOR.
2. PROVIDE DESIGNATION LABELS FOR ALL TERMINATION BLOCKS, PATCH PANELS, AND DEVICE LOCATIONS.
3. SUBMIT LABEL REPORT LISTING THE DEVICE NUMBERS AND ROOM NUMBERS.
4. LABELS SHALL BE WHITE WITH TYPEWRITTEN LEGIBLE CHARACTERS PRINTED WITH NON-SMEAR TYPE INK. HANDWRITTEN LABELS ARE NOT PERMITTED. PROVIDE LABELS FOR CABLES WITH PROTECTIVE WRAP AROUND PLASTIC TRANSPARENT COVER WHICH WILL SERVE TO PROTECT THE INK FROM SMEARING AND SECURE THE LABEL TO THE CABLE. PROVIDE LABELS FOR CABLES WIDE ENOUGH FOR 24 CHARACTERS IN A SINGLE ROW.
5. ALL CABLES SHALL BE LABELED WITHIN 6.5” OF FINAL TERMINATION.

CAMERAS:
1. SECURITY CAMERAS SHALL BE PROVIDED AND INSTALLED BY OWNER VENDOR.
2. PROVIDE THE MEANS FOR OPTIMUM CAMERA LOCATION, LENS SELECTION AND VIEW. FIXED CAMERAS ARE TO BE PROVIDED WITH A SERIES OF VARI-FOCAL LENSES FOR THE PURPOSE OF ACQUIRING FIELD OF VIDEO AND VIDEO PICTURE FROM EACH INTENDED CAMERA LOCATION. TO SHOW VARYING FIELD OF VIEWS AND QUALITY OF CAMERA PICTURE. OBTAIN CONCURRENCES OF THE SELECTED CAMERA PLACEMENT, LENS SELECTION FIELD OF VIEW, AND PROVIDE IMAGES TO THE OWNER FOR ACCEPTED FIELD OF VIEW.
3. UPON COMPLETION OF INSTALLATION, DOCUMENT THAT THE CAMERA LOCATIONS AND LENSES CHOSEN/UTILIZED ARE AS SELECTED IN THE INITIAL PROCEDURE AND SUBMIT THE FIELD OF VIEWS PROVIDED BY THE COMPLETED INSTALLATION FOR APPROVAL BY THE OWNER THAT THEY ARE COMPARABLE TO THOSE OBTAINED IN THE INITIAL SELECTION PROCEDURE.

SECURITY SYMBOLS LEGEND

(THIS IS A MASTER LEGEND, NOT ALL SYMBOLS MAY APPEAR ON DRAWINGS.)

SECURITY DEVICES

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
XX (square)	WALL MOUNTED DEVICE	XX (circle)	CEILING MOUNTED DEVICE

SECURITY DEVICE DESIGNATORS

D-####-# ← DEVICE NUMBER - REFER TO THE SECURITY DEVICE SCHEDULE FOR MORE INFORMATION.
DEVICE TYPE → XX
ADDITIONAL INFORMATION → X

DEVICE TYPES

AB	ALERTUS BEACON	ICM	INTERCOM MASTER	P	PANIC DEVICE	WR	WIRELESS RECEIVER
ACP	ACCESS CONTROL PANEL	IL	INTER-LOCK	PS	POWER SUPPLY	WS	WORKSTATION
CB	CODE BLUE PHONE	K	KNOX BOX	T	TICKET		
GB	GLASS BREAK SENSOR	LA	LOCAL ALARM	TS1	TURNSTILE - ADA		
IC	INTERCOM	MS	MOTION SENSOR	TS2	TURNSTILE		

ADDITIONAL INFORMATION

ADA WITH ADA OPENERS FA FIRE ALARM TIE IN G GATE MOUNTED W WIRELESS

SECURITY CAMERAS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
FIX	FIXED CAMERA	DUO	90° DUO CAMERA	180	180° CAMERA
PTZ	PTZ CAMERA	DUO	180° DUO CAMERA	270	270° CAMERA
				360	360° CAMERA

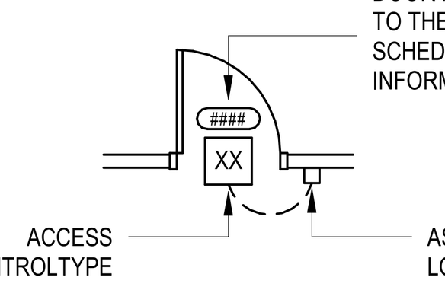
SECURITY CAMERA DESIGNATORS

C-####-# ← CAMERA NUMBER - REFER TO THE SECURITY CAMERA SCHEDULE FOR MORE INFORMATION.
CAMERA TYPE → XX

SECURITY DOORS

SYMBOL	DESCRIPTION
XX	ACCESS CONTROL TYPE
□	ASSOCIATED DEVICE LOCATION

SECURITY DOOR DESIGNATORS



ADDITIONAL INFORMATION

CR	CARD READER	FR	FUTURE CARD READER
DC	DOOR CONTACT	ML	MANUAL LOCK
EC	ELECTRONIC CONTROL		

SECURITY CAMERA SCHEDULE

ROOM NUMBER	ROOM NAME	DEVICE NUMBER	CAMERA TYPE	MAKE & MODEL	TERMINATION POINT	REFERENCE DETAIL	NOTES
016	(E) CORRIDOR	C-016-01	FIX		IT 019	3/Y-501	ROUGH-IN ONLY, CAMERA SYSTEM BY OWNER'S VENDOR
016	(E) CORRIDOR	C-016-02	FIX		IT 019	3/Y-501	ROUGH-IN ONLY, CAMERA SYSTEM BY OWNER'S VENDOR
047	CORRIDOR	C-047-01	FIX		IT 019	3/Y-501	ROUGH-IN ONLY, CAMERA SYSTEM BY OWNER'S VENDOR
047	CORRIDOR	C-047-02	FIX		IT 019	3/Y-501	ROUGH-IN ONLY, CAMERA SYSTEM BY OWNER'S VENDOR
047	CORRIDOR	C-047-03	FIX		IT 019	3/Y-501	ROUGH-IN ONLY, CAMERA SYSTEM BY OWNER'S VENDOR

SECURITY DEVICE SCHEDULE

ROOM NUMBER	ROOM NAME	DEVICE NUMBER	DEVICE TYPE	MAKE & MODEL	TERMINATION POINT	REFERENCE DETAIL	NOTES
019	(E) IT	(E)	PS		IT 019	-	EXISTING ACS POWER SUPPLY TO REMAIN
019	(E) IT	(E)	ACP		IT 019	-	EXISTING ACS PANEL TO REMAIN
019	(E) IT	APC-019-02	ACP		IT 019	-	ACS SYSTEM BY OWNER'S VENDOR
019	(E) IT	PS-019-02	PS		IT 019	-	ACS SYSTEM BY OWNER'S VENDOR
040	STORAGE	AB-040	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
041	PRACTICE	AB-041	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
042	SIMULATION SUITE	AB-042	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
042A	HIGH FIDELITY ICU SIM	AB-042A	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
042B	HIGH FIDELITY ICU SIM	AB-042B	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
042C	HIGH FIDELITY BIRTHING SIM	AB-042C	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
042D	HIGH FIDELITY OR SIM	AB-042D	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
043	PRACTICE	AB-043	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
044	GENERAL PURPOSE CLASSROOM	AB-044	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
045	GROUP STUDY	AB-045	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
046	GROUP STUDY	AB-046	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR
049	NURSING SKILLS LAB	AB-049	AB		IT 019	4/Y-501	ROUGH-IN ONLY, ALERTUS BEACON BY OWNER'S VENDOR

SECURITY DOOR SCHEDULE

ROOM NUMBER	ROOM NAME	DOOR NUMBER	ACCESS CONTROL	TERMINATION POINT	REFERENCE DETAIL	NOTES
019	(E) IT	E019	CR	IT 019	1/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
040	STORAGE	040	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
041	PRACTICE	041	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
042	SIMULATION SUITE	042	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
043	PRACTICE	043	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
048	AV / IT	048	CR	IT 019	1/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
049	NURSING SKILLS LAB	049A	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR
049	NURSING SKILLS LAB	049B	CR	IT 019	2/Y-501	ROUGH-IN ONLY, ACS SYSTEM BY OWNER'S VENDOR

NOTES:
1. SEE THE ARCHITECTURAL DOOR SCHEDULE FOR MORE INFORMATION.

SECURITY SYSTEM DEMOLITION SCOPE NOTES:
1. REFER TO SHEET TD-111 FOR DEMOLITION REQUIREMENTS OF EXISTING SECURITY DEVICES (IE EXISTING READER DOORS AND ALERTUS BEACONS).
2. REFER TO DETAILS 1/T-200 AND 2/TD-111. EQUIPMENT AND CABLING IN IT 019 TO REMAIN IN PLACE AND FUNCTIONAL, UNLESS OTHERWISE NOTED.
3. ALL EXISTING SECURITY DEVICES TO BE REMOVED BY OWNER. GC TO PULL BACK CABLING TO SOURCE ROOM AND COIL IN PLACE.
4. COORDINATE DEMOLITION REQUIREMENTS AND PHASING WITH OWNER IT DEPARTMENT PRIOR TO WORK.

SECURITY SYSTEM NEW WORK SCOPE NOTES:
1. PROVIDE ROUGH-IN ONLY FOR NEW SECURITY DEVICE LOCATIONS.
2. ALL SECURITY EQUIPMENT AND CABLING INSTALLATION SHALL BE PERFORMED BY OWNER'S PREFERRED VENDOR(S).
3. REFER TO SECURITY DETAILS SHEET Y-501.
4. COORDINATE SECURITY DOOR ROUGH-IN REQUIREMENTS WITH DIV-08 HARDWARE SPEC AND ARCHITECTURAL DOOR SCHEDULE.
5. REFER TO DETAIL 1/T-200 FOR LOCATION OF NEW ACCESS CONTROL PANEL.
6. COORDINATE FINAL LOCATIONS, REQUIREMENTS AND PHASING WITH OWNER IT DEPARTMENT PRIOR TO WORK.

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ARCHITECTURE
LANDSCAPE ARCHITECTURE
PLANNING
INTERIOR DESIGN

No.	Date	Revision

Project Name
NURSING RENOVATION

Project Number
221170.00

Date (YYYY/MM/DD)
10-01-2021

Drawn By: NV5 Checked By: NV5

Drawing
SECURITY SYMBOLS LEGEND, NOTES AND SCHEDULES

Y-001

CONTRACT DOCUMENTS

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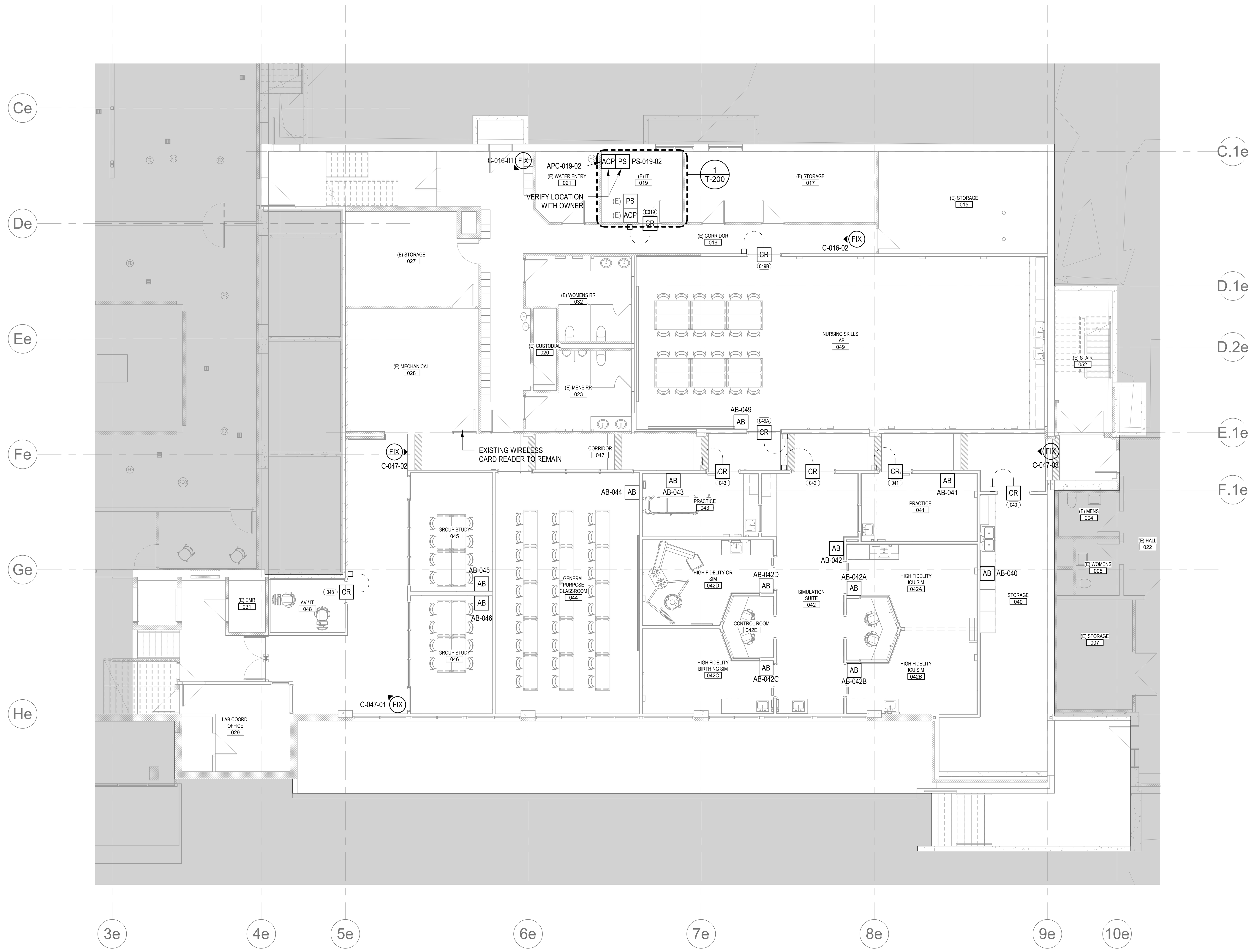

1 Y-101 OVERALL SECURITY PLAN
1/8" = 1'-0"

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