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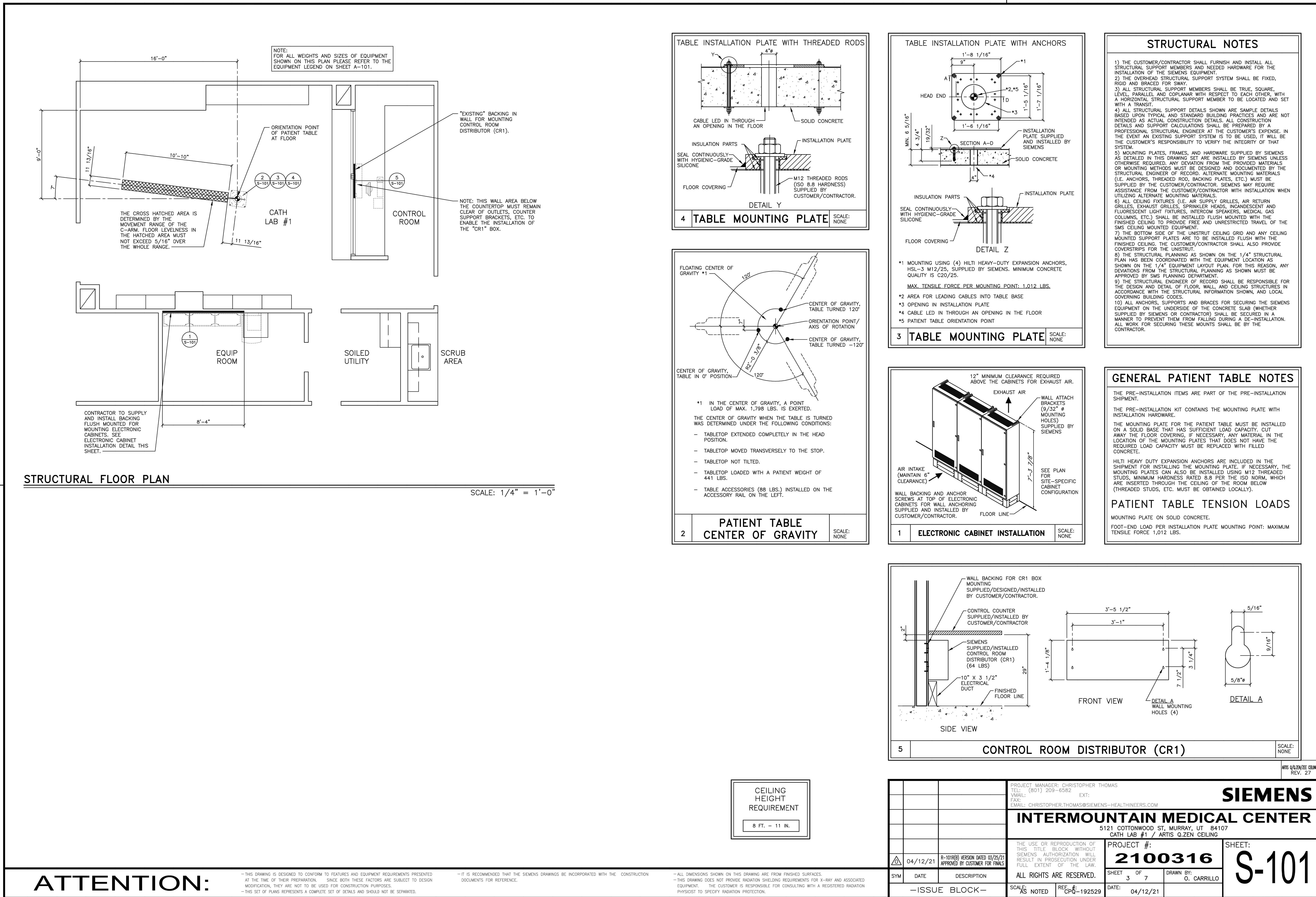
Intermountain Healthcare
IMC- Cath Lab 1 Remodel Project

5121 South Cottonwood Street
Murray, UT 84107

NJRA Project # 20229
Construction Documents December 15, 2021

Siemens
Equipment-
Structural

EQ 103



12/14/2021 7:45:05 AM - T:\2001\HC\20229\00\HC - IMC CATH LAB #1\02 BIM - REVIT & AUTOCAD\02 AUTOCAD DWGS\EQ 104 SIEMENS EQUIPMENT STRUCTURAL.DWG

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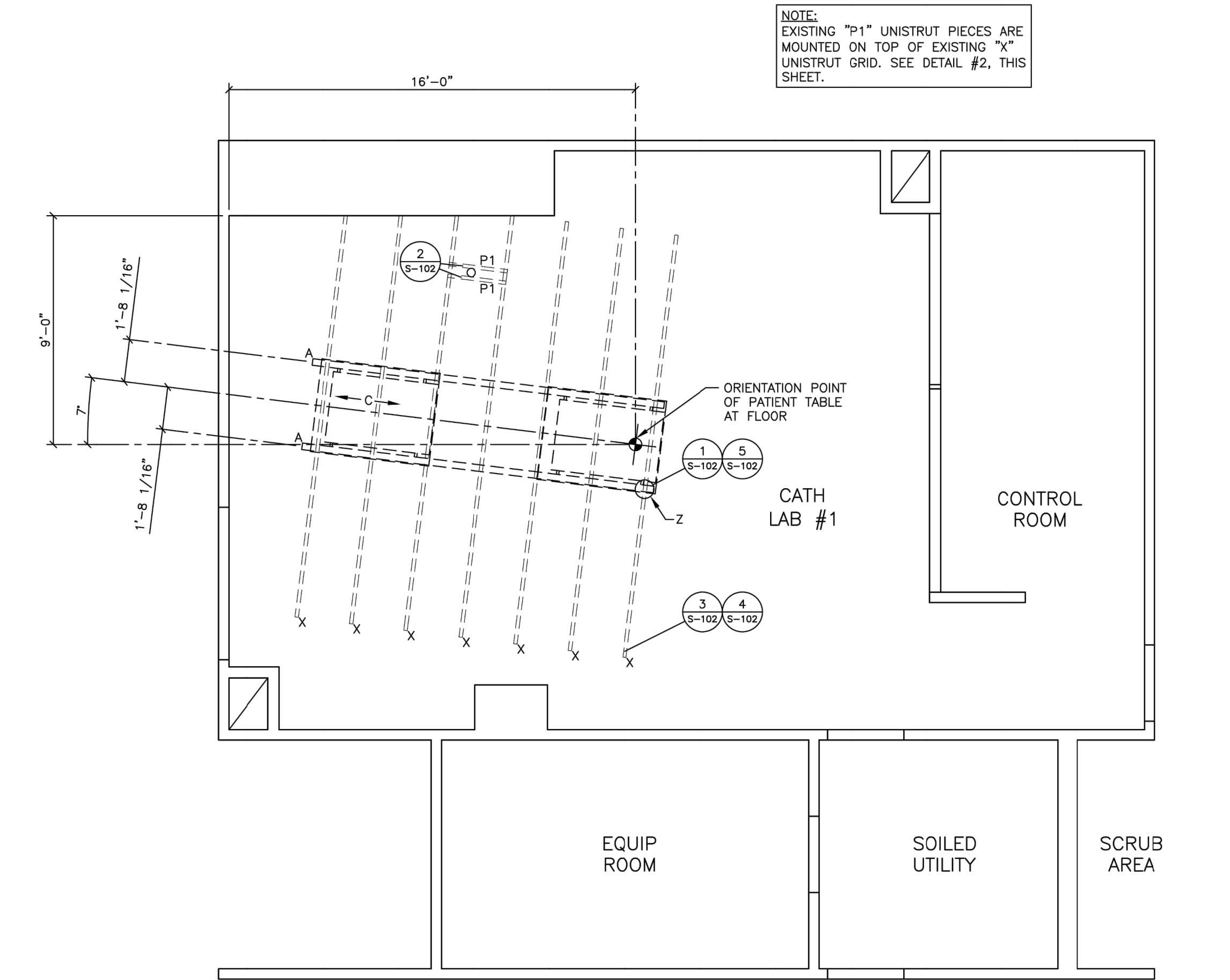
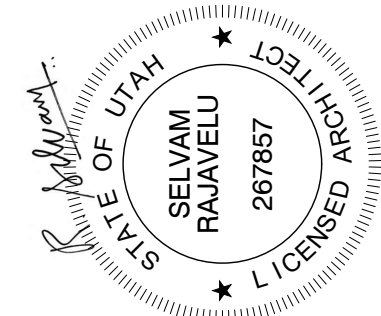
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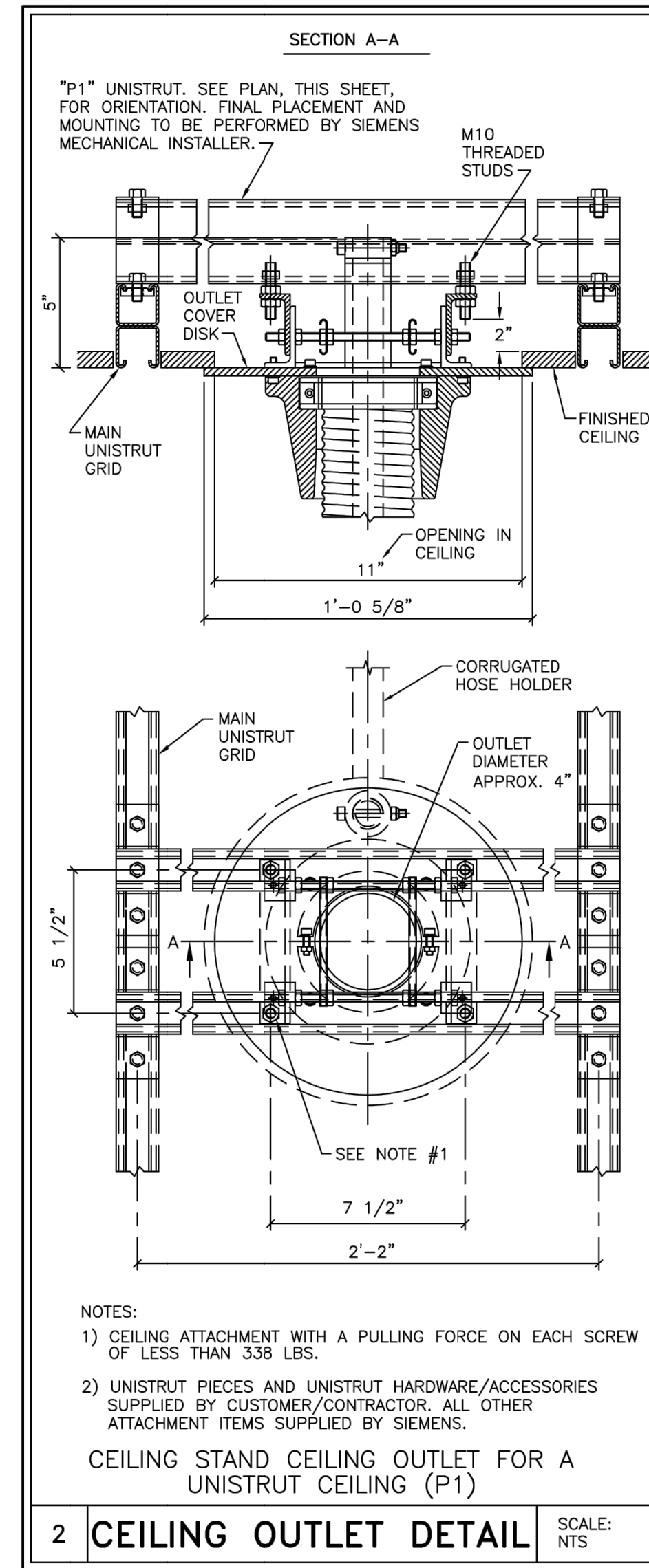
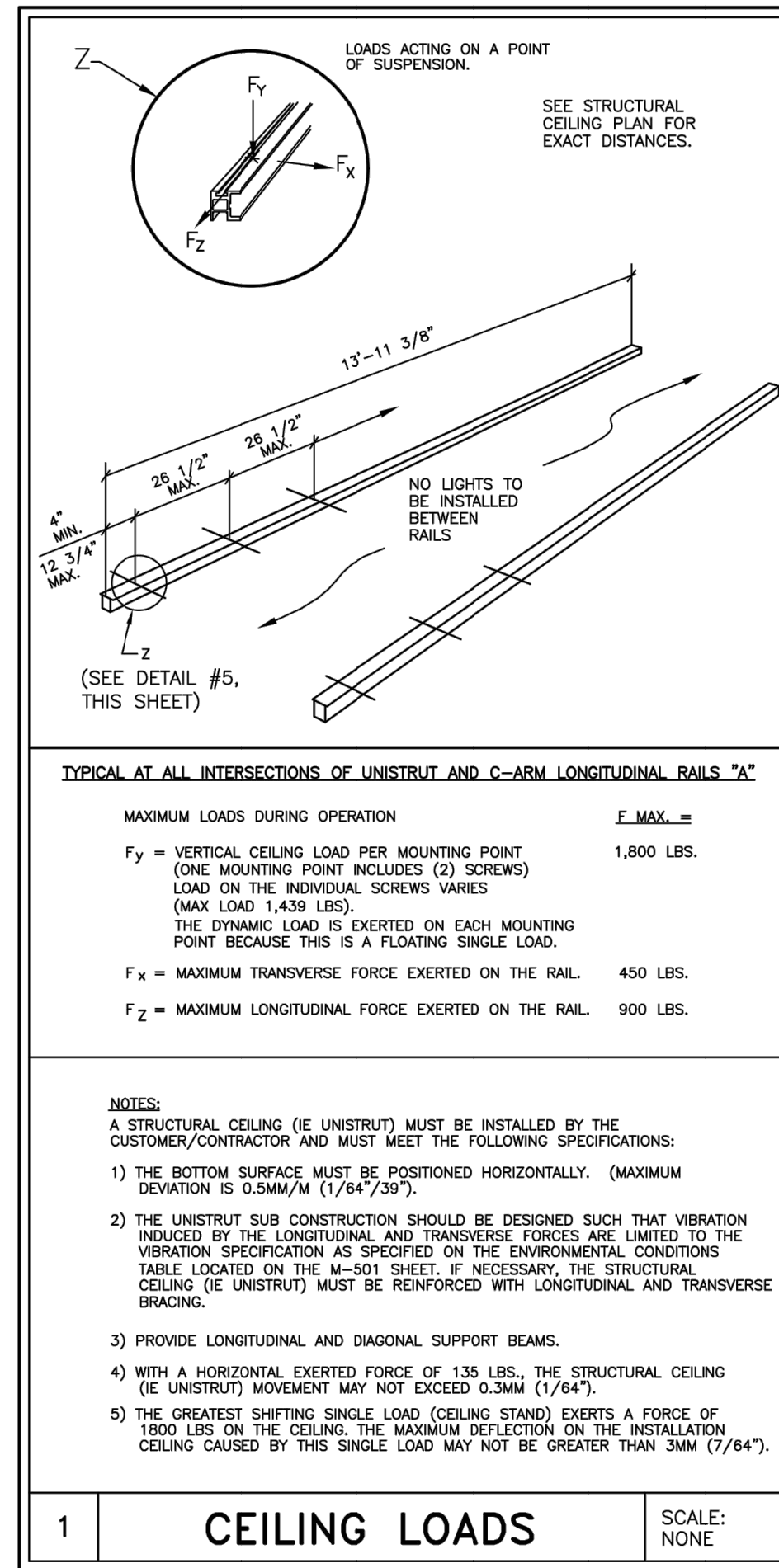
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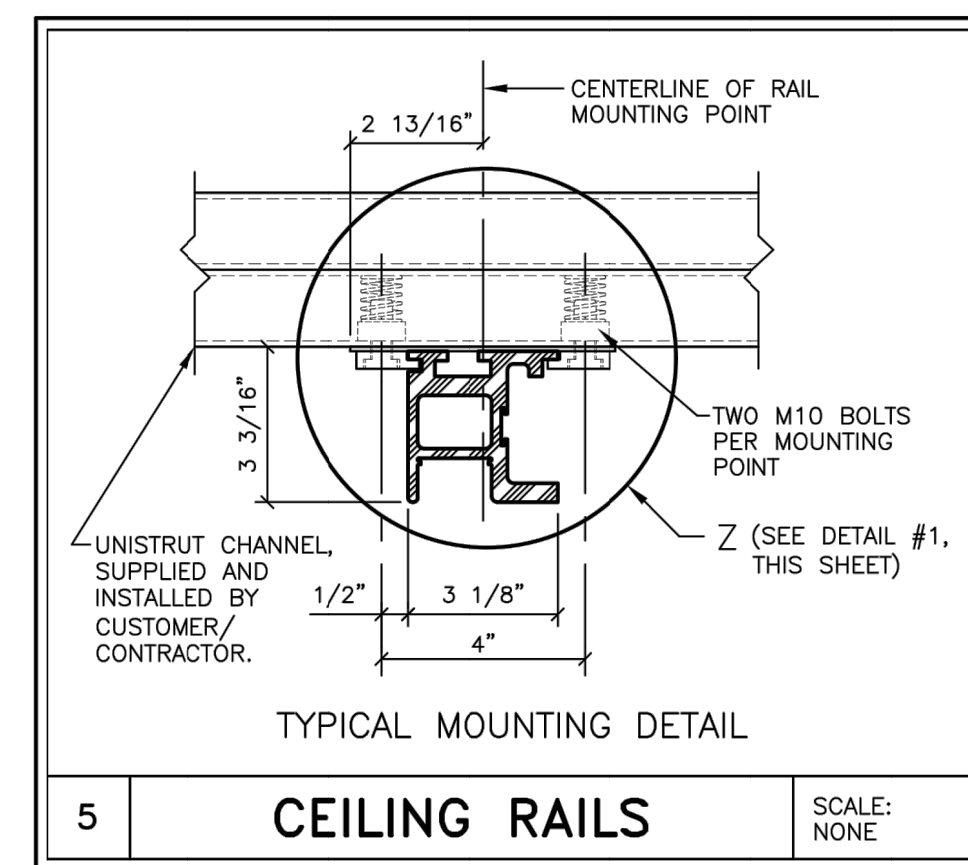
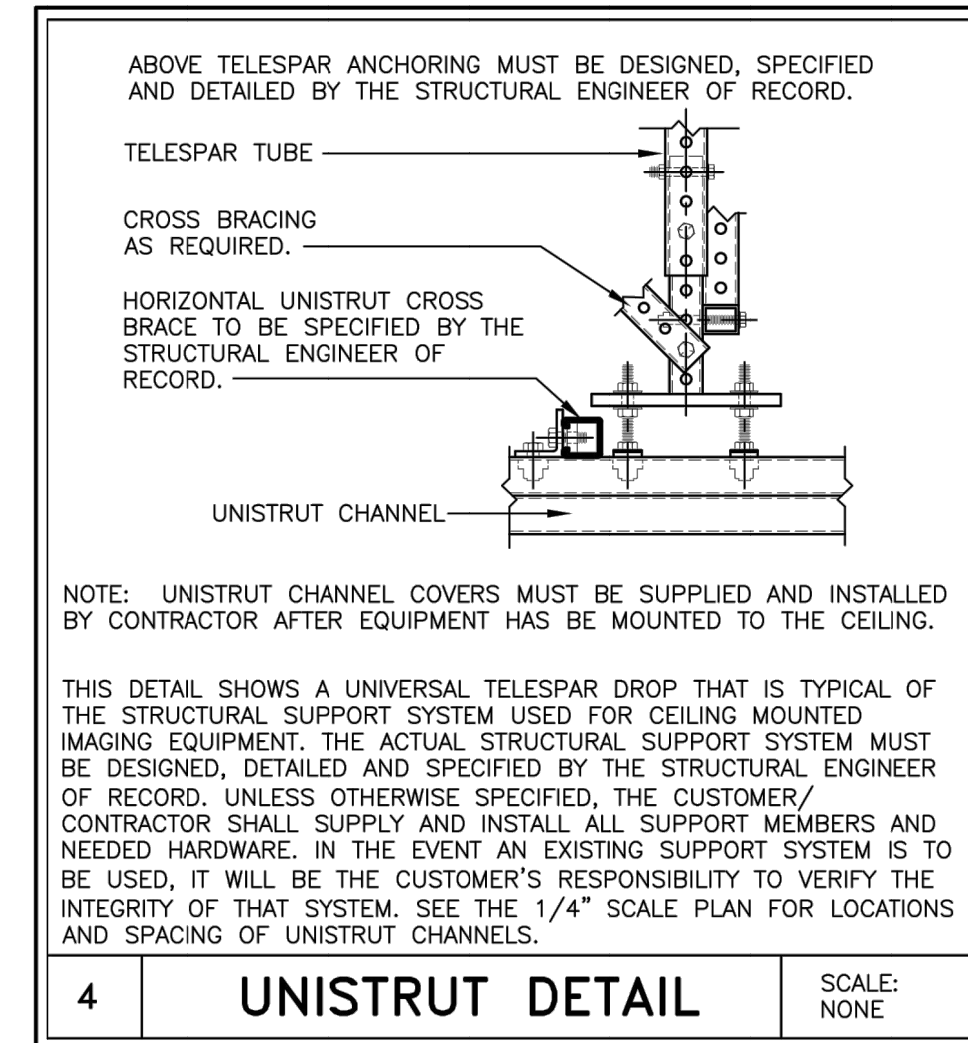
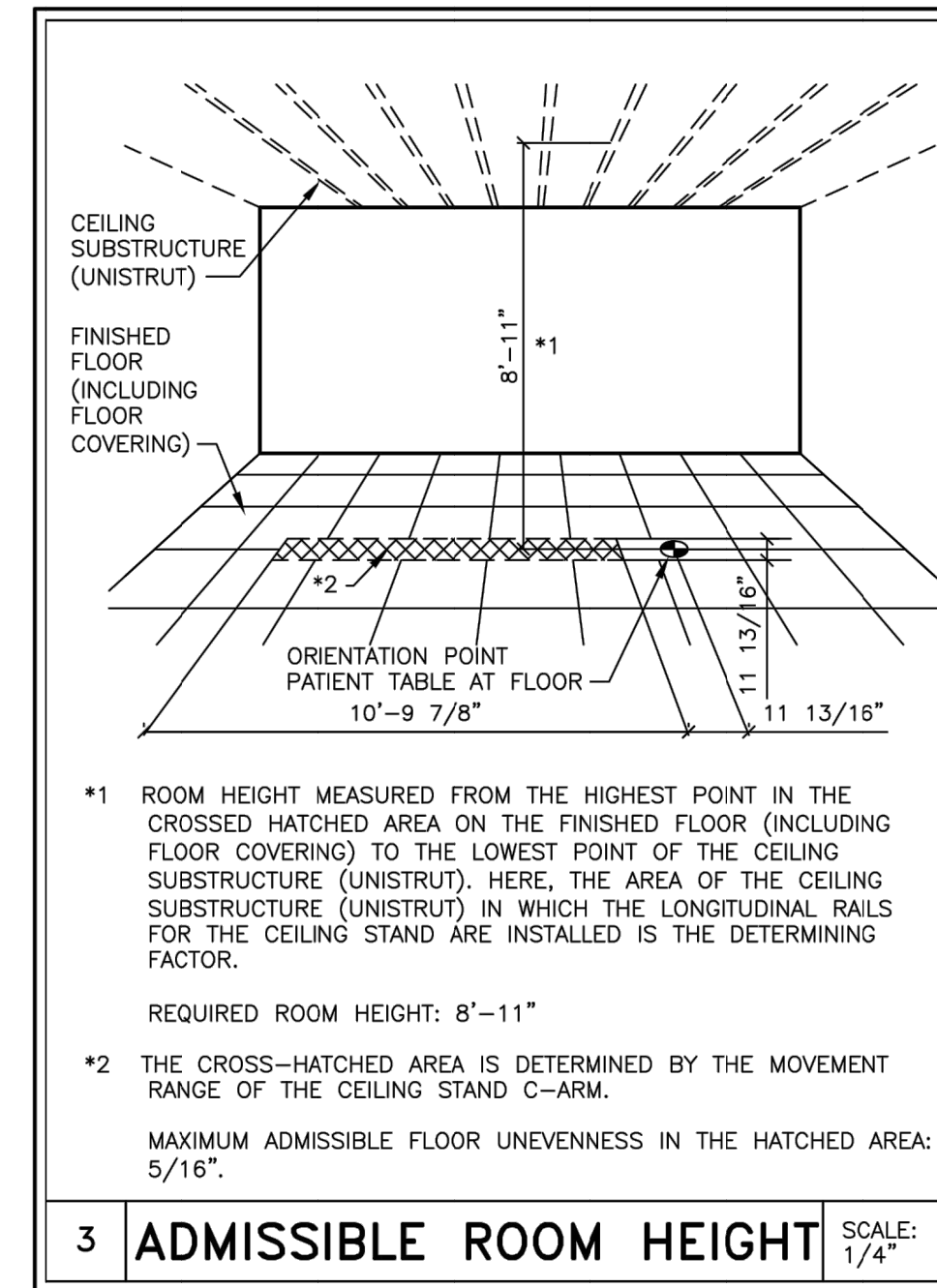
STRUCTURAL CEILING PLAN

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



CEILING PLAN LEGEND		
SUPPLIED/INSTALLED BY SIEMENS		
SYM	DESCRIPTION	DET
A	LONGITUDINAL RAILS ATTACHED TO UNISTRUT	1,5
C	CEILING STAND MOVES ALONG LONGITUDINAL RAILS	1
D	DCS RAILS ATTACHED TO UNISTRUT	1,5
E	DCS CARRIAGE MOVES ALONG LONGITUDINAL RAILS	-
F	RAD. SHIELD RAILS ATTACHED TO UNISTRUT	-
G	RADIATION SHIELD SUPPORT CARRIAGE MOVES ALONG RAILS	-
Z	LONGITUDINAL RAIL SUPPORT MOUNTING POINT BOLTED TO UNISTRUT FRAME	5
SUPPLIED/INSTALLED BY CUSTOMER/CONTRACTOR		
SYM	DESCRIPTION	DET
X	UNISTRUT P-1001 (OR EQUIVALENT AS SPECIFIED BY STRUCTURAL ENGINEER OF RECORD) MOUNTED FLUSH WITH FINISHED CEILING. MUST BE LEVEL AS SPECIFIED BY SIEMENS ON STRUCTURAL NOTES AND DETAILS.	4
P1	CEILING OUTLET SUPPORTS	2

NOTE:
ALL STRUCTURAL SUPPORT DETAILS SHOWN ARE SAMPLE DETAILS BASED UPON TYPICAL AND STANDARD BUILDING PRACTICES AND ARE NOT INTENDED AS ACTUAL CONSTRUCTION DETAILS. ALL CONSTRUCTION DETAILS AND SUPPORT CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL STRUCTURAL ENGINEER AT THE CUSTOMER'S EXPENSE. IN THE EVENT AN EXISTING SUPPORT SYSTEM IS TO BE USED, IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO VERIFY THE INTEGRITY OF THAT SYSTEM.



CEILING HEIGHT REQUIREMENT

8 FT. - 11 IN.

ATTENTION:

- THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED AT THE TIME OF THEIR PREPARATION. SINCE BOTH THESE FACTORS ARE SUBJECT TO DESIGN MODIFICATION, THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

- THIS SET OF PLANS REPRESENTS A COMPLETE SET OF DETAILS AND SHOULD NOT BE SEPARATED.

- IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

- ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

- THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.

PROJECT MANAGER: CHRISTOPHER THOMAS TEL: (801) 209-6582 EXT: FAX: EMAIL: CHRISTOPHER.THOMAS@SIEMENS-HEALTHINEERS.COM		SIEMENS	
INTERMOUNTAIN MEDICAL CENTER 5121 COTTONWOOD ST, MURRAY, UT 84107 CATH LAB #1 / ARTIS Q.ZEN CEILING		PROJECT #: 2100316	
THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS' AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW. ALL RIGHTS ARE RESERVED.		SHEET: S-102	
SYM	DATE	DESCRIPTION	DATE
-ISSUE BLOCK-			
SCALE: AS NOTED		REF: # CPD-192529	DATE: 04/12/21

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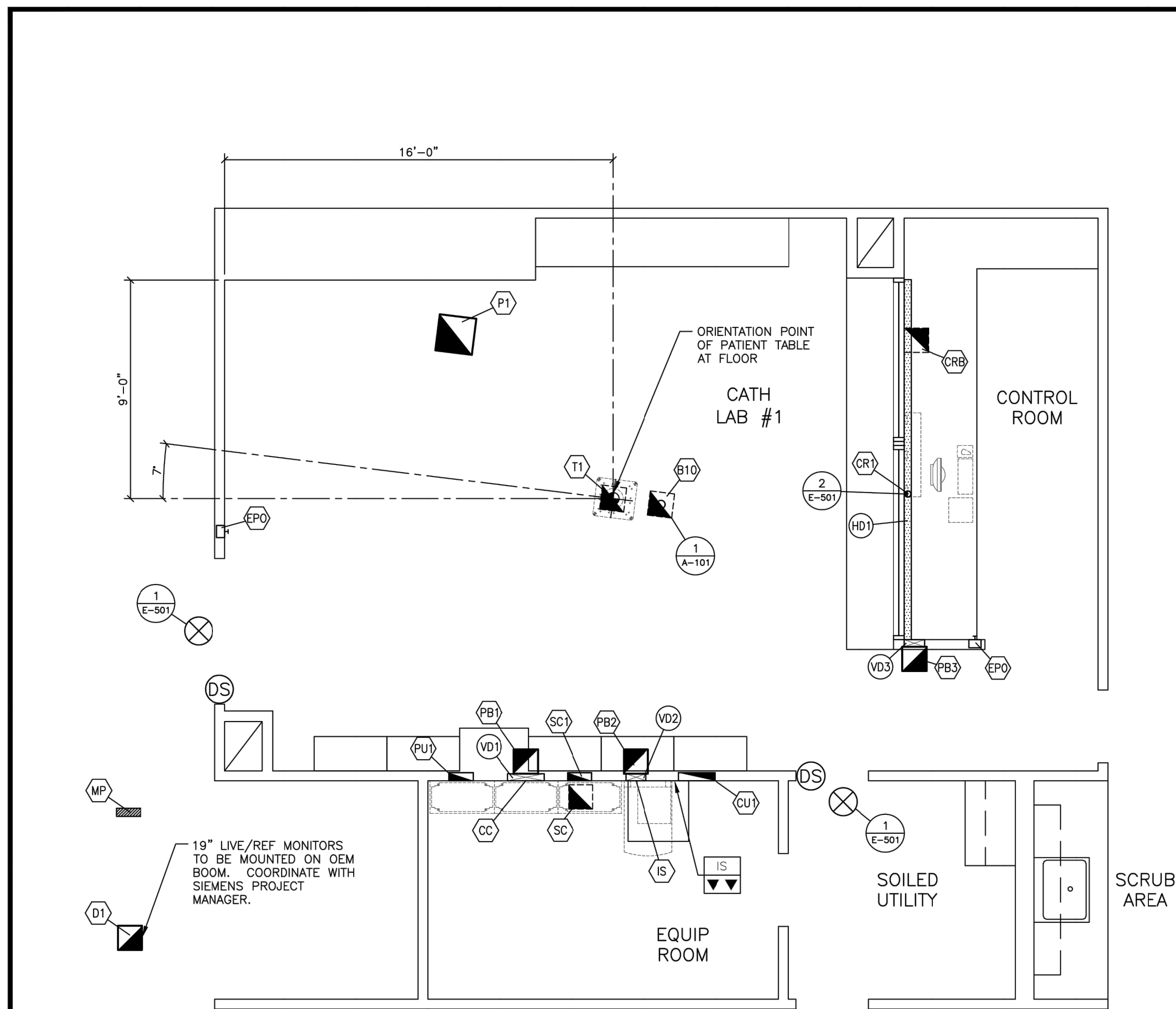
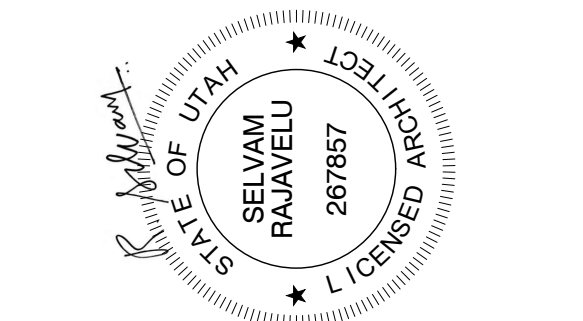
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ELECTRICAL DIMENSION PLAN

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

SYMBOLS	
ALL MAY NOT APPLY	
	CIRCUIT BREAKER BY CUSTOMER/CONTRACTOR
	OPENING IN RACEWAY OR TRENCHDUCT
	PULLBOX IN (FLOOR/WALL/CEILING)
	OPENING IN ACCESS FLOORING
	WARNING LIGHT (X-RAY ON)
	DOOR SAFETY SWITCH
	(EPO) EMERGENCY POWER OFF BUTTON
	TRENCH DUCT
	CEILING DUCT
	UNDER FLOOR DUCT
	SURFACE DUCT
	VERTICAL DUCT
	ETHERNET CONNECTION TO CUSTOMER'S INFORMATION SYSTEMS NETWORK (VERIFY WITH SMS PROJECT MANAGER).
	110 VOLT, 20 AMP, HOSPITAL GRADE DUPLEX OUTLET
	110 VOLT, 20 AMP, HOSPITAL GRADE QUAD OUTLET

ATTENTION:

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ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.

CEILING
HEIGHT
REQUIREMENT

8 FT. - 11 IN.

ELECTRICAL LEGEND			
SYM	SIZE	DESCRIPTION	REMARKS
15	EXISTING	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER, WITH 4" SLEEVE FROM BOX TO FLUSH WITH FINISHED FLOOR. EXISTING STAINLESS STEEL WATERPROOF PLATE ON TOP OF CORED OPENING IN FLOOR.	TABLE ACCESSORIES
16	EXISTING	BUSHED OPENING IN VERTICAL DUCT "VD1" COVER AT FLOOR LINE.	CABLE CABINET
17	EXISTING	BUSHED OPENING IN TOP OF HORIZONTAL DUCT "HD1".	CONTROL ROOM DISTRIBUTOR
18	EXISTING	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER, WITH 3" CONDUIT(S) FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR LINE.	CONTROL ROOM UNDER-FLOOR BOX
19	EXISTING	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE, WITH REMOVABLE FRONT COVER AND (1) 4" BUSHING IN CENTER OF REMOVABLE COVER FOR CABLE EXIT.	COOLING UNIT
20	AS REQUIRED	PULL BOX MOUNTED ABOVE FINISHED CEILING WITH REMOVABLE BOTTOM COVER WITH 3" BUSHED OPENING. NOTE: IF LOCAL CODES REQUIRE COMPLETE CABLE CONTAINMENT IN RACEWAY, THIS BOX MUST BE SIZED SUCH THAT A 8" X 6" X 3" SIEMENS POWER DISTRIBUTION BOX CAN BE INSTALLED INSIDE THIS PULL BOX.	BOOM DVI 2x8WD-19D (live+ref)
21	---	EMERGENCY OFF BUTTONS FOR CIRCUIT BREAKERS. EPO'S MUST PREVENT RESETTING OF CIRCUIT BREAKERS WHEN IN OFF POSITION. EPO'S MUST BE RECESSED OR SHIELDED. FINAL LOCATION DETERMINED BY CUSTOMER.	EMERGENCY POWER OFF
22	EXISTING	BUSHED OPENING IN VERTICAL DUCT "VD3" COVER AT FLOOR LINE.	IMAGE SYSTEM
23	---	MAIN PANEL WITH MAIN BREAKER. LOCATION DETERMINED BY CUSTOMER/CONTRACTOR. SEE "POWER SCHEDULE"	BREAKER PANEL
24	EXISTING	PULL BOX MOUNTED ABOVE AND CONNECTING TO VERTICAL DUCT "VD1".	PULL BOX
25	EXISTING	PULL BOX MOUNTED ABOVE AND CONNECTING TO VERTICAL DUCT "VD2".	PULL BOX
26	EXISTING	PULL BOX MOUNTED ABOVE AND CONNECTING TO VERTICAL DUCT "VD3".	PULL BOX
27	EXISTING	PULL BOX MOUNTED ABOVE FINISHED CEILING, WITH REMOVABLE BOTTOM COVER WITH 8" BUSHED OPENING.	C-ARM
28	EXISTING	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE, WITH REMOVABLE FRONT COVER WITH 4" BUSHED OPENING AT BOTTOM OF COVER.	GENERATOR
29	EXISTING	PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE, WITH REMOVABLE FRONT COVER WITH 4" BUSHED OPENING AT BOTTOM OF COVER.	SYSTEM CABINET
30	EXISTING	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. PROVIDE 6" SLEEVE FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR LINE.	SYSTEM CABINET
31	EXISTING	PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER, WITH 4" SLEEVE FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR LINE.	TABLE
32	EXISTING	HORIZONTAL DUCT MOUNTED ON FINISHED WALL AT FLOOR LINE (WITH REMOVABLE FRONT COVER), CONNECTED TO VERTICAL DUCT "VD3" AS SHOWN.	HORIZONTAL WALL DUCT
33	EXISTING	VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL, BEGINNING AT FLOOR LINE AND EXTENDING UP WALL ABOVE FINISHED CEILING. DUCT EXTENDS TO "PB1" FOR CONDUIT TRANSITIONS.	VERTICAL DUCT
34	EXISTING	VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL, BEGINNING DUCT AT FLOOR LINE AND EXTENDING UP WALL ABOVE FINISHED CEILING. DUCT EXTENDS TO "PB2" & "PB3" FOR CONDUIT TRANSITIONS.	VERTICAL DUCT
1	3"	CONDUIT FROM "PB1" (SC1) TO "D1"	MAX. CONDUIT LENGTH 47'
2	2 1/2"	CONDUIT FROM "PB2" (S) TO "D1" (NOT WITH DCS LD)	MAX. CONDUIT LENGTH 58'
3	3"	CONDUIT FROM "T1" TO "B10" UNDER FLOOR	
4	2"	CONDUIT FROM "PB2" (S) TO "CUSTOMER MONITOR" (LIVE+REF VIDEO TO OEM OPTION)	MAX. CONDUIT LENGTH 80'

ELECTRICAL NOTES

- 1) COMPLIANCE: ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE (NEPA-70), O.S.H.A. REGULATIONS, AS WELL AS APPLICABLE REGULATIONS OF CITY, COUNTY, STATE AND FEDERAL AGENCIES. PROVIDE MATERIALS AND EQUIPMENT THAT COMPLY WITH ANSI, IEEE AND NEMA STANDARDS AND ARE U.L. LISTED AND LABELED. THE CUSTOMER'S/CONTRACTOR'S WORK AND ALL EQUIPMENT INSTALLED SHALL COMPLY WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED/ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- 2) QUALITY ASSURANCE: THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD TO INSURE THAT THE NEW WORK WILL FIT INTO THE EXISTING STRUCTURE AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST OR BE DISCOVERED THAT PREVENT THE INSTALLATION OF WORK AS SHOWN, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION OF EQUIPMENT, OR THE PERFORMANCE OF ANY WORK THAT MAY BE AFFECTED. DO NOT ALTER DRAWINGS, DIMENSIONS, OR SPECIFICATIONS IN ANY WAY WITHOUT CONTACTING AND RECEIVING WRITTEN CONFIRMATION FROM SIEMENS PROJECT MANAGER. ALL DIMENSIONS ARE FROM FINISHED SURFACES. CONDUIT AND PULL BOXES TO BE INSTALLED BY THE CUSTOMER/CONTRACTOR WITH LOCATIONS BEING FIELD VERIFIED BY THE SIEMENS PROJECT MANAGER.
- 3) POWER SUPPLY SOURCE: POWER SUPPLIES FOR SIEMENS HEALTHCARE EQUIPMENT SHALL BE FROM A MEDICAL IMAGING PANEL OR BUILDING SERVICE EQUIPMENT THAT IS A GROUNDING 3 OR 4-WIRE "WYE" SOURCE PER THE SPECIFIC EQUIPMENT OPERATION REQUIREMENTS. A DEDICATED CIRCUIT SHALL BE PROVIDED THAT IS KEPT ENTIRELY FREE AND INDEPENDENT OF ALL OTHER BUILDING WIRING, NO ELEVATORS, GENERATORS, PUMPS, HVAC OR SIMILAR EQUIPMENT SHALL BE CONNECTED TO THE SAME CIRCUIT OR MEDICAL IMAGING PANEL THAT SERVES THE SIEMENS HEALTHCARE EQUIPMENT. IF THE POWER SUPPLY SOURCE DOES NOT MEET THE SPECIFIC SIEMENS EQUIPMENT POWER REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE THE NECESSARY EQUIPMENT REQUIRED TO ESTABLISH THE POWER SUPPLY IN ACCORDANCE WITH THE REQUIRED POWER SUPPLY PARAMETERS OF THE SIEMENS EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE CUSTOMER AND/OR UTILITY COMPANY FIELD REPRESENTATIVE.
- 4) WORK FURNISHED BY CUSTOMER/CONTRACTOR: WORK NOT PROVIDED BY SIEMENS HEALTHCARE BUT SHOWN ON DRAWINGS TO BE FURNISHED AND INSTALLED BY CUSTOMER/CONTRACTOR INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING, UNLESS NOTED OTHERWISE: ELECTRICAL RACEWAYS AND DUCTS, WIRING TROUGHS, PULL BOXES, CONDUITS, CIRCUIT BREAKERS, ACCESS PANELS, EMERGENCY OFF BUTTONS, DOOR SWITCHES, WARNING LIGHTS, WIRING DEVICES, CONNECTORS, LIGHTING EQUIPMENT AND GROUNDING.
- 5) RACEWAY AND CONDUIT NOTES: ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT ENFORCED EDITION OF THE NATIONAL ELECTRICAL CODE. CONDUIT BODIES SHALL NOT BE USED, WHERE A CONDUIT ENTERS A BOX, FITTING, OR OTHER ENCLOSURE, AN INSULATED THROAT CONNECTOR SHALL BE PROVIDED TO PROTECT THE WIRE FROM ABRASION. ALL CONNECTORS FOR EMT SHALL BE COMPRESSION OR DOUBLE SET SCREW TYPE.
- 6) KEEP RACEWAYS AT LEAST 6 INCHES AWAY FROM PARALLEL RUNS OF FLUES OR STEAM AND HOT WATER PIPES. INSTALL RACEWAY RUNS ABOVE WATER AND STEAM PIPES PROVIDED THAT CABLE RUN DISTANCES ARE MAINTAINED. USE TEMPORARY CLOSURES TO PREVENT FOREIGN MATTER FROM ENTERING RACEWAY.
- 7) CONDUIT RUNS ARE SHOWN SCHEMATICALLY. INSTALL CONDUIT WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE CONSIDERING THE BUILDING CONSTRUCTION AND OBSTRUCTIONS, EXCEPT AS OTHERWISE INDICATED. THE CONTRACTOR SHALL MAKE CERTAIN THAT ANY CONDUIT/RACEWAY RUNS CONTAINING SIEMENS HEALTHCARE CABLES DO NOT EXCEED THE SPECIFIED MAXIMUM DISTANCES AS SHOWN ON THE ELECTRICAL DETAILS. LISTED CONDUIT SIZES FOR SIEMENS-SUPPLIED CABLES MUST BE MAINTAINED IN ORDER TO ENABLE THE TOTAL CABLE BUNDLE INCLUDING CONNECTORS TO BE PULLED THROUGH WITHOUT DAMAGE.
- 8) PROVIDE ENCLOSED METAL WIRE DUCT RACEWAY SYSTEM WHERE SHOWN ON DRAWINGS WITH DIVIDERS TO SEPARATE THE DUCT INTO TWO OR THREE SEPARATE COMPARTMENTS AS SHOWN ON THE SIEMENS PLANS (FOR POWER AND SIEMENS HEALTHCARE CABLES). DIVIDERS AND CROSSOVER PIECES TO BE PROVIDED AS NECESSARY. THE CABLE TO CABLE AS WELL AS THE CIRCUIT TO CIRCUIT SEPARATION REQUIREMENT WAS EVALUATED DURING THE UL SYSTEM CERTIFICATION OF THE EQUIPMENT. ADDITIONAL SEPARATION OF THE SYSTEM CABLE ASSEMBLIES INTO SEPARATE OR PARTITIONED RACEWAYS, UNLESS OTHERWISE NOTED, IS NOT NECESSARY TO INSURE SEPARATION OF CIRCUITS.
- 9) PROVIDE WIRE DUCT/RACEWAY WITH ACCESSIBLE REMOVABLE COVERS. LOCATIONS OF BUILDING MATERIAL OPENINGS (I.E. ACCESS PANELS) TO BE CUT IN FIELD ARE TO BE COORDINATED WITH THE DRAWING REQUIREMENTS AND BUILDING STRUCTURE. THOSE THAT ARE NOT INDICATED OR INTERFERE WITH BUILDING ELEMENTS SHALL BE COORDINATED WITH SIEMENS PROJECT MANAGER. ELECTRICAL PULL BOXES AND RACEWAY COVERS SHALL BE INSTALLED IN A MANNER TO ALLOW ACCESSIBILITY FOR INSTALLATION AND MAINTENANCE. CONTRACTORS MUST PROVIDE PULL STRINGS FOR ALL CONDUIT AND WIRE DUCT/RACEWAY. IN-FLOOR TRENCH DUCT AND FLUSH FLOOR BOXES SHALL BE PROVIDED WITH FULLY GASKETED REMOVABLE COVERS.
- 10) WHEN JUNCTION BOXES AND WIRE DUCT/RACEWAY ARE MOUNTED HIGHER THAN 14 FEET ABOVE FINISHED FLOOR, THE ELECTRICAL CONTRACTOR SHALL PROVIDE TWO ELECTRICIANS TO HELP THE SIEMENS INSTALLERS PULL SIEMENS SUPPLIED CABLES AT CUSTOMER'S EXPENSE. WHEN JUNCTION BOXES AND WIRE DUCT/RACEWAY ARE MOUNTED ABOVE A HARD CEILING (I.E. SHEET ROCK), A 24" X 24" ACCESS PANEL IS REQUIRED AT EACH JUNCTION BOX AND WITHIN 2 FEET OF EACH RACEWAY TRANSITION (SUCH AS A 90 DEGREE ELBOW OR TEE) IN DUCT/RACEWAY. THERE MUST BE FREE AND CLEAR ACCESS TO JUNCTION BOXES AND WIRE DUCT/RACEWAY. WHEN ACCESS PANELS ARE LOCATED MORE THAN 3 FEET FROM JUNCTION BOXES AND WIRE DUCT/RACEWAY THE ELECTRICAL CONTRACTOR SHALL PROVIDE TWO ELECTRICIANS TO HELP SIEMENS INSTALLERS PULL SIEMENS SUPPLIED CABLES AT CUSTOMER'S EXPENSE.
- 11) WIRING: ALL WIRING INSTALLED SHALL BE 600 VOLT CLASS, STRANDED TYPE THHN/THWN-2, SINGLE CONDUCTOR ANNEALED COPPER FOR A MAXIMUM OPERATING TEMPERATURE OF 90° C (194° F). SIZED AS INDICATED, INSTALLED IN METAL RACEWAYS. THE CUSTOMER/CONTRACTOR SHALL LEAVE A MINIMUM 10 FEET OF WIRE TAILS. ALL OUTLET POINTS WITH WIRE IDENTIFICATION TAGGED AT BOTH ENDS FOR FINAL CONNECTION BY THE CUSTOMER/ELECTRICAL CONTRACTOR.
- 12) SHORT CIRCUIT REQUIREMENTS: ALL CIRCUIT BREAKERS SUPPLIED FOR THE SIEMENS EQUIPMENT REQUIREMENTS SHALL BE RATED HIGHER THAN THE SHORT CIRCUIT AVAILABLE AT THE TERMINALS OF THE ELECTRICAL EQUIPMENT AS DETERMINED BY THE ENGINEER OF RECORD, BUT NOT LESS THAN 35,000 RMS SYMMETRICAL AT 480V, 3-PHASE, 60 HERTZ. THE CONTRACTOR SHALL OBTAIN THE CORRECT SHORT CIRCUIT CURRENT RATING OF ALL THE NEW EQUIPMENT FOR INSTALLATION FROM THE ENGINEER OF RECORD.

CONDUIT LENGTH CALCULATIONS

IF SITE-SPECIFIC CONDITIONS EXCEED THE FOLLOWING ASSUMED VALUES, THEN ADDITIONAL LENGTH MUST BE SUBTRACTED BY THE ELECTRICAL CONTRACTOR FROM THE MAXIMUM CONDUIT LENGTHS LISTED.

IF DUCT LOCATIONS ARE ALTERED FROM THE SHOWN LAYOUT, IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO RECALCULATE THE MAXIMUM CONDUIT LENGTHS.

ASSUMED VALUES USED IN CALCULATING STATED MAXIMUM CONDUIT LENGTHS:

VERTICAL DUCTS - 12'-0"

FLOOR PENETRATIONS - 3'-0"

WIRE QUALITY/TYPE/CLASS
REV. 27

SIEMENS

INTERMOUNTAIN MEDICAL CENTER

5121 COTTONWOOD ST, MURRAY, UT 84107
CATH LAB #1 / ARTIS Q.ZEN CEILING

PROJECT #:

2100316

SHEET: 5 OF 7

DRAWN BY: O. CARRILLO

DATE: 04/12/21

E-102

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SCALE: AS NOTED

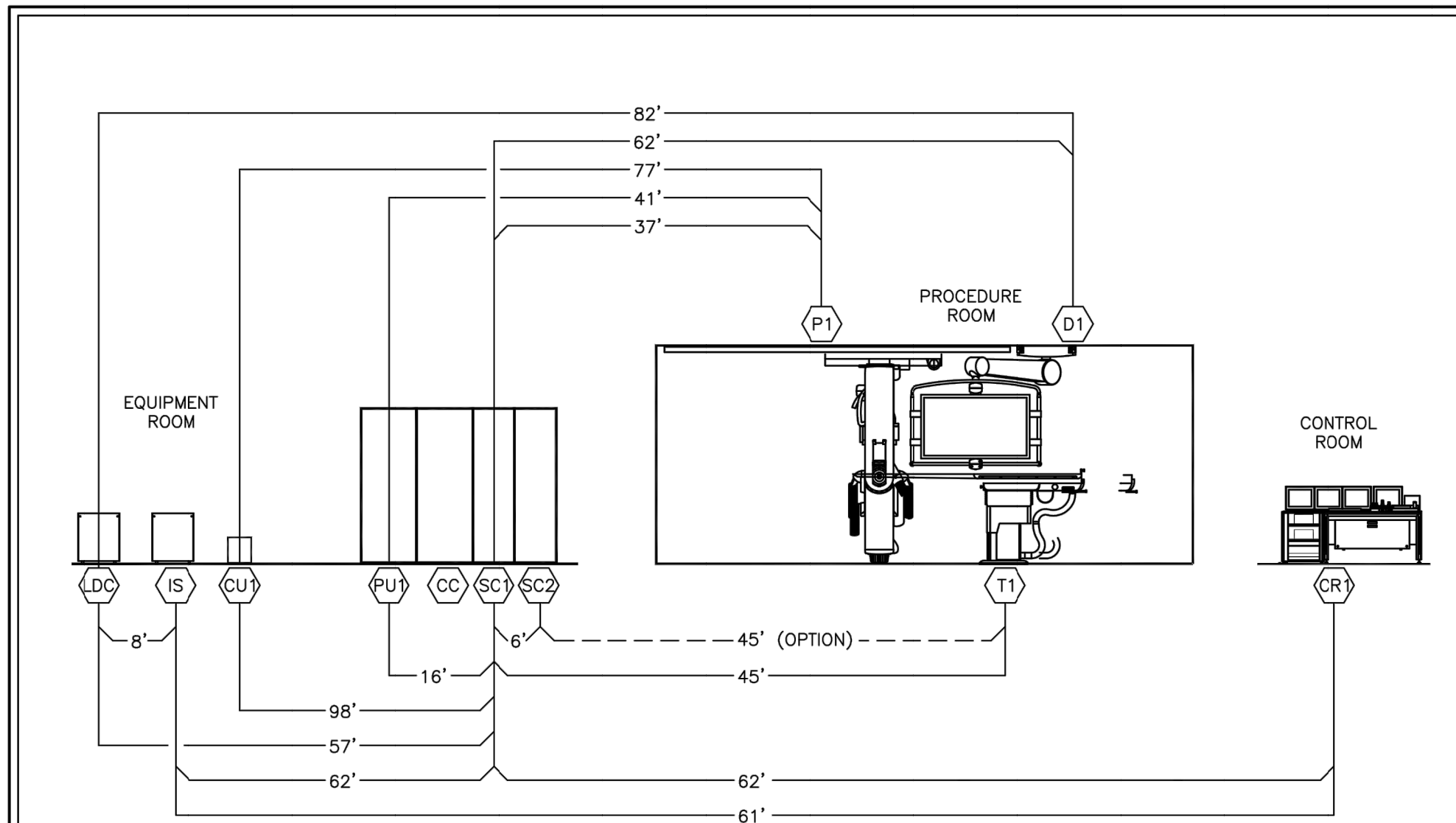
REF. # CPD-192529

SYM	DATE	DESCRIPTION
Δ	04/12/21	R-1010R01 VERSION DATED 03/25/21 APPROVED BY CUSTOMER FOR FINALS
-ISSUE BLOCK-		



ITEM	QTY	DESCRIPTION
MP	1	MAIN PANEL WITH CIRCUIT BREAKERS FLUSH OR SURFACE MOUNTED.
M	1	MAIN BREAKER MUST HAVE TRIPPING DEVICE SO WHEN ANY EPO IS PRESSED, THE MAIN BREAKER TRIPS. MAIN BREAKER AMPS: 125
		VOLTS PHASES NEUTRAL GROUND TOTAL WIRES
		480/277V 3 1 1 5 (NOTE 1)
A	1	BREAKER AMPS: 100 (FOR PUI)
		VOLTS PHASES NEUTRAL GROUND TOTAL WIRES
		480Y 3 0 1 4 (NOTE 1)
B	1	BREAKER AMPS: 30 (FOR SC1)
		VOLTS PHASES NEUTRAL GROUND TOTAL WIRES
		480/277V 3 1 1 5 (NOTE 1)
C	1	BREAKER AMPS: 15 (FOR STEP-DOWN XFMR "X1")
		VOLTS PHASES NEUTRAL GROUND TOTAL WIRES
		480V 1 (L1,L2) 0 1 3
X#1	1	750VA, 480V PRIMARY, 120V SECONDARY STEP-DOWN SINGLE-PHASE TRANSFORMER WITH PRIMARY AND SECONDARY FUSE PROTECTION FOR TABLE OUTLET POWER, CONNECTED TO AN ADAPTED FLUSH OR MOUNTED 15A, 125VAC UL 943 GFI WITH BLANK FACE (NO CONTACT GROUNDS OR NEAR CONTACTS). THE TRANSFORMER MUST BE PUSH-TO-TEST AND PUSH-TO-RESET BUTTONS, AND A CLEAR LEXAN HINGED COVER TO AVOID INADEQUATE MANUAL TRIP.
1) PHASE AND NEUTRAL MUST BE THE SAME SIZE. GROUND SIZED PER NEC, NOTE. UNLESS OTHERWISE NOTED, ALL BREAKERS WILL BE 80% RATED.		
EPO	VARIABLES	NOTE 1 – EPO CIRCUIT #1: MAIN CIRCUIT BREAKER EMERGENCY POWER OFF BUTTON WITH PROTECTIVE COVER THAT PREVENTS ACCIDENTAL ACTIVATION. THE EPO MUST BE OF FAIL-SAFE DESIGN. ALL EPO'S TO HAVE MECHANICAL LATCHING MECHANISM. EPO MUST BE RESET BEFORE MAIN BREAKER CAN RE-ARM OPERATION. OWNERS WIRING CONFIGURATION TO BE DESIGNED BY ELECTRICAL ENGINEER OF RECORD. THE EPO'S MUST BE INSTALLED BY A QUALIFIED ELECTRICAL CONTRACTOR ACCORDING TO NATIONAL ELECTRICAL CODE, STATE AND LOCAL REGULATIONS. MEASURES SHOULD BE TAKEN TO DESIGN THE CIRCUIT IN SUCH A WAY THAT IT WILL ALWAYS WORK WHEN THE MECHANICAL EQUIPMENT IS POWERED. THE CUSTOMER IS SOLELY RESPONSIBLE FOR THE IMPLEMENTATION OF THE EPO'S AND THEIR ASSOCIATED CIRCUITS AND MUST MAKE FINAL DETERMINATION CONSIDERING ALL SITE CONDITIONS AND REGULATORY FACTORS.

ALL ITEMS LISTED IN THIS SCHEDULE SHALL BE SUPPLIED AND
INSTALLED BY CUSTOMER/CONTRACTOR.



ARTIS Q/Q.ZEN/ZEE CEILING MAXIMUM CABLE LENGTHS (TYPICAL EQUIPMENT)	
ARTIS Q	100m
ARTIS Q.ZEN	100m
ARTIS ZEE	100m

WIRING SYSTEM:	480Y/277V, 3 PHASE, 5-WIRE, 60 HZ.
MINIMUM POWER SUPPLY:	
IF AN ON-SITE TRANSFORMER IS REQUIRED TO OBTAIN OPERATING VOLTAGE, IT MUST BE OF SUFFICIENT CAPACITY AND CHARACTERISTICS TO MAINTAIN SUPPLY VOLTAGE AND IMPEDANCE REQUIREMENTS (TRANSFORMER AND CONDUCTORS).	
X-RAY GENERATOR (PU1) MOMENTARY RATING: (RADIOGRAPHIC EXPOSURE)	162 KVA
X-RAY GENERATOR (PU1) LONG-TIME RATING: (FLUOROSCOPY)	14 KVA
SYSTEM CABINET (SC1) LONG-TIME RATING:	8.5 KVA
LINE IMPEDANCE	≤ 120 (mΩ)

MAXIMUM LINE VOLTAGE VARIATION	±10% OF SYSTEM VOLTAGE
PHASE IMBALANCE:	2%
FREQUENCY VARIATION:	± 1 HZ

POWER SUPPLY NOTES:

1. INCOMING POWER SUPPLIES FOR SIEMENS EQUIPMENT SHOULD BE DEDICATED (BACK TO SOURCE), ISOLATED AND INSULATED FROM ANY OTHER EQUIPMENT SUCH AS ELEVATORS, GENERATORS, HVAC SYSTEMS, ETC.
2. SIEMENS HEALTHCARE REQUIRES THAT THE INCOMING POWER MEETS THE POWER QUALITY REQUIREMENTS.

EQUIPMENT GROUNDING CONDUCTOR TO COMPLY WITH THE FOLLOWING:

- 1) SIZE GROUNDING WIRE TO SIEMENS EQUIPMENT PER POWER SCHEDULE REQUIREMENTS.
- 2) DERIVED FROM THE ELECTRICAL SERVICE, TRANSFORMER OR DISTRIBUTION PANEL FEEDING THE SIEMENS EQUIPMENT.
- 3) RUN IN THE SAME CONDUIT, TROUGH OR RACEWAY AS THE PHASE CONDUCTORS.
- 4) CONTINUOUS, WITH NO BREAKS OR USE OF CONDUIT, CHASSIS OR EARTH AS THE SOLE GROUNDING PATH.
- 5) NO CHANGES IN SIZE AND/OR CONDUIT IN ACCORDANCE WITH THE NEC REQUIREMENTS.
- 6) MINIMIZE CONNECTIONS OR TERMINALS TO ENSURE THE GROUNDING SYSTEM REMAINS AS CONTINUOUS AS POSSIBLE.
- 7) AS A NORM, THERE SHOULD NOT BE ANY CURRENT PRESENCE ON THE GROUND CONDUCTOR, BUT IT IS ALLOWED TO HAVE $\leq 500mA$ DURING OPERATION OF THE IMAGING EQUIPMENT.

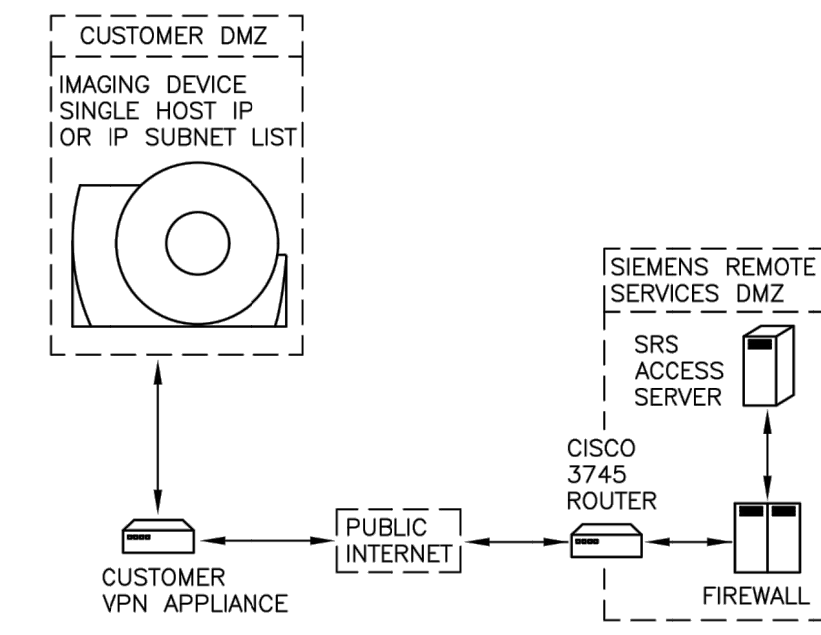
POOR POWER WILL ALTER EQUIPMENT PERFORMANCE

IT IS IN THE CUSTOMER'S INTEREST THAT THE ELECTRICAL CONTRACTOR BE RESPONSIBLE FOR TESTING AND VERIFYING THAT THE EQUIPMENT POWER SUPPLY COMPLIES WITH THE SIEMENS SPECIFICATIONS.

TO ENSURE THE UPTIME OF YOUR SYSTEM DURING THE WARRANTY PERIOD (AND BEYOND WITH A SERVICE AGREEMENT), SIEMENS REMOTE SERVICES (SRS) REQUIRES REMOTE LOCAL AREA NETWORK ACCESS TO SIEMENS SYSTEMS.

THE PREFERRED CONNECTION METHOD IS (VPN) VIRTUAL PRIVATE NETWORK (WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE). THIS METHOD PROVIDES THE POSSIBILITY FOR REMOTE SYSTEM DIAGNOSTICS WITHOUT ADDITIONAL HARDWARE. PLEASE CONTACT SIEMENS SMART REMOTE SERVICES TO DETERMINE BEST IMPLEMENTATION FOR YOUR SITE. CONTACT:

IMCPTSCSRS.DL@SIEMENS-HEALTHINEERS.COM



A GIGABIT NETWORK IS REQUIRED FOR ADEQUATE IMAGE DATA TRANSFER SPEED BETWEEN THE IMAGER AND 3D RECONSTRUCTION WORKSTATION. WORKFLOW AND CLINICAL NEEDS DEMAND 3D IMAGES BE AVAILABLE FOR REVIEW BY CLINICAL STAFF IMMEDIATELY UPON ACQUISITION.

The diagram illustrates the rear panel of the 286 computer, divided into two sections: **STANDARD** and **OPTIONAL**.

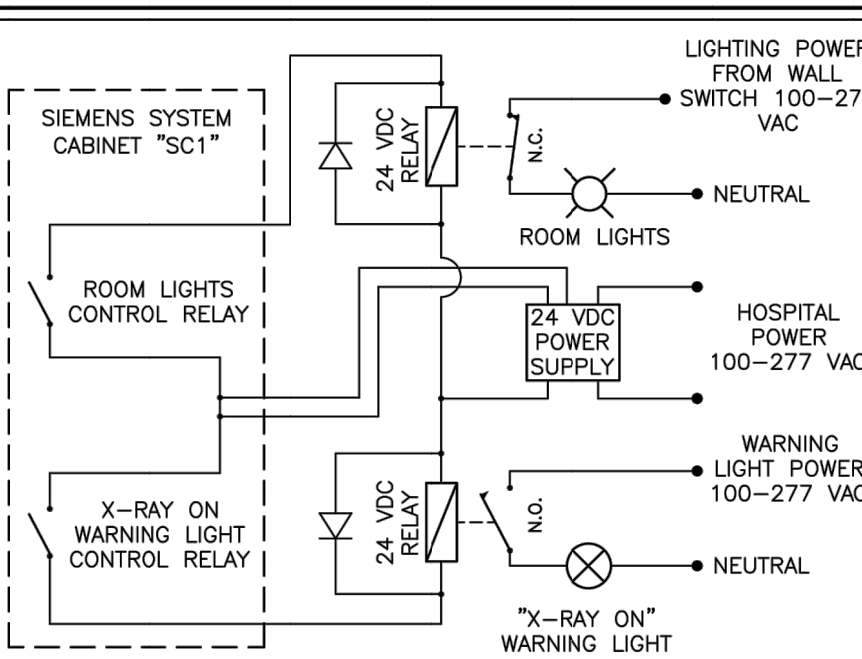
STANDARD:

- LIVE DISPLAY MONITOR:** Connected via a 65" (VIA CR1) cable. A 6'-6" dimension is indicated for the distance from the top of the panel to this connector.
- ACE (KEYBOARD AND MOUSE CONNECT TO ACE):** Connected via a 65" (VIA CR1) cable.

OPTIONAL:

- REFERENCE DISPLAY MONITOR:** Connected via a 65" (VIA CR1) cable. A 6'-6" dimension is indicated for the distance from the top of the panel to this connector.
- HAND SWITCH:** Connected via a 6'-6" cable.
- CONTROL MODULES:** Connected via a 6'-6" cable.
- ECC:** Connected via a 6'-6" cable.
- EMERGENCY STOP:** Connected via a 13" cable.
- FOOT SWITCH:** Connected via a 5'-6" cable.
- DVD RECORDER:** Connected via a 65" cable. A 6'-6" dimension is indicated for the distance from the top of the panel to this connector.
- TFT MONITOR FOR DVD RECORDER:** Connected via a 9'-10" cable. A 5'-11" dimension is indicated for the distance from the top of the panel to this connector.

NOTE: LIFE-SUSTAINING EQUIPMENT MUST NOT BE CONNECTED TO THE TABLE POWER OUTLET (IF INSTALLED) IN THE SIEMENS PATIENT TABLE. POWER WILL BE DISCONNECTED IF EPO BUTTON IS PRESSED. TABLE OUTLET IS 120V, FUSED AT 5A.



24. ALL RELAYS MUST INCLUDE A FREE-WHEELING DIODE (P/N 1N4002 OR EQUIVALENT).
 25. ALL ITEMS PROVIDED BY CUSTOMER ELECTRICAL CONTRACTOR EXCEPT CONTACTS INSIDE SIEMENS "SC1" CABINET (ITEMS INSTALLED DOTTED LINES).
 26. ALL WIRING THAT CONNECTS TO SIEMENS "SC1" CABINET MUST BE 14-18 AWG STRANDED WIRE.
 27. ONLY 3 WIRES LABELED "24 VDC", "ROOM LIGHTS" AND "X-RAY-ON" SHOULD BE SENT TO SIEMENS "SC1" CABINET.
 28. 24 VDC RELAYS ARE TO BE SELECTED BY ELECTRICAL CONTRACTOR TO HANDLE THE VOLTAGE AND AMPERAGE OF LIGHTING CIRCUIT.
 29. IF NEEDED, A SWITCH TO BLOCK RADIATION CAN BE INSTALLED IN SERIES WITH THE DOOR CONTACT.
 - * THE SWITCH (24 VDC / 20 MA) MUST BE PROVIDED ON SITE.
 - * CONTROL USING +24 V FROM THE SYSTEM CONTROL CABINET.
 - * PLAN THE SWITCH SO THAT UNINTENTIONAL OPERATION IS NOT POSSIBLE.
 - * THE SWITCH MUST BE PROVIDED WITH AN APPROPRIATE SYMBOL (OF DESIGNATION) FROM WHICH THE FUNCTION CAN BE RECOGNIZED.
- WARNING LIGHT/ROOM LIGHT SCHEMATIC**

[illegible]

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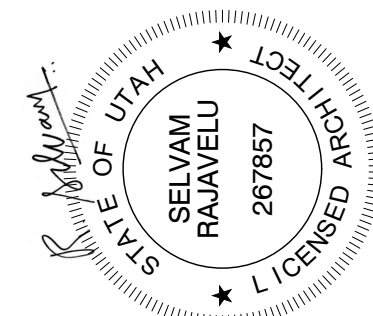
CONTRACTOR SUPPLIED CABLES				
FROM	VIA	TO	DESCRIPTION	REMARKS
PANEL	EXISTING	MP	ELECTRICAL CONTRACTOR TO SIZE PLUS GROUND	SEE "POWER SCHEDULE"
MP	EXISTING	PU1	3#2, 1#2 GROUND AND CONNECT	SEE "POWER SCHEDULE"
MP	EXISTING	SC1	3#6, 1#6 NEUTRAL, 1#6 GROUND AND CONNECT	SEE "POWER SCHEDULE"
MP	EXISTING	EPO	2#12, PLUS GROUND	SEE "POWER SCHEDULE"
EPO	EXISTING	EPO	2#12, PLUS GROUND	EMERGENCY POWER
SC1	EXISTING	WL	2#14-18 AWG	SEE "LIGHTING DETAIL" SHEET E-501
SC1	EXISTING	DS	24V SIGNAL, 2#14-18 AWG	DOOR SWITCH
WL	EXISTING	WL	3#12, PLUS GROUND	WARNING LIGHT
DS	EXISTING	DS	24V SIGNAL, 2#14-18 AWG	DOOR SWITCH

SIEMENS SUPPLIED CABLES				
FROM	VIA	TO	DESCRIPTION	REMARKS
P1	EXISTING	PU1	P1 LEFT SIDE	MAXIMUM LENGTH 41'
P1	EXISTING	PU1	(2) HIGH VOLTAGE CABLES P1 LEFT SIDE	MAXIMUM LENGTH 41'
P1	EXISTING	SC1	P1 LEFT SIDE	MAXIMUM LENGTH 37'
P1	EXISTING	CU1	FOR LIQUID COOLING HOSES (P1 LEFT SIDE)	MAXIMUM LENGTH 77'
SC1	EXISTING	CU1	FOR CONTROL ROOM OPTIONS (CONTROL MODULES, FOOT SWITCH, DISPLAY, ETC)	MAXIMUM LENGTH 62'
SC1	EXISTING	T1	NOT WITH OR TABLE	MAXIMUM LENGTH 45'
SC1	EXISTING	CU1		MAXIMUM LENGTH 98'
SC1	BETWEEN CABINETS	PU1		MAXIMUM LENGTH 16'
IS	EXISTING	IS	62" CABLES SELECTABLE ON FACTORY CHECKLIST	MAXIMUM LENGTH 28'
SC1	VD1, PB1, 1	D1	USE WITH ANY DCS	MAXIMUM LENGTH 62'
IS	VD2, PB2, 2	D1	NOT WITH DCS LD	MAXIMUM LENGTH 71'
IS	EXISTING	CR1		MAXIMUM LENGTH 61'
IS	EXISTING	CR1		MAXIMUM LENGTH 61'
T1	J	B10	UNDER FLOOR (CONFIRM IF EXISTING ON SITE)	
CRB	EXISTING	B10	CUSTOMER PATIENT MONITORING, ETC.	
IS	VD2, PB2, 4	CUSTOMER MONITOR	LIVE+REF VIDEO INTERFACE TO OEM (OPTION)	MAXIMUM LENGTH 110'

						PROJECT MANAGER: CHRISTOPHER THOMAS TEL# (801) 209-6582 EXT: FAX: EMAIL : CHRISTOPHER.THOMAS@SIEMENS-HEALTHINEERS.COM	SIEMENS
						INTERMOUNTAIN MEDICAL CENTER	
						5121 COTTONWOOD ST. MURRAY, UT 84107 CATH LAB #1 / ARTIS Q.ZEN CEILING	
						THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW. ALL RIGHTS ARE RESERVED.	SHEET:
						PROJECT #: 2100316	E-501
						SHEET 6 OF 7 DRAWN BY: O. CARRILLO	
						DATE: 04/12/21	
						SCALE: AS NOTED REF.# CPQ-192529	
						R=101R(8) VERSION DATED 03/25/21 APPROVED BY CUSTOMER FOR FINALS	
						-ISSUE BLOCK-	

REFERENCE DOCUMENT - NOT FOR CONSTRUCTION

12/14/2023 7:42:45 AM - T:\200\HC\20229\00\HC - IMC CATH LAB #1\02 BIM - REVIT & AUTOCAD\02 AUTOCAD DWGS\EQ 107 SIEMENS EQUIPMENT ELECTRICAL.DWG



Intermountain Healthcare
IMC- Cath Lab 1 Remodel Project

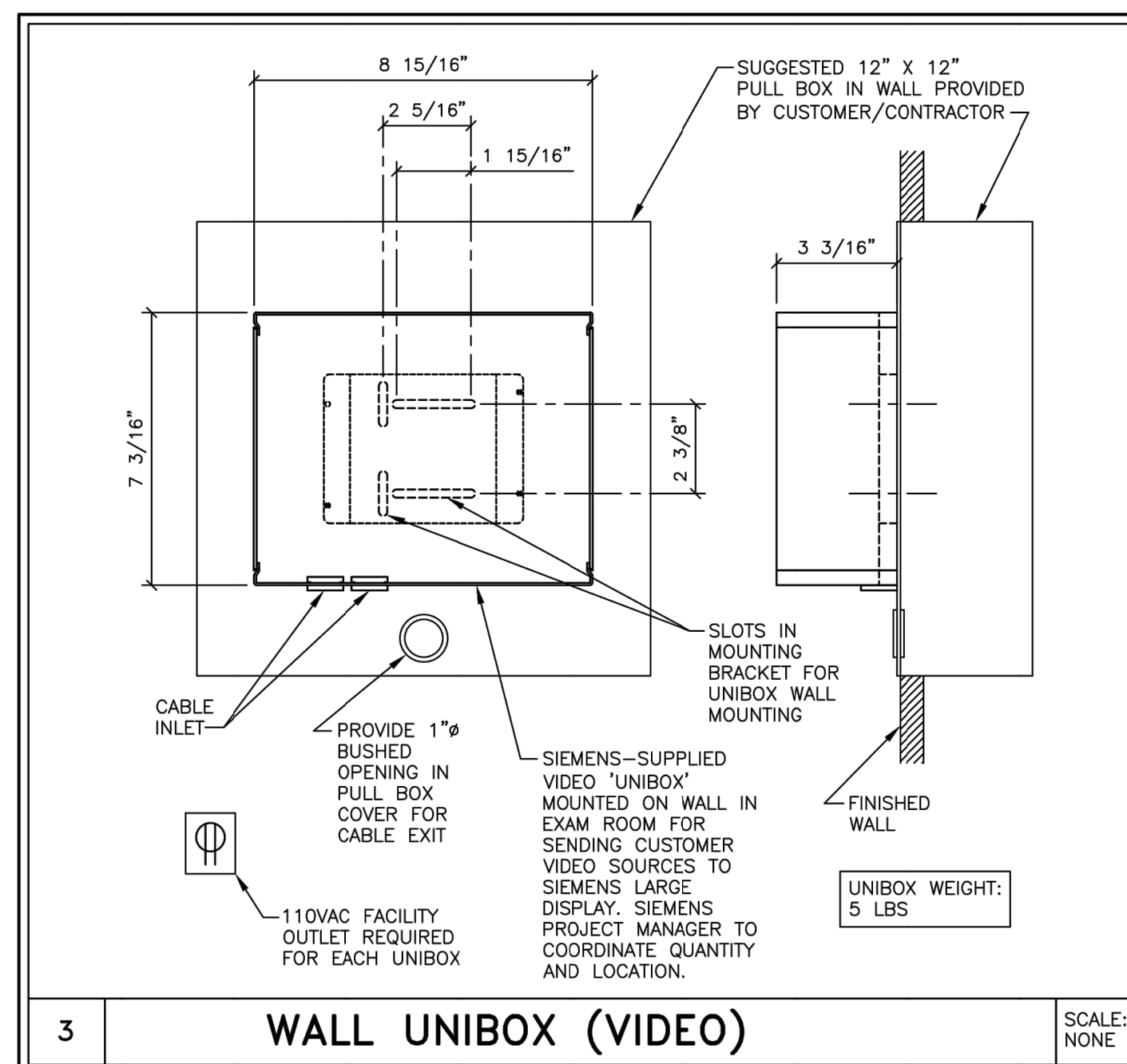
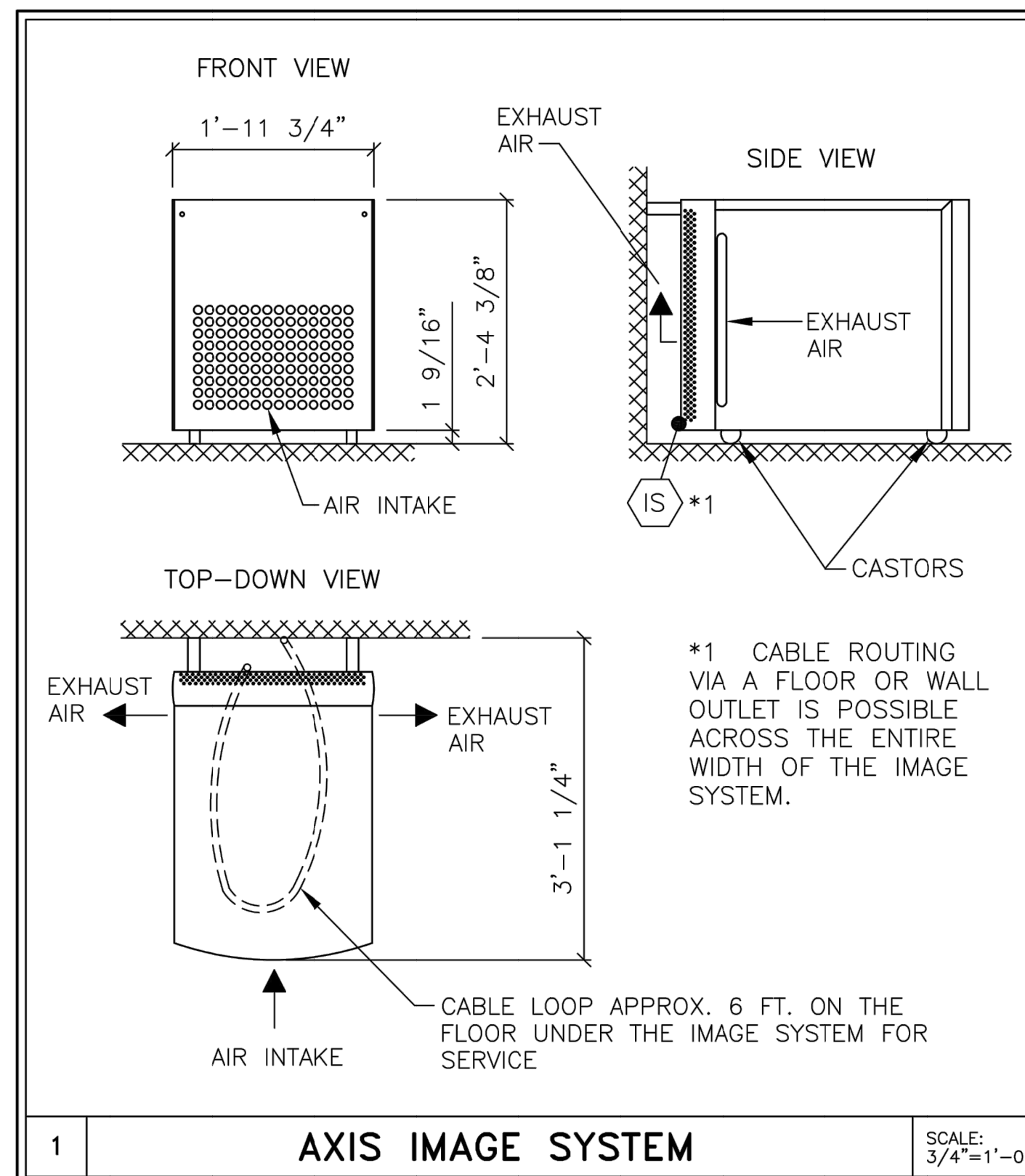
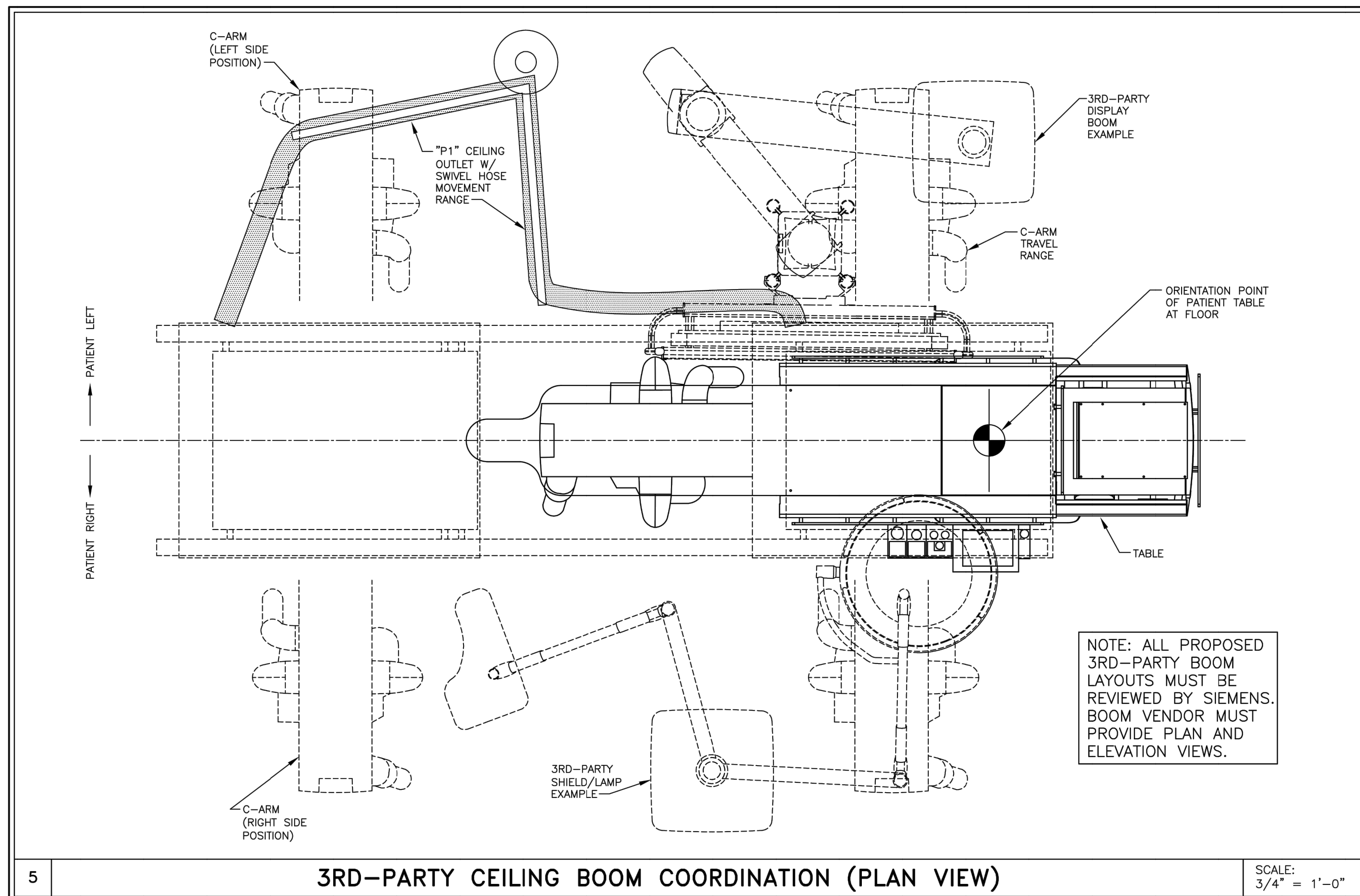
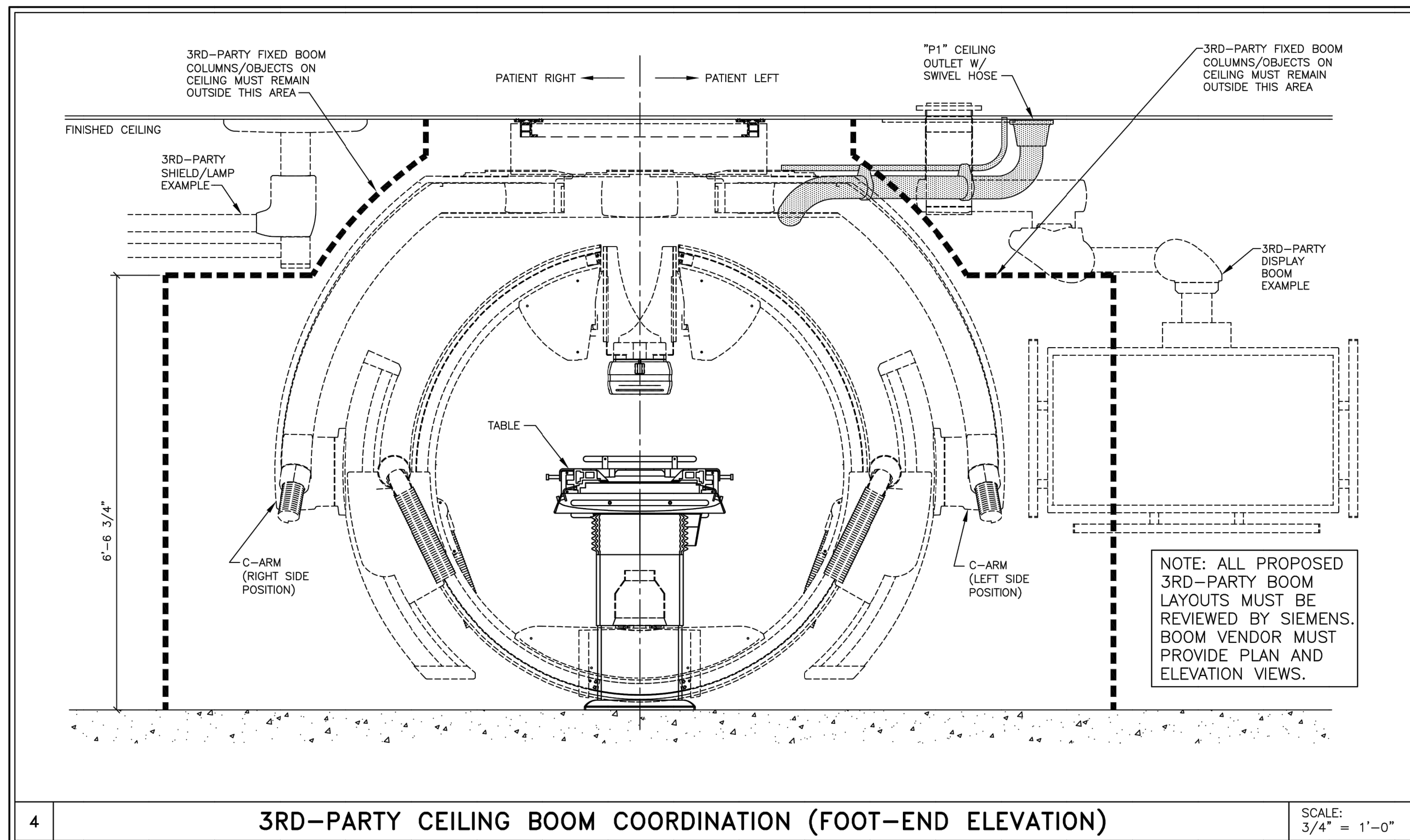
5121 South Cottonwood Street
Murray, UT 84107

NJRA Project # 20229
Construction Documents December 15, 2021

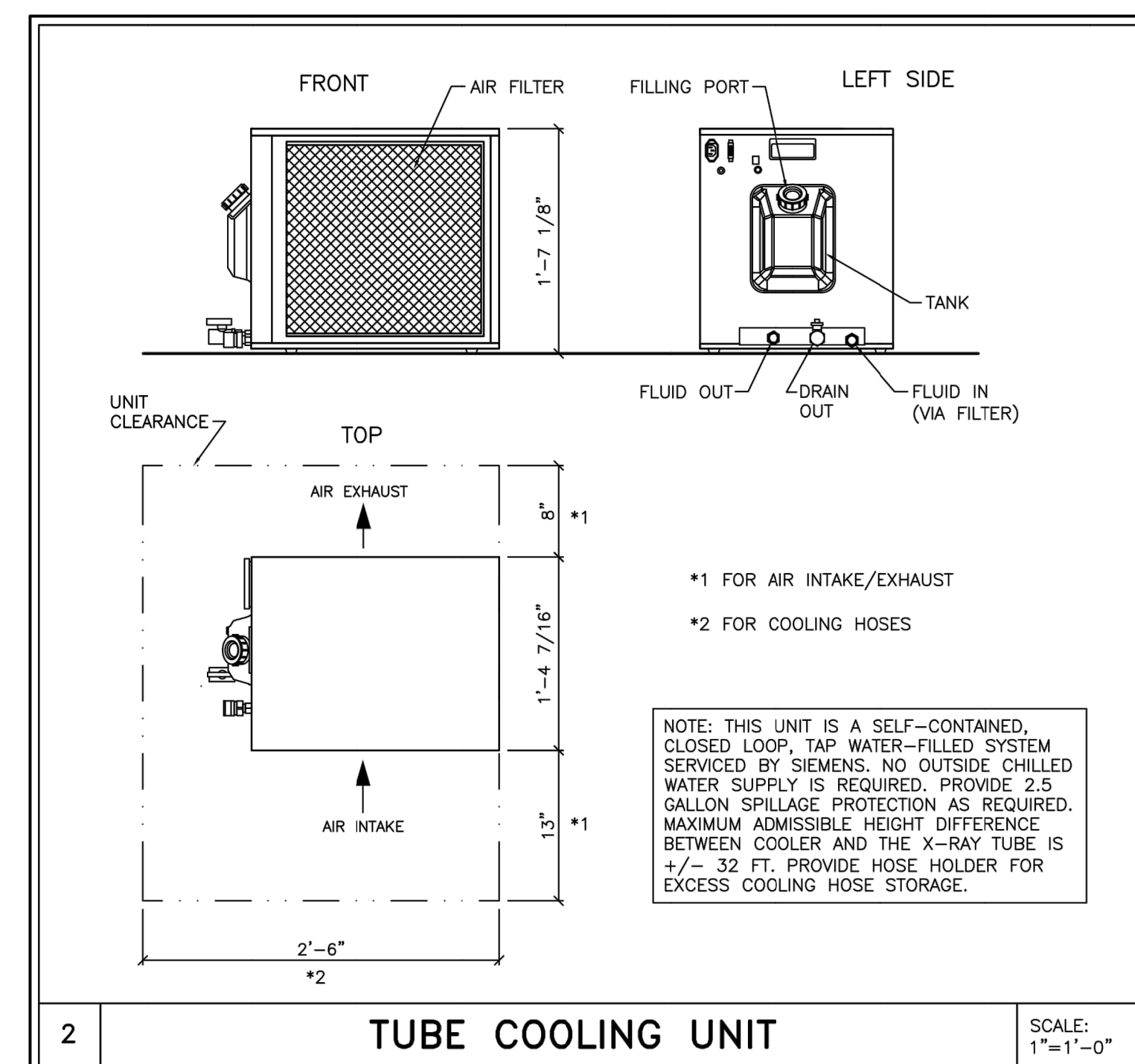
Siemens
Equipment-
Mechanical

EQ 107

REFERENCE DOCUMENT - NOT FOR CONSTRUCTION



ENVIRONMENTAL CONDITIONS		
EXAM AND CONTROL ROOM	TEMPERATURE RANGE: 59°F-86°F (RECOMMENDED 70°F)	RELATIVE HUMIDITY: 20% - 75% NON-CONDENSING
IMAGE SYSTEM (IS)	TEMPERATURE RANGE: 50°F-95°F (RECOMMENDED 70°F)	RELATIVE HUMIDITY: 20%-75% NON CONDENSING
	MAX. TEMP. GRADIENT: 18° F/HR	AIR FLOW VOLUME: 371 CFM
	MAX. NOISE LEVEL: 53 dB(A)	
GENERATOR (PU1)	TEMPERATURE RANGE: 50°F-95°F (RECOMMENDED 70°F)	RELATIVE HUMIDITY: 20%-75% NON CONDENSING
	MAX. TEMP. GRADIENT: 9° F/HR	AIR FLOW VOLUME: 94 CFM
	MAX. NOISE LEVEL: 55 dB(A)	
SYSTEM CABINET (SC1)	TEMPERATURE RANGE: 59°F-86°F (RECOMMENDED 70°F)	RELATIVE HUMIDITY: 20% - 75% NON-CONDENSING
	MAX. TEMP. GRADIENT: 9° F/HR	AIR FLOW VOLUME: 294 CFM
	MAX. NOISE LEVEL: 48 dB(A)	
COOLING UNIT (CU1)	TEMPERATURE RANGE: 41°F-86°F (RECOMMENDED 70°F)	RELATIVE HUMIDITY: FROST FREE
	ATMOSPHERIC PRESSURE: 700hPa - 1040hPa	AIR FLOW VOLUME: 647 CFM
	SHOCKS: MAX. 10G/16MS	MAX. NOISE LEVEL: 55 dB(A)
STAND WITH FLAT DETECTOR	MAX. TEMPERATURE GRADIENT: 9° F/HR	
	MAX. VIBRATIONS: 0.1 G/10-200HZ	



HEAT LOADS	
FOR RTU'S OF SIEMENS EQUIPMENT, REFER TO THE EQUIPMENT LEGEND, SHEET A-101.	

CEILING HEIGHT REQUIREMENT
8 FT. - 11 IN.

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INTERMOUNTAIN MEDICAL CENTER 5121 COTTONWOOD ST, MURRAY, UT 84107 CATH LAB #1 / ARTIS Q.ZEN CEILING			PROJECT #: 2100316	
THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS' AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW. ALL RIGHTS ARE RESERVED.			SHEET: M-501	
DATE: 04/12/21 R-101000 VERSION DATED 03/25/21 APPROVED BY CUSTOMER FOR FINALS			SHEET 7 OF 7 DRAWN BY: O. CARRILLO	
SYN DATE DESCRIPTION			DATE: 04/12/21	
-ISSUE BLOCK-			SCALE: AS NOTED REF: CFC-192529	

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