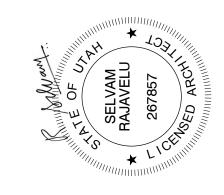


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EQUIPMENT LEGEND DESCRIPTION SMS | WEIGHT | BTU/HR | DIMENSIONS (INCHES) REMARKS SYM (LBS) TO AIR W D D ACE (ARCHIVE CONTROL EXTENSION) ⟨\_⟩ | 13 N/A | 12 1/4 | 11 3/4 | 4 | ON COUNTER CONTROL ROOM DISTRIBUTOR 342 | 41 1/2 | 8 1/4 | 16 1/8 | WALL MOUNTED KEYBOARD 342 | 17 1/2 | 6 1/8 | 2 1/8 | ON COUNTER 256 | 16 1/2 | 8 1/4 | 13 1/2 | ON COUNTER 19" LIVE DISPLAY TABLE CONTROL MODULES --- | 16 1/2 | 8 3/4 | 3 1/2 | ON TABLE 512 | 33 | 8 1/4 | 13 1/2 | OEM BOOM MOUNTED BOOM 1 KIT 19" (2) DISPLAYS LIVE+REF ARTIS Q.ZEN CEILING C-ARM STAND (P1) | 1,994 | 682 --- -- C-ARM CEILING SUSPENDED PATIENT TABLE (BASIC, STANDARD TABLE) --- | ---9) | POLYDOROS A100 GENERATOR CABINET | (PUI) | 723 | 4,094 | 31 1/2 | 17 1/8 | 87 | FLOOR MOUNTED (10) CABLE CABINET (C) 26FEMOVE 31 1/2 17 1/8 87 FLOOR MOUNTED (C) 655 5,460 31 1/2 17 1/8 87 FLOOR MOUNTED SYSTEM CONTROL CABINET AXIS IMAGE SYSTEM 4,347 | 23 3/4 | 37 1/4 | 28 | ON CASTERS TUBE COOLING UNIT 15,355 | 16 1/2 | 28 1/4 | 19 1/4 | SHELF MOUNTED

#### NON-SIEMENS (OEM) DISPLAY BOOMS IMPORTANT SAFETY CRITERIA: FAILURE TO MEET THE FOLLOWING REQUIREMENTS MAY RESULT IN RISK OF INJURY TO PATIENTS, PERSONNEL OR DAMAGE TO THE EQUIPMENT! 1) IT MUST BE POSSIBLE TO MANUALLY MOVE THE BOOM VERTICALLY WITH A FORCE LESS THAN 85 N (19 LBS) WHEN POSITIONING THE DISPLAY BOOM OVER THE PATIENT. ) TO AVOID THE RISK OF CRUSHING PERSONS OR DAMAGING EQUIPMENT IN THE EVENT THAT THE ANGIOGRAPHY SYSTEM COMES INTO CONTACT WITH THE DISPLAY BOOM, IT MUST BE POSSIBLE TO PUSH THE BOOM AWAY IN A HORIZONTAL DIRECTION WITH A FORCE LESS THAN 50 N (11 LBS). 3) MOTORIZED, HEIGHT-ADJUSTABLE DISPLAY BOOMS WHICH CANNOT MANUALLY BE PUSHED AWAY MAY NOT BE USED. T IS RECOMMENDED THAT INSTALLATION OF 3RD PARTY DISPLAY BOOMS BE COORDINATED WITH THE INSTALLATION OF THE SIEMENS SYSTEM, IN ORDER TO ENSURE THE SIMULTANEOUS INSTALLATION OF THE SYSTEM AND THE DISPLAY BOOM, THE CUSTOMER SHOULD TAKE STEPS EARLY IN THE PLANNING PROCESS TO ENSURE THAT THE BOOM MANUFACTURER'S LEAD TIME CAN BE COORDINATED WITH THE DELIVERY OF THE SIEMENS EQUIPMENT. THE THIRD-PARTY MANUFACTURER IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF THE DISPLAY BOOM(S). THE THIRD-PARTY MANUFACTURER IS RESPONSIBLE FOR INSTALLING THE SIEMENS COMPONENTS IN THE DISPLAY BOOM IN ACCORDANCE WITH SIEMENS SPECIFICATIONS. SIEMENS ASSUMES NO RESPONSIBILITY FOR ANY DAMAGE TO SIEMENS COMPONENTS WHICH ARE NOT INSTALLED IN ACCORDANCE WITH SIEMENS SPECIFICATIONS. SIEMENS TECHNICIANS MUST BE GIVEN INSTRUCTIONS AND/OR TRAINING AS APPROPRIATE BY THE 3RD PARTY MANUFACTURER FOR MAINTENANCE/SERVICE OF THE SIEMENS COMPONENTS (I.E. DISPLAY, CABLES), OR A TECHNICIAN FROM THE THIRD-PARTY MANUFACTURER MUST BE PRESENT WHENEVER ANY SERVICE

Storage area available for storing items during installation

Delivery path verified for largest piece, including rails

Climate control functioning 24 hours a day, 7 days a week

Nothing hanging below ceiling in area shaded on drawing

Contractor supplied electrical wiring / pigtails installed

Cable runs checked to ensure maximum lengths not exceeded

Lead shielding (walls, doors, windows) complete

All walls primed and painted. Flooring installed

Casework complete in control room

Room lighting complete and functional

X-Ray warning light and wiring installed

Cable inlets located per plans

EPO's installed and functional

UPS started and functional

PREPARATION COSTS, PROFESSIONAL FEES, PERMITS, REPORTS, AND 4) EQUIPMENT WARRANTIES, EXPRESSED OR IMPLIED ON THE PART OF SÍEMENS SHALL BE CONTINGENT UPON STRICT COMPLIANCE WITH THE ARCHITECTURAL. STRUCTURAL. ELECTRICAL, MECHANICAL AND RECOMMENDATIONS AND REQUIREMENTS CONTAINED IN THESE DRAWINGS, UNLESS SPECIFIED OTHERWISE. 5) ALL DIMENSIONS SHOWN ARE FROM FINISHED SURFACES UNLESS SPECIFIED OTHERWISE. 6) 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. ACTUAL PROTECTION REQUIREMENTS SHALL BE SPECIFIED BY A REGISTERED RADIATION PHYSICIST AT CUSTOMER'S ENGAGEMENT AND EXPENSE, RESPONSIBILITY FOR ALL INFORMATION AS TO THE ROOM LOCATION, USE, AND NUMBER OF ANTICIPATED EXAMINATIONS TO BE PERFORMED PER TIME PERIOD SHALL BE PROVIDED TO THE PHYSICIST BY THE CUSTOMER. THE CUSTOMER SHALL FURTHER TAKE ALL RESPONSIBILITY IN THE COMMUNICATION AND COORDINATION OF ACTIVITIES OF THE RADIATION PHYSICIST AND THE ARCHITECTURAL REPRESENTATIVE. ) SIEMENS HEALTHCARE SHALL BE RESPONSIBLE FOR SIEMENS EQUIPMENT INSTALLATION, CALIBRATION, CONNECTION AND INSTALLATION OF SIEMENS PROVIDED CABLES. THE CUSTOMER/ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR TERMINATIONS OF CUSTOMER/ELECTRICAL ONTRACTOR—SUPPLIED CABLES TO SIEMENS EQUIPMENT. IN THE EVENT THAT SPECIFIC TRADE RULES OR LICENSE REQUIREMENTS PROHIBIT THIS, THE CUSTOMER SHALL INITIATE THE SERVICES OF APPROVED OTHER CONTRACTORS AND PAY FOR SELECTED, APPROVED PARTIES TO PERFORM THIS WORK WITH SUPERVISION PROVIDED BY SIEMENS. CALIBRATION WHEN ACCOMPLISHED OUTSIDE OF NORMAL INSTALLATION SEQUENCES DUE TO CONTRACTOR OR TRADE RULE ACTIONS OR REQUIREMENTS SHALL BE SUPPORTED BY, CHARGED TO, AND ACCEPTED BY THE CUSTOMER AS AN ADDITIONAL INSTALLATION EXPENSE. 8) THE CUSTOMER SHALL COORDINATE WITH SIEMENS PROJECT MANAGER THE LOCATIONS AND TRAVEL OF ALL ANCILLARY EQUIPMENT TO BE CEILING OR WALL MOUNTED (I.E.: O.R. LIGHTS, MEDICAL GAS COLUMNS, PHYSIOLOGICAL MONITORING INJECTORS, CRT PLATFORMS, SPRINKLER HEADS, SMOKE DETECTORS, ELECTRICAL OUTLETS, HVAC GRILLES, SPEAKERS, AND GENERAL ROOM LIGHTING, ETC.). 9) THE GENERAL CONTRACTOR/CUSTOMER SHALL BE RESPONSIBLE FOR ALL FINAL PAINT, TOUCH-UP AND ANY COSMETIC OR TRIM WORK WHICH NEEDS TO BE OR IS REQUIRED TO BE COMPLETED AFTER THE INSTALLATION OF THE SIEMENS EQUIPMENT AND ANY ASSOCIATED SUPPORT APPARATUS.

ARCHITECTURAL NOTES

) ALL PRELIMINARY EQUIPMENT LAYOUTS SUBMITTED BY SIEMENS HEALTHCARE ARE BASED ON THE RECOMMENDED SPACE NECESSARY FOR

NOT IN THE BEST INTEREST OF BOTH THE CUSTOMER AND SIEMENS.

WILL NOT BE RESPONSIBLE FOR ANY ALTERATIONS THAT ENCROACH

SURVEY OR ARCHITECTURAL DRAWINGS SUPPLIED TO SIEMENS. SIEMENS

CASEWORK, AND SOFFITS, ETC.) MADE BY THE CUSTOMER OR REQUIRED

BY A CUSTOMER'S ARCHITECTURAL FIRM ONCE PRELIMINARY DRAWINGS

RECEIVING WRITTEN CONFIRMATION FROM SIEMENS PROJECT MANAGER.

SIEMENS HEALTHCARE IS NOT AN ARCHITECTURAL OR ENGINEERING

DRAWINGS. THEREFORE, THESE DRAWINGS ARE TO BE USED ONLY FOR

REPRESENTATIVE OR A CUSTOMER'S ENGINEERING DESIGN GROUP. THE

ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE CODES

THE OPERATION AND SERVICEABILITY OF THE EQUIPMENT BEING PROPOSED. SIEMENS WILL NOT SUBMIT AN EQUIPMENT LAYOUT THAT IS

ALL EQUIPMENT LAYOUTS ARE BASED EITHER ON AN ACTUAL SITE

WITHIN DESIGNATED SAFETY AND SERVICE CLEARANCE ZONES AS

INDICATED ON DRAWINGS (I.E., PIPE CHASES, VENTILATION DUCTS,

SPECIFICATIONS AND/OR DIMENSIONS WITHOUT CONTACTING AND

FÍRM. DRAWINGS SUPPLIED BY SIEMENS ARE NOT CONSTRUCTION

INFORMATION TO COMPLEMENT ACTUAL CONSTRUCTION DRAWINGS

CUSTOMER'S ARCHITECT AND GENERAL CONTRACTOR SHALL BE

AND PROFESSIONAL DESIGN REQUIREMENTS INCLUDING OSHA/NEC SAFETY CLEARANCE REQUIRMENTS IN ADDITION TO SIEMENS-REQUIRED

3) THE CUSTOMER IS RESPONSIBLE FOR ALL ROOM AND AREA

AVAILABLE FROM A CUSTOMER APPOINTED ARCHITECTURAL

SAFETY/SERVICE CLEARANCES SHOWN.

HAVE BEEN SUBMITTED AND APPROVED. DO NOT ALTER ANY

## ENVIRONMENTAL CONDITIONS FOR TRANSPORT/STORAGE

TEMPERATURE RANGE: -4° F TO 158° F AIR PRESSURE: 700 hPa TO 1060 hPa

# TRANSPORTING REQUIREMENTS

103.6"(L) x 46.5"(D) x 81.5"(H), 2,590 LBS. LARGEST INDIVIDUAL PIECE WITH CARRIAGE (MIN. DOOR OPENING): 98 1/4"(L) x 39 1/2"(W) x 75"(H), 2,006 LBS. CEILING RAILS ARE 14 FT.(L) x 3"(W) x 3"(H) MIN. CORRIDOR WIDTH: 82.7"

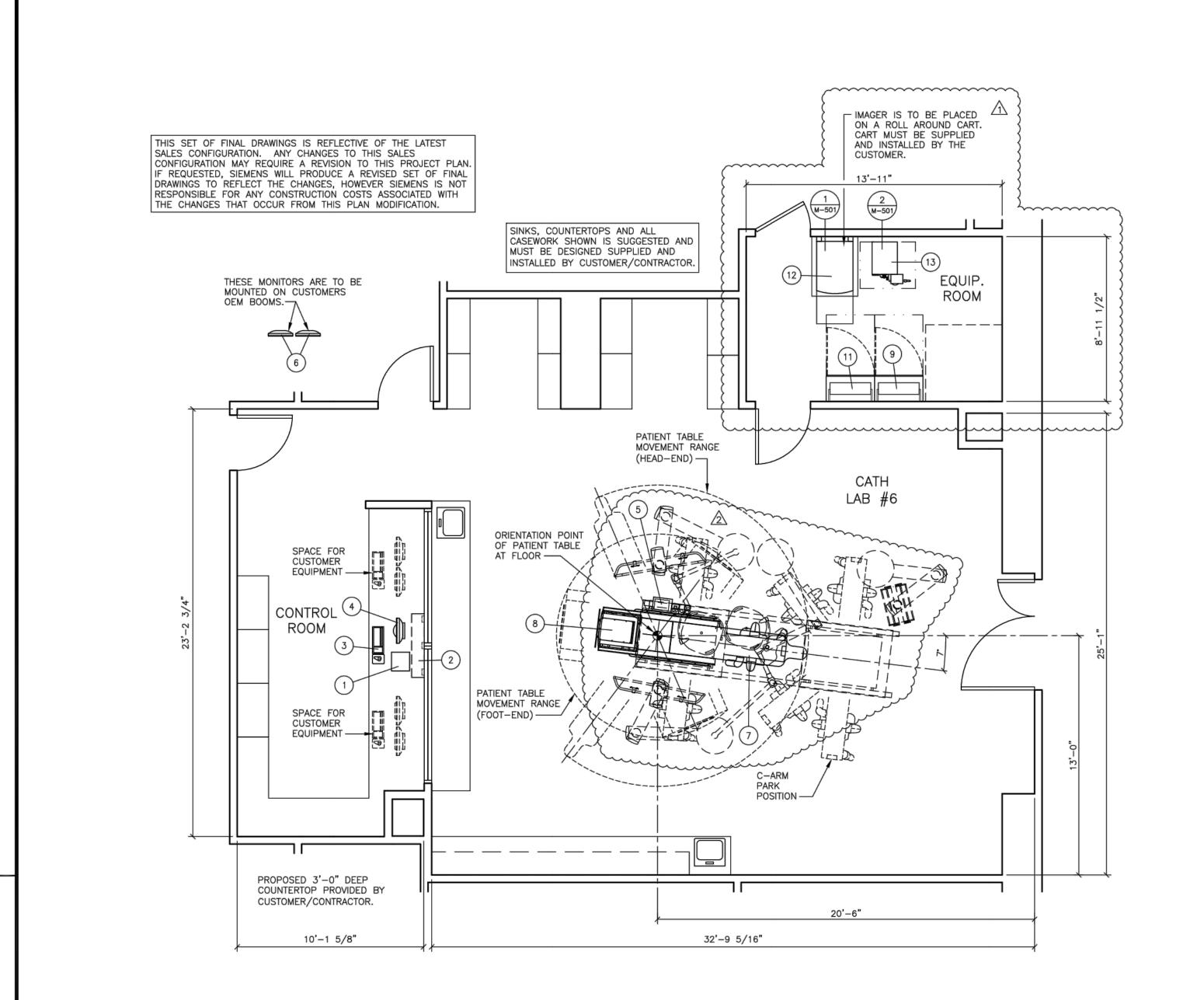
RESOURCE LIST	(SMS USE ONL	Y)
DESIGNATION	PG NUMBER	DATE
ARTIS Q / Q.ZEN CEILING	AXAQ-060.891.01.01.02	04.13

SIEMENS

NJRA Project # Construction Documents March 27, 2019

alt

Siemens Equipment-Architectural



#### ARCHITECTURAL EQUIPMENT PLAN SCALE: 1/4" = 1'-0"

REQUIRED MINIMUM HEIGHT IN DROP CEILING FOR CORRUGATED HOSE HOLDER AND LAYING CABLES; FOR DETAILS REGARDING THE CEILING OUTLET SEE SHEET S-102. FINISHED CEILING -THE "B10" FIXPOINT IS A THRU-FLOOR PENETRATION ARTIS ZEE CEILING C-ARM SYSTEM PROVIDED AS A MEANS OF MOVEMENT -CONNECTING A TABLE INJECTOR OR OTHER NON-SIEMENS ACCESSORIES AT THE TABLE FOR WHICH CABLE TABLE BASE WOULD BE PROHIBITED. THIS OPENING CAN BE ELIMINATED AS REQUIRED, OR IT CAN BE COMBINED INTO A CUSTOMER-SUPPLIED GAS/UTILITY BOX ON THE FLOOR. NOTE: THE '-0" DISTANCE FROM TABLE
OCENTER SHOWN HERE APPLIES FINISHED -PATIENT TABLE -O A CABLE PENETRATION POIN 5'-6 1/16" <u>NLY.</u> SEE DIAGRAM FOR POSSIBLI BOX PLACEMENT AND HEIGHT PTIONS, VALIDATE EXACT \* ROOM HEIGHT MEASURED FROM THE HIGHEST POINT OF THE FINISHED FLOOR PLACEMENT WITH SIEMENS PROJECT (INCLUDING FLOOR COVERING) TO THE LOWEST POINT OF THE CEILING SUBSTRUCTURE WITH NON-TILTING TABLE ARTIS Q/Q.ZEN/ZEE CEILING TYPICAL ELEVATION

### STATE AGENCY REVIEW PRIOR TO SIEMENS EQUIPMENT INSTALLATION, APPROVAL OF CONSTRUCTION OR STRUCTURAL MODIFICATIONS UTILIZING X-RAY FOR DIAGNOSTIC OR THERAPEUTIC PURPOSES, MUST BE OBTAINED BY THE

CUSTOMER FROM THE APPROPRIATE STATE AGENCY, IF APPLICABLE.

MAGNETIC	FIELD PRECAUTIONS
MAY HAVE AN ADVERSE E	ETIC FIELDS IN THE VICINITY OF EQUIPMENT FFECT. IT IS THE CUSTOMER'S RESPONSIBILITY LOWING VALUES ARE NOT EXCEEDED.
MAXIMUM ALLOWABLE MAGNETIC FIELD	DEVICES
1.0mT (10 GAUSS)	COMPUTERS, MAGNETIC DISK DRIVES, OSCILLOSCOPES, PROCESSORS
0.5mT (5 GAUSS)	X-RAY TUBES, B/W MONITORS, MAGNETIC DATA CARRIERS, DATA STORAGE DRIVES
0.2mT (2 GAUSS)	SIEMENS CT SCANNERS
0.05mT(0.5 GAUSS)	CRT MONITORS, SIEMENS LINEAR ACCELERATORS
0.05mT(0.5 GAUSS)	X-RAY IMAGE INTENSIFIERS, GAMMA CAMERAS, PET/CYCLOTRON, OTHER LINEAR ACCELERATORS
MAGNETIC FIELDS SHOULD	BE MEASURED PRIOR TO DELIVERY

cillary e	equipment (OEM items
eakers i	nstalled and facility po
Г	
	CEILING
	HEIGHT
	REQUIREMENT
	1,24011,21112111
	8 FT 11 IN.
_	

			PRO TEL: VMA FAX:
			EMA
<u> </u>	02/21/19	ADDITION OF OEM BOOMS PER CUSTOMER REQUEST	
Λ	02/01/19	REVISED EQUIPMENT ROOM PER CUSTOMER REQUEST	TH TH
$\triangle$	11/02/18	R-101R(A) VERSION DATED 09/24/18 APPROVED BY CUSTOMER FOR FINALS	SI RI FI
SYM	DATE	DESCRIPTION	Al

INTERMOUNTAIN MEDICAL CENTER -ISSUE BLOCK-

THE USE OR REPRODUCTION OF PROJECT #: THIS TITLE BLOCK WITHOU' SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER SCALE: REF. #: 30219677

CATH LAB #6 - ARTIS Q.ZEN CEILING

DRAWN BY:
M. GONZALEZ

PROJECT MILESTONES TO BE COMPLETED BEFORE EQUIPMENT DELIVERY

Floor thickness and anchoring spec's verified. If req'd, alt solutions per engineer of record in place

All conduits, troughs, in-floor pull boxes and/or core drills avoid conflict with floor plate anchors

Unistrut installed to correct height, location, and levelness (check minimum ceiling height)

, booms, etc) installed

Network drops active and IP addresses obtained for Siemens Remote Services (SRS)

- 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.

REFERENCE SHEET

A-101 A-101

A-101

A-101

A-101

A-101

A-101

A-102

A-102

S-101

S-101

S-102

E-101

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E-501

(801) 209-6582

1803659

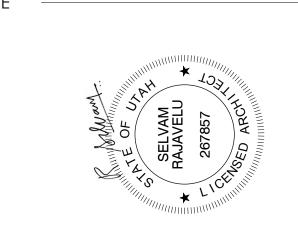
**ATTENTION:** 

- 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.

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Construction Documents March 27, 2019

NJRA Project #

INTERMOUNTAIN MEDICAL CENTER

5121 COTTONWOOD STREET, MURRAY, UT. 84107 CATH LAB #6 - ARTIS Q.ZEN CEILING

1803659

DRAWN BY:
M. GONZALEZ

ADDITION OF OEM BOOMS PER CUSTOMER REQUEST

PER CUSTOMER REQUEST

R-101R(A) VERSION DATED 09/24/18 APPROVED BY CUSTOMER FOR FINALS

DESCRIPTION

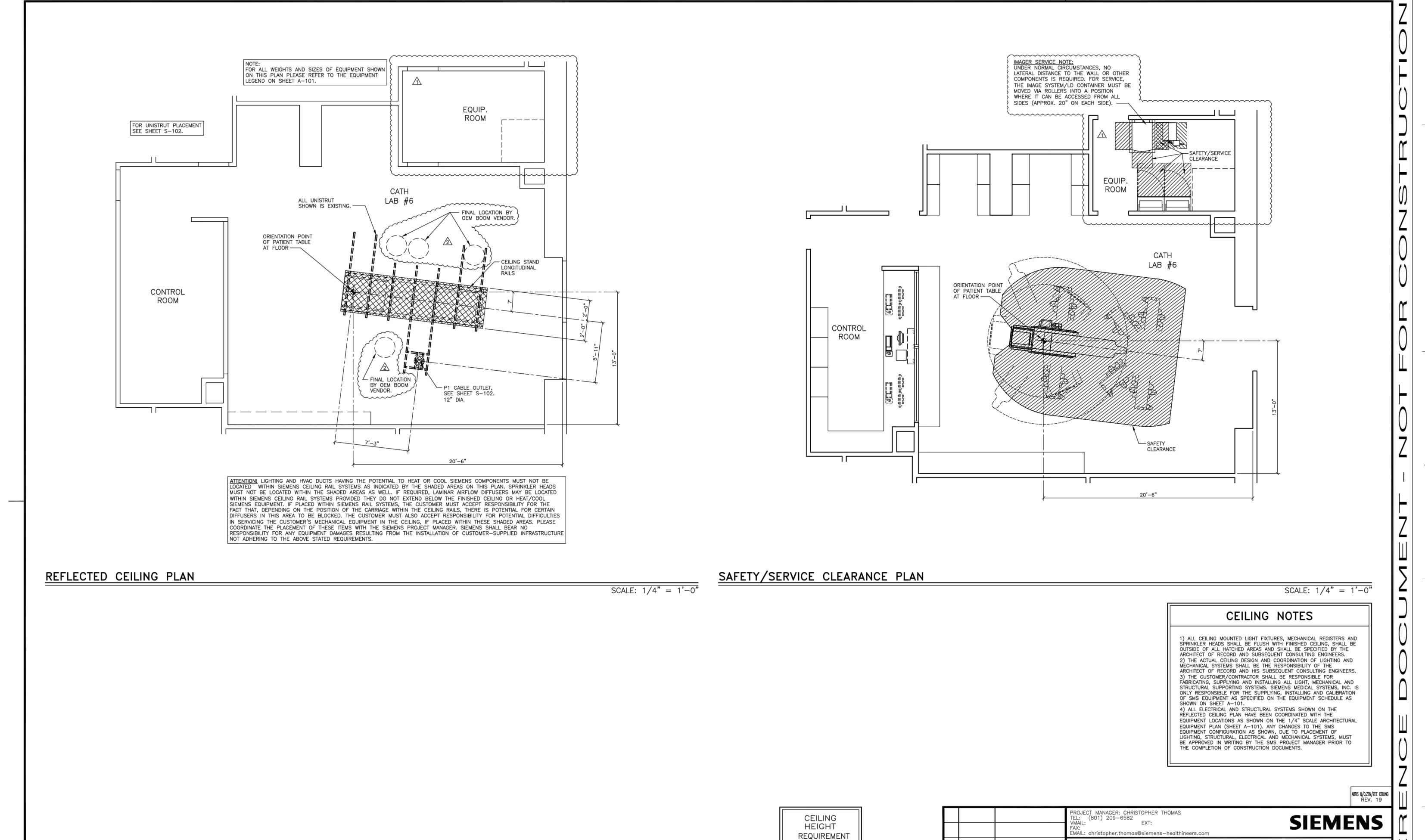
-ISSUE BLOCK-

REVISED EQUIPMENT ROOM THE USE OR REPRODUCTION OF PROJECT #:

THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.

SCALE: REF. #: 30219677

Siemens Equipment-Architectural



- IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION

DOCUMENTS FOR REFERENCE.

- THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED

MODIFICATION, THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

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AT THE TIME OF THEIR PREPARATION. SINCE BOTH THESE FACTORS ARE SUBJECT TO DESIGN

ATTENTION:

8 FT. - 11 IN.

- THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED

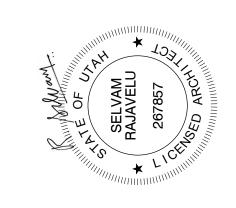
EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION

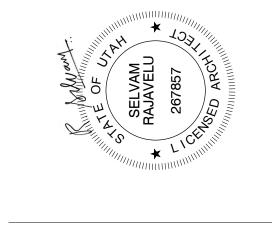
-ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

PHYSICIST TO SPECIFY RADIATION PROTECTION.

1 5







STRUCTURAL NOTES 1) THE CUSTOMER/CONTRACTOR SHALL FURNISH AND INSTALL ALL STRUCTURAL SUPPORT MEMBERS AND NEEDED HARDWARE FOR THE 2) THE OVERHEAD STRUCTURAL SUPPORT SYSTEM SHALL BE FIXED, RIGID AND BRACED FOR SWAY.

INSTALLATION OF THE SIEMENS EQUIPMENT.

NJRA Project # Construction Documents March 27, 2019

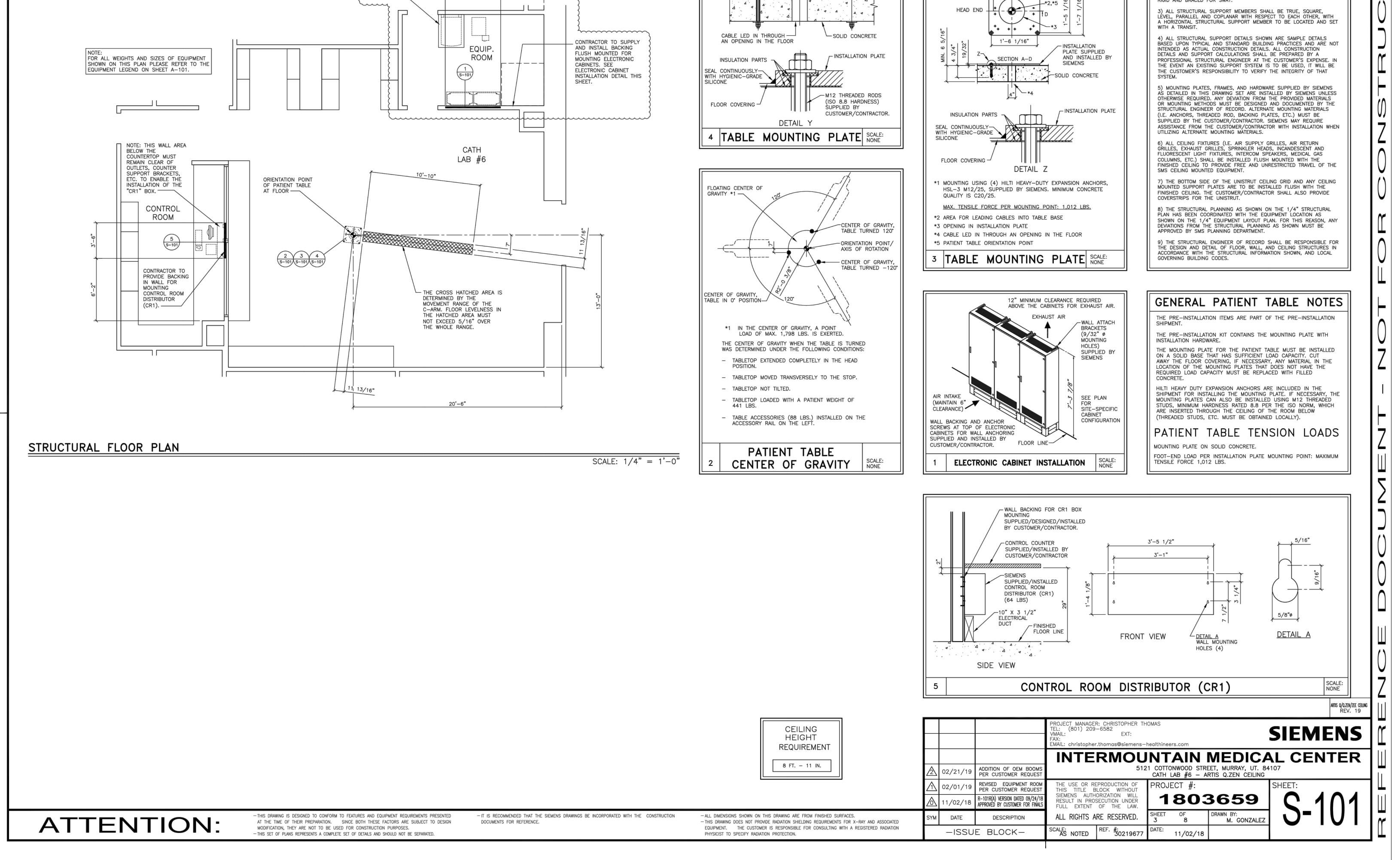
Siemens

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Equipment-Structural

18226.00



ON A ROLL AROUND CART.

CART MUST BE SUPPLIED AND INSTALLED BY THE

CUSTOMER. —

TABLE INSTALLATION PLATE WITH THREADED RODS

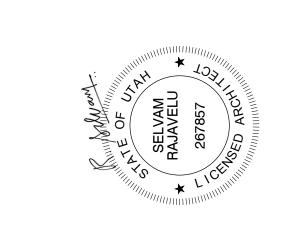
TABLE INSTALLATION PLATE WITH ANCHORS

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NJRA Project #

1803659 DRAWN BY:
M. GONZALEZ 11/02/18

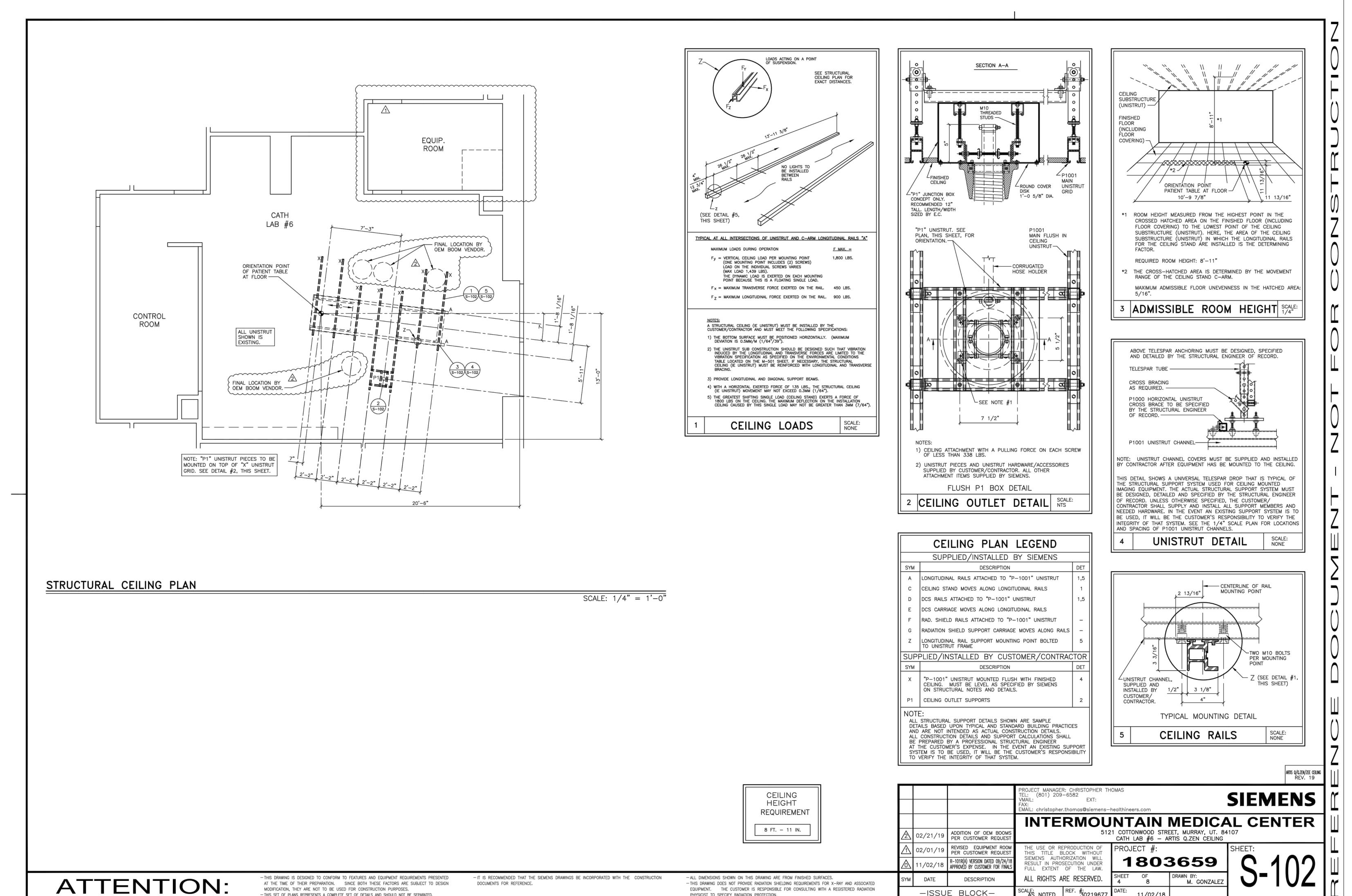
SCALE: REF. #: 30219677

-ISSUE BLOCK-

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Construction Documents March 27, 2019

18226.00



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EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION

PHYSICIST TO SPECIFY RADIATION PROTECTION.

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.

DOCUMENTS FOR REFERENCE.



NJRA Architects, Inc. 5272 S. College Drive, Suite 104 Murray, Utah 84123

801.364.9259

www.njraarchitects.com

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. 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. POWER SUPPLY SOURCE: POWER SUPPLIES FOR SIEMENS HEALTHCARE EQUIPMENT SHALL BE FROM A MEDICAL IMAGING PANEL OR BUILDING SERVICE EQUIPMENT THAT IS A GROUNDED 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

LIGHTS, WIRING, WIRING DEVICES, CONNECTORS, LIGHTING EQUIPMENT AND GROUNDING. RACEWAY AND CONDUIT NOTES: ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT ENFORCED EDITION OF THE NATIONAL 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 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

ACCORDANCE WITH THE REQUIRED POWER SUPPLY PARAMETERS OF THE

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

THE CUSTOMER AND/OR UTILITY COMPANY FIELD REPRESENTATIVE.

SIEMENS EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH

4) WORK FURNISHED BY CUSTOMER/CONTRACTOR: WORK NOT PROVIDED BY SÍEMENS HEALTHCARE BUT SHOWN ON DRAWINGS TO BE FURNISHED AND

**ELECTRICAL NOTES** 

) COMPLIANCE: ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE (NFPA-70), O.S.H.A. REGULATIONS, AS WELL AS

ENTERING RACEWAY. 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. 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 CABLING). 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 JL 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

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 REQUIRMENTS AND BUILDING STRCTURE, THOSE THAT ARE NOT INDICATED OR INTERFER 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. 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.

6) 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 AT ALL OUTLÉT POINTS WITH WIRE IDENTIFICATION TAGGED AT BOTH ENDS FOR FINAL CONNECTION BY THE CUSTOMER/ELECTRICAL CONTRACTOR. 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 35,000A RMS SYMMETRICAL AT 480V, 3-PHASE, 60 HERTZ. THE CONTRACTOR 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

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"

ARTIS Q/Q.ZEN/ZEE CEILING

			PROJECT MANAGER: CHRISTOPHER TH TEL: (801) 209-6582 VMAIL: EXT: FAX: EMAIL: christopher.thomas@siemens-h	
			INTERMOU	NTAIN M
/	02/21/19	ADDITION OF OEM BOOMS PER CUSTOMER REQUEST	512	1 COTTONWOOD STREET, CATH LAB #6 — ARTIS
7	02/01/19	REVISED EQUIPMENT ROOM PER CUSTOMER REQUEST	THIS TITLE BLOCK WITHOUT	PROJECT #:
		R_101P(A) VERSION DATED 00/24/18	SIEMENS AUTHORIZATION WILL	1903

REMARKS

CONTROL ROOM DISTRIBUTOR

SEE "POWER SCHEDULE"

SEE "POWER SCHEDULE"

SEE "POWER SCHEDULE"

SEE "POWER SCHEDULE"

MAX. CONDUIT LENGTH 26'

MAX. CONDUIT LENGTH 26'

MAX. CONDUIT LENGTH 22'

MAX. CONDUIT LENGTH 67'

MAX. CONDUIT LENGTH 32'

MAX. CONDUIT LENGTH 35'

MAX. CONDUIT LENGTH 78'

MAX. CONDUIT LENGTH 32'

MAX. CONDUIT LENGTH 68'

MAX. CONDUIT LENGTH 42'

MAX. CONDUIT LENGTH 55'

MAX. CONDUIT LENGTH 31'

MAX. CONDUIT LENGTH 31'

MAX. CONDUIT LENGTH 68'

TABLE ACCESSORIES

CABLE CABINET

MEDICAL CENTER S Q.ZEN CEILING

1803659

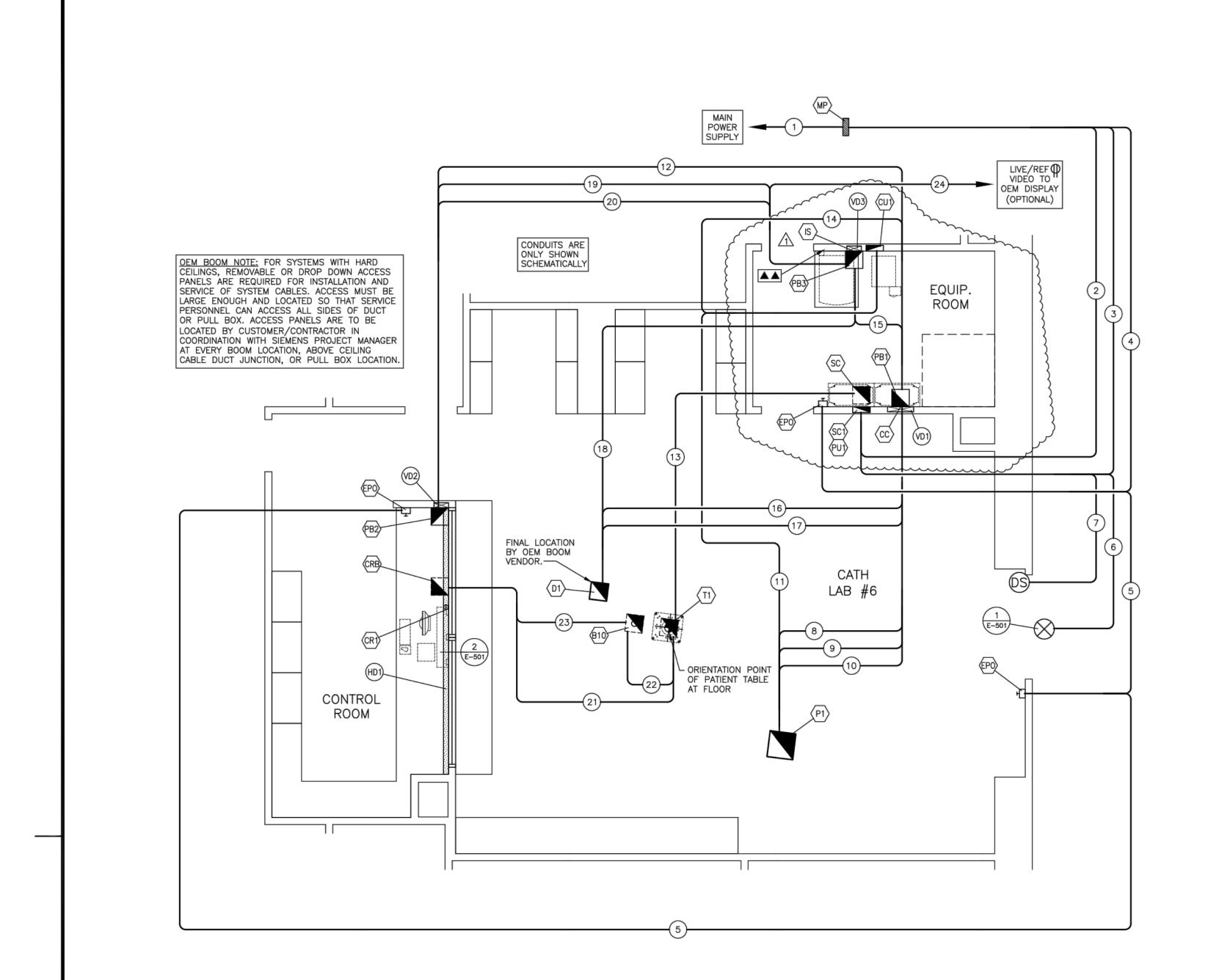
SIEMENS

Siemens Equipment-Electrical

Construction Documents March 27, 2019

alt

NJRA Project #



# ELECTRICAL RACEWAY PLAN

	SYMBOLS
	ALL MAY NOT APPLY
	CIRCUIT BREAKER BY CUSTOMER/CONTRACTOR
•	OPENING IN RACEWAY OR TRENCHDUCT
	PULLBOX IN (FLOOR/WALL/CEILING)
	OPENING IN ACCESS FLOORING
$\otimes$	WARNING LIGHT (X-RAY ON)
(DS)	DOOR SAFETY SWITCH
Н	(EPO) EMERGENCY POWER OFF BUTTON
	TRENCHDUCT
	CEILING DUCT
	UNDER FLOOR DUCT
	SURFACE DUCT
$\boxtimes$	VERTICAL DUCT
<b>•</b>	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

HEIGHT REQUIREMENT 8 FT. - 11 IN.

CEILING

SYM

SIZE

3"ø

AS REQUIRED

EC TO SIZE

2 1/2"ø

(2) 3"ø

3"ø

2"ø

2 1/2"ø

2"ø

3"ø

3"ø

3"ø

3"ø

2"ø

SCALE: 1/4" = 1'-0

- ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES. PHYSICIST TO SPECIFY RADIATION PROTECTION.

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.

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

11/02/18 R-101R(A) VERSION DATED 09/24/18
APPROVED BY CUSTOMER FOR FINALS

DESCRIPTION

ALL RIGHTS ARE RESERVED.

-ISSUE BLOCK-

ELECTRICAL LEGEND

SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR

(EXISTING) PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER.

A SINGLE CONDUIT CONNECTION TO THIS BOX, PROVIDE A 3" CONDUIT THRU FLOOR. FOR

MULTIPLE CONDUIT CONNECTIONS, PROVIDE (2) 4" CONDUITS THRU FLOOR. E.C. TO DESIGN

(EXISTING) PULL BOX MOUNTED FLUSH IN FINISHED WALL AT 48" AFF. PROVIDE BOX WITH

REMOVABLE FRONT COVER AND (1) 4"Ø BUSHING IN CENTER OF REMOVABLE COVER FOR CABLE

RACEWAY, THIS BOX MUST BE SIZED SUCH THAT A 8" X 6" X 3" SIEMENS POWER DISTRIBUTION

OF CIRCUIT BREAKERS WHEN IN OFF POSITION. EPO'S MUST BE RECESSED OR SHIELDED. FINAL

(EXISTING) ABOVE FINISHED CEILING PULL BOXES FOR CONDUIT TERMINATION INTO VERTICAL

(EXISTING) PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. PROVIDE 6"0 CONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR

PROVIDE 4" CONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR WITH BUSHING AT FLOOR

3 1/2" X 18" (EXISTING) VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL, BEGIN DUCT AT FLOOR LINE AND VERTICAL DUCT

3 1/2" X 10" (EXISTING) VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL. BEGIN DUCT AT FLOOR LINE AND VERTICAL DUCT

3 1/2" X 10" (EXISTING) VERTICAL DUCT MOUNTED FLUSH IN FINISHED WALL. BEGIN DUCT AT FLOOR LINE AND VERTICAL DUCT

EXTEND UP WALL ABOVE FINISHED CEILING, PROVIDE JUNCTION BOX "PB2" (SIZED BY E.C.) AT

TOP OF DUCT FOR CONDUIT TRANSITIONS. IF REQUIRED BY LOCAL CODE, DIVIDE DUCT INTO (3)

EXTEND UP WALL ABOVE FINISHED CEILING. PROVIDE JUNCTION BOX "PB2" (SIZED BY E.C.) AT

TOP OF DUCT FOR CONDUIT TRANSITIONS. IF REQUIRED BY LOCAL CODE, DIVIDE DUCT INTO (3)

EXTEND UP WALL ABOVE FINISHED CEILING. PROVIDE JUNCTION BOX "PB3" (SIZED BY E.C.) AT

TOP OF DUCT FOR CONDUIT TRANSITIONS. IF REQUIRED BY LOCAL CODE, DIVIDE DUCT INTO (3)

3 1/2" X 10" (EXISTING) HORIZONTAL DUCT MOUNTED ON FINISHED WALL AT FLOOR LINE. PROVIDE DUCT WITH HORIZONTAL WALL DUCT

REMOVABLE FRONT COVER. IF REQUIRED BY LOCAL CODE, DIVIDE DUCT INTO (3) SECTIONS WITH

REMOVABLE FRONT COVER WITH 4"Ø BUSHED OPENING AT BOTTOM OF COVER.

REMOVABLE FRONT COVER WITH 4"Ø BUSHED OPENING AT BOTTOM OF COVER.

AS REQUIRED (EXISTING) PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER.

METAL DIVIDERS. CONNECT TO VERTICAL DUCT "VD2" AS SHOWN.

AS REQUIRED (NEW) PULL BOX MOUNTED ABOVE FINISHED CEILING WITH REMOVABLE BOTTOM COVER WITH BOOM DVI 2xBWD-19D

3"

BUSHED OPENING. NOTE: IF LOCAL CODES REQUIRE COMPLETE CABLE CONTAINMENT IN (live+ref)

(EXISTING) BUSHED OPENING IN VERTICAL DUCT "VD3" COVER AT HEIGHT NEEDED FOR IMAGER. IMAGE SYSTEM

(EXISTING) PULL BOX MOUNTED FLUSH IN FINISHED CEILING WITH REMOVABLE BOTTOM COVER | C-ARM

(EXISTING) PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE. PROVIDE BOX WITH GENERATOR

(EXISTING) PULL BOX MOUNTED FLUSH IN FINISHED WALL AT FLOOR LINE. PROVIDE BOX WITH SYSTEM CABINET

(VERIFY) MAIN PANEL WITH MAIN BREAKER. LOCATION DETERMINED BY CUSTOMER/CONTRACTOR. BREAKER PANEL

(VERIFY) EMERGENCY OFF BUTTONS FOR CIRCUIT BREAKERS. EPO'S MUST PREVENT RESETTING EMERGENCY POWER OFF

WATERPROOF PLATE ON TOP OF CORED OPENING IN FLOOR.

TRANSITION TO SURFACE FLOOR DUCT AS REQUIRED.

BOX CAN BE INSTALLED INSIDE THIS PULL BOX.

EXIT. SEE PLAN FOR LOCATION.

LOCATION DETERMINED BY CUSTOMER

DUCTS. SEE PLAN FOR LOCATION.

WITH 6"Ø BUSHED OPENING.

SECTIONS WITH METAL DIVIDERS.

SECTIONS WITH METAL DIVIDERS.

SECTIONS WITH METAL DIVIDERS.

(VERIFY) CONDUIT FROM PANEL TO "MP"

(VERIFY) CONDUIT FROM "MP" TO "PU1"

(VERIFY) CONDUIT FROM "MP" TO "SC1"

(VERIFY) CONDUIT FROM "MP" TO "EPO"

(VERIFY) CONDUIT FROM "SC1" TO "WL"

(VERIFY) CONDUIT FROM "EPO" TO "EPO"

(VERIFY) CONDUIT FROM "SC1" TO "DS"

(EXISTING) CONDUIT FROM "P1" TO "PB1" (PU1)

(EXISTING) CONDUITS FROM "P1" TO "PB1" (PU1)

(EXISTING) CONDUIT FROM "P1" TO "PB1" (SC1)

(EXISTING) CONDUIT FROM "PB1" (SC1) TO "CU1"

(NEW) CONDUIT FROM "PB1" (SC1) TO "D1"

(NEW) CONDUIT FROM "PB1" (SC1) TO "D1"

(NEW) CONDUIT FROM "PB3" (IS) TO "D1"

(EXISTING) CONDUIT FROM 'PB1" (SC1) TO "PB3" (IS)

(EXISTING) CONDUIT FROM "PB3" (IS) TO "PB2" (CR1)

(EXISTING) CONDUIT FROM "PB3" (IS) TO "PB2" (CR1)

(EXISTING) CONDUIT FROM "T1" TO "B10" UNDER FLOOR

(EXISTING) CONDUITS FROM "PB1" (SC1) TO "PB2" (CR1)

(EXISTING) CONDUIT FROM "SC" (SC1) TO "T1" UNDER FLOOR

(EXISTING) CONDUIT FROM "P1" TO "CU1" FOR LIQUID COOLING HOSES

(NEW) CONDUIT FROM "CRB" TO "T1" UNDER FLOOR (VOLCANO S51 CABLE SET)

(EXISTING) CONDUIT FROM "CRB" TO "B10" UNDER FLOOR (CUSTOMER PATIENT MONITORING)

(NEW) CONDUIT FROM "PB3" (IS) TO "CUSTOMER MONITOR" (LIVE+REF VIDEO TO OEM OPTION) MAX. CONDUIT LENGTH 86'

SEE "POWER SCHEDULE

(EXISTING) BUSHED OPENING IN TOP OF HORIZONTAL DUCT "HD1".

(EXISTING) BUSHED OPENING IN VERTICAL DUCT "VD1" COVER AT FLOOR LINE.

PROVIDE 4" OCONDUIT FROM BOX TO FLUSH WITH FINISHED FLOOR, PROVIDE STAINLESS STEEL

(EXISTING) PULL BOX MOUNTED BELOW FINISHED FLOOR WITH REMOVABLE BOTTOM COVER. FOR CONTROL ROOM

DRAWN BY:

M. GONZALEZ



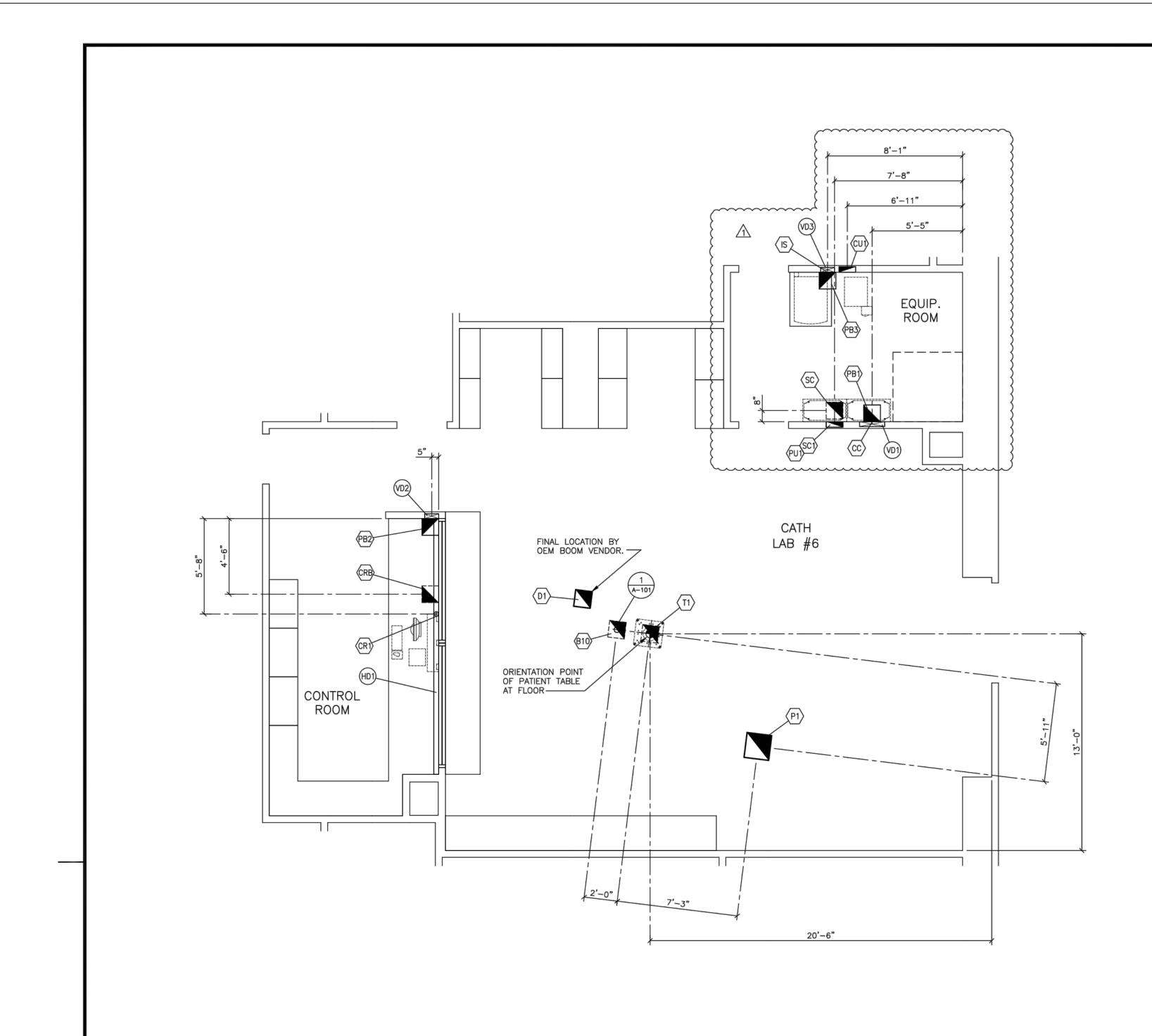
5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



NJRA Project # Construction Documents March 27, 2019

**SIEMENS** 

Siemens Equipment-Electrical



ELECTRICAL DIMENSION PLAN

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

CEILING HEIGHT REQUIREMENT 8 FT. – 11 IN.

PROJECT MANAGER: CHRISTOPHER THOMAS
FEL: (801) 209-6582

REVISED EQUIPMENT ROOM PER CUSTOMER REQUEST THIS TITLE BLOCK WITHOUT PROJECT #:

THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.

ADDITION OF OEM BOOMS PER CUSTOMER REQUEST

R-101R(A) VERSION DATED 09/24/18 APPROVED BY CUSTOMER FOR FINALS

DESCRIPTION

-ISSUE BLOCK-

INTERMOUNTAIN MEDICAL CENTER

5121 COTTONWOOD STREET, MURRAY, UT. 84107 CATH LAB #6 — ARTIS Q.ZEN CEILING

1803659

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SHEET OF B DRAWN BY:

M. GONZALEZ

SCALE: AS NOTED REF. #: 11/02/18

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

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

PHYSICIST TO SPECIFY RADIATION PROTECTION.

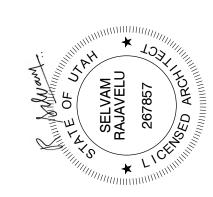
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ATTENTION:

NJRA Architects, Inc. 5272 S. College Drive, Suite 104 Murray, Utah 84123 801.364.9259

www.njraarchitects.com



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

		S	IEMENS SUPPLIED CABLES	
FROM	VIA	то	DESCRIPTION	REMARKS
P1	8, PB1, VD1	PU1	P1 LEFT SIDE	MAXIMUM LENGTH 41'
P1	9, PB1, VD1	PU1	(2) HIGH VOLTAGE CABLES P1 LEFT SIDE	MAXIMUM LENGTH 41'
P1	10, PB1, VD1	SC1	P1 LEFT SIDE	MAXIMUM LENGTH 37'
P1	11	CU1	FOR LIQUID COOLING HOSES (P1 LEFT SIDE)	MAXIMUM LENGTH 77'
SC1	VD1, PB1, 12, PB2, VD2, HD1	CR1	FOR CONTROL ROOM OPTIONS (CONTROL MODULES, FOOT SWITCH, DISPLAY, ECC)	MAXIMUM LENGTH 62'
SC1	VD1, PB1, 13	T1	NOT WITH OR TABLE	MAXIMUM LENGTH 45'
SC1	VD1, PB1, 14	CU1		MAXIMUM LENGTH 98'
SC1	BETWEEN CABINETS	PU1		MAXIMUM LENGTH 16'
SC1	VD1, PB1, 15, PB3, VD3	IS	62' CABLES SELECTABLE ON FACTORY CHECKLIST	MAXIMUM LENGTH 28'
SC1	VD1, PB1, 16	D1	OEM DISPLAY CONNECTION	MAXIMUM LENGTH 98'
SC1	VD1, PB1, 17	D1	OEM DISPLAY CONNECTION	MAXIMUM LENGTH 62'
IS	VD3, PB3, 18	D1	OEM DISPLAY CONNECTION	MAXIMUM LENGTH 75'
IS	VD3, PB3, 19, PB2, VD2, HD1	CR1		MAXIMUM LENGTH 61'
IS	VD3, PB3, 20, PB2, VD2, HD1	CR1		MAXIMUM LENGTH 61'
CRB	21	T1	VOLCANO IVUS (VOLCANO S51 CABLE SET)	MAXIMUM LENGTH 98'
T1	22	B10		
CRB	23	B10	CUSTOMER PATIENT MONITORING, ETC.	
IS	VD3, PB3, 24	CUSTOMER MONITOR	LIVE+REF VIDEO INTERFACE TO OEM (OPTION)	MAXIMUM LENGTH 110'

SIEMENS REMOTE SERVICE 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 DIÁGNOSTICS WITHOUT ADDITIONAL HARDWARE. PLEASE CONTACT SIEMENS REMOTE SERVICES (800-888-SIEM) TO DETERMINE IF THIS METHOD IS SUITABLE FOR CUSTOMER DMZ IMAGING DEVICE SINGLE HOST IP OR IP SUBNET LIST SIEMENS REMOTE | SERVICES DMZ | SRS ACCESS SERVER ROUTER CUSTOMER VPN SERVER

ARTIS Q	/Q.ZEN/ZEE	CEILING	MAXIMUM	CABLE	LENGTHS	(TYPICAL	EQUIPMENT)
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— — — — — — 45' (OPTION) – — — — -

PROCEDURE

ROOM

# POWER REQUIREMENTS MINIMUM POWER SUPPLY:

(Pu) (CC) (SC) (SC2)

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 | 162 KVA RATING: (RADIOGRAPHIC EXPOSURE) X-RAY GENERATOR (PU1) LONG-TIME 8 KVA RATING: (FLUOROSCOPY) SYSTEM CABINET (SC1) LONG-TIME LINE IMPEDANCE  $\leq$  120 (m $\Omega$ ) POWER QUALITY PARAMETERS

EQUIPMENT

ROOM

MAXIMUM LINE VOLTAGE VARIATION ±10% OF SYSTEM VOLTAGE PHASE IMBALANCE: FREQUENCY VARIATION: POWER SUPPLY NOTES: . INCOMING POWER SUPPLIES FOR SIEMENS EQUIPMENT SHOULD BE DEDICATED (BACK TO SOURCE), ISOLATED AND INSULATED FROM ANY OTHER EQUIPMENT SUCH AS ELEVATORS, GENERATORS, HVAC

2. SIEMENS HEALTHCARE REQUIRES THAT THE INCOMING POWER MEETS THE POWER QUALITY REQUIREMENTS.

# GROUNDING NOTES

EQUIPMENT GROUND CONDUCTOR TO COMPLY WITH THE FOLLOWING:

1) SIZED EQUIVALENT TO THE PHASE CONDUCTORS (FULL SIZED GROUND). 2) DERIVED FROM THE ELECTRICAL SERVICE, TRANSFORMER OR MAIN DISTRIBUTION PANEL FEEDING THE SIEMENS EQUIPMENT. 3) RUN IN THE SAME CONDUIT, TROUGH OR RACEWAY AS THE PHASE CONDUCTORS.

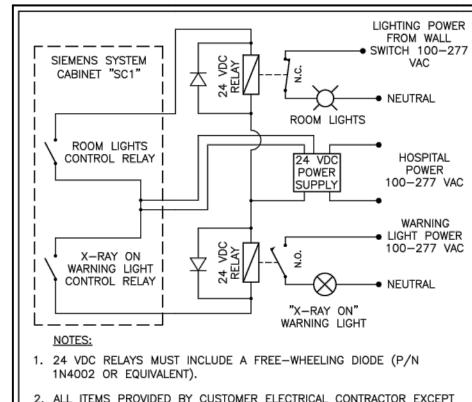
4) CONTINUOUS, WITH NO BREAKS OR USE OF CONDUIT, CHASSIS OR EARTH AS THE SOLE GROUNDING PATH. 5) BONDED TO CHASSIS AND/OR CONDUIT IN ACCORDANCE WITH THE NEC REQUIREMENTS. 6) MINIMIZE CONNECTIONS OR TERMINALS TO ENSURE CONTINUITY OVER THE LIFE OF THE INSTALLATION. 7) AS A NORM, THERE SHOULD NOT BE ANY CURRENT PRESENCE ON THE GROUND CONDUCTOR, BUT IT IS ACCEPTABLE TO HAVE <500mA DURING OPERATION OF THE IMAGING EQUIPMENT. 8) THERE MAY BE SOME APPLICATIONS WHICH REQUIRE AN

ISOLATED GROUND AS PER NEC 250-96B.

# TABLE POWER OUTLET SAFETY

ROOM

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.



. ALL ITEMS PROVIDED BY CUSTOMER ELECTRICAL CONTRACTOR EXCEPT CONTACTS INSIDE SIEMENS "SC1" CABINET (ITEMS INSIDE DOTTED

3. ALL WIRING THAT CONNECTS TO SIEMENS "SC1" CABINET MUST BE 14-18 AWG STRANDED WIRE. 4. 4 WIRES LABELED "24 VDC", "ROOM LIGHTS" AND "X-RAY ON" SHOULD BE SENT TO SIEMENS "SC1" CABINET. 5. 24 VDC RELAYS ARE TO BE SELECTED BY ELECTRICAL CONTRACTOR TO

HANDLE THE VOLTAGE AND AMPERAGE OF LIGHTING CURCUIT. 6. 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 \* THE SWITCH MUST BE PROVIDED WITH AN APPROPRIATE SYMBOL (OR DESIGNATION) FROM WHICH THE FUNCTION CAN BE RECOGNIZED.

٧	VARNING LIGHT/ROOM LIGHT SCHEMA	TIC
1	LIGHTING DETAIL	SCALE: NONE

AXIS IMAGE SYSTEM (REMOTE CONFIGURATION)
STANDARD:  LIVE DISPLAY 65' (VIA CR1) —  6'-6" MONITOR  ACE (KEYBOARD AND 65' (VIA CR1) —  MOUSE CONNECT TO ACE)
OPTIONS:  — 6'-6" → REFERENCE DISPLAY ← 65' (VIA CR1) — MONITOR
— 6'-6" → HAND SWITCH — 6'-6" → CONTROL MODULES
— 6'-6" → ECC —13' → EMERGENCY STOP
— 5'-6" → FOOT SWITCH — 6'-6" → DVD RECORDER ← 65'
5'-11"  TFT MONITOR FOR  -9'-10"  DVD RECORDER
CONTROL ROOM DISTRIBUTOR  CR1
2 CONTROL ROOM SYSTEM CONNECTIONS SCALE: NONE

NETWORK REQUIREMENT

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

A GIGABIT NETWORK IS REQUIRED FOR ADEQUATE IMAGE DATA

ACQUISITION.

FIREWALL

|--|

ATTENTION:

POWER SCHEDULE

— OPTIONAL TABLE
OUTLET POWER FEED.
CONTACT SIEMENS
PROJECT MANAGER.

\_\_\_+\_

SYSTEM

CABINET

MAIN PANEL WITH CIRCUIT BREAKERS FLUSH OR SURFACE

VOLTS PHASES NEUTRAL GROUND TOTAL WIRES

STEP-DOWN SINGLE-PHASE TRANSFORMER WITH PRIMARY AND SECONDARY FUSE PROTECTION FOR TABLE OUTLET POWER,

CONNECTED TO AN ADJACENT FLUSH WALL-MOUNTED 15A,

LEXAN HINGED COVER TO AVOID INADVERTENT MANUAL TRIP.

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. FPO MUST BE RESET BEFORE MAIN BREAKER CAN

125VAC UL 943 GFCI WITH BLANK FACE (NO CONTACT OPENINGS OR NEMA CONFIGURATION) WITH LED INDICATION. PUSH-TO-TEST AND PUSH-TO-RESET BUTTONS, AND A CLEAR

1) ALL WIRES MUST BE SAME SIZE.

NOTE: UNLESS OTHERWISE NOTED, ALL BREAKERS WILL BE 80% RATED

RESUME OPERATION, CONTACTS AND WIRING

CONFIGURATION TO BE DESIGNED BY ELECTRICAL

THE EPOs 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

MEDICAL EQUIPMENT IS POWERED. THE CUSTOMER IS

THE FINAL DETERMINATION CONSIDERING ALL SITE

CONDITIONS AND REGULATORY FACTORS.

ALL ITEMS LISTED IN THIS SCHEDULE SHALL BE SUPPLIED AND

POWER QUALITY

POOR POWER WILL ALTER EQUIPMENT PERFORMANCE

CONTRACTOR BE RESPONSIBLE FOR TESTING AND VERIFYING THAT THE EQUIPMENT POWER SUPPLY COMPLIES WITH THE SIEMENS

IT IS IN THE CUSTOMER'S INTEREST THAT THE ELECTRICAL

SOLELY RESPONSIBLE FOR THE IMPLEMENTATION OF TH

EPOs AND THEIR ASSOCIATED CIRCUITS AND MUST MAKE

BREAKER AMPS: 15 (FOR STEP-DOWN XFMR "XF1")

750VA, 480V PRIMARY, 120V GROUNDED SECONDARY

3 0 1 4 (NOTE 1)

5 (NOTE 1)

MAIN BREAKER MUST HAVE TRIPPING DEVICE SO WHEN ANY EPO IS PRESSED, THE MAIN BREAKER TRIPS.

ALL CONDUITS AND WIRES
SIZES MUST BE DETERMINED
BY THE ELECTRICAL
ENGINEER OF RECORD PER
N.E.C AND TO MAINTAIN

POLY. A100 CABINET

MAIN BREAKER AMPS: 125

BREAKER AMPS: 100 (FOR PU1)

BREAKER AMPS: 30 (FOR SC1)

480 |1 (L1,L2)

EPO VARIES NOTE 1 - EPO CIRCUIT #1

ENGINEER OF RECORD.

INSTALLED BY CUSTOMER/CONTRACTOR.

SPECIFICATIONS.

MAXIMUM WIRE SIZE FOR TERMINAL LUGS IS #3/0 AWG FOR "PU1" CABINET.

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.

-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.

ARTIS Q/Q.ZEN/ZEE CEILING REV. 19 **SIEMENS** INTERMOUNTAIN MEDICAL CENTER 5121 COTTONWOOD STREET, MURRAY, UT. 84107 ADDITION OF OEM BOOMS PER CUSTOMER REQUEST CATH LAB #6 - ARTIS Q.ZEN CEILING REVISED EQUIPMENT ROOM THE USE OR REPRODUCTION OF PROJECT #: THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW. PER CUSTOMER REQUEST 1803659 R-101R(A) VERSION DATED 09/24/18 APPROVED BY CUSTOMER FOR FINALS DRAWN BY:
M. GONZALEZ ALL RIGHTS ARE RESERVED. DESCRIPTION SCALE: REF. #: 30219677 -ISSUE BLOCK-

Siemens Equipment-Electrical

NJRA Project #

alt

Construction Documents March 27, 2019

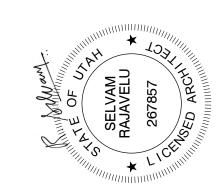
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- THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED

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



NJRA Architects, Inc. 5272 S. College Drive, Suite 104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



59°F-86°F (RECOMMENDED TEMPERATURE 70°F) 50°F-86°F (RECOMMENDED TEMPERATURE 70°F) 50°F-86°F (RECOMMENDED TEMPERATURE 70°F) 59°F-86°F (RECOMMENDED TEMPERATURE 70°F) 59°F-86°F (RECOMMENDED TEMPERATURE 70°F)

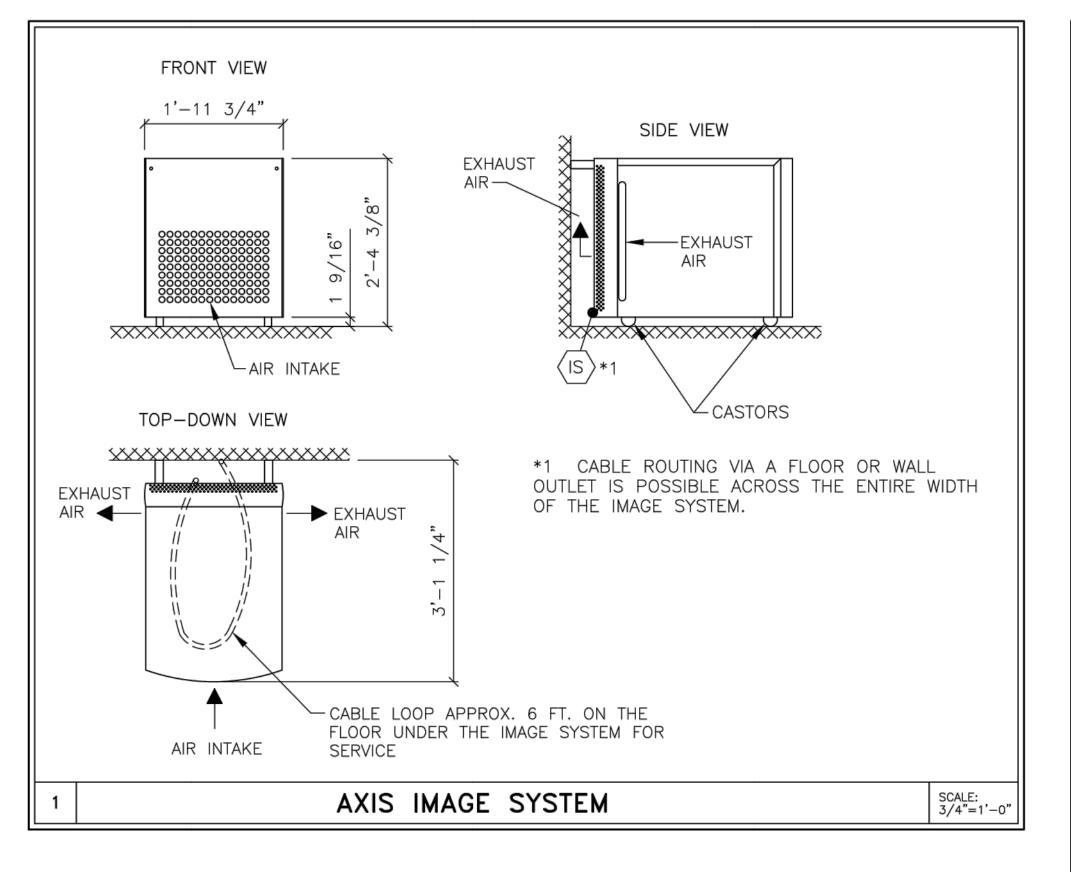
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NJRA Project # Construction Documents March 27, 2019

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Siemens Equipment-Mechanical



H	EAT L	OAD	S	
FOR BTU'S OF SEIMENS LEGEND, SHEET A-101.	EQUIPMENT,	REFER 1	TO THE	EQUIPMENT

ASSEMBLY ∠<sub>DRAIN</sub> OUT (VIA FILTER) CLEARANCE 7 TOP AIR EXHAUST \*1 FOR AIR INTAKE/EXHAUST \*2 FOR COOLING HOSES NOTE: THIS UNIT IS A SELF-CONTAINED, CLOSED LOOP, TAP WATER-FILLED SYSTEM SERVICED BY SIEMENS. NO OUTSIDE CHILLED WATER SUPPLY IS REQUIRED. PROVIDE 2.5 GALLON SPILLAGE PROTECTION AS REQUIRED MAXIMUM ADMISSIBLE HEIGHT DIFFERENCE AIR INTAKE BETWEEN COOLER AND THE X-RAY TUBE IS +/- 32 FT. PROVIDE HOSE HOLDER FOR EXCESS COOLING HOSE STORAGE. SCALE: 1"=1'-0" TUBE COOLING UNIT

5

RELATIVE HUMIDITY:

AIR FLOW VOLUME:

TEMPERATURE RANGE: RELATIVE HUMIDITY:

TEMPERATURE RANGE:

RELATIVE HUMIDITY:

AIR FLOW VOLUME:

RELATIVE HUMIDITY: MAX. TEMP. GRADIENT:

AIR FLOW VOLUME:

RELATIVE HUMIDITY:

AIR FLOW VOLUME:

SHOCKS:

**VIBRATIONS:** 

TEMPERATURE RANGE:

ATMOSPHERIC PRESSURE:

MAX. TEMP. GRADIENT: 18° F/HR

MAX. NOISE GENERATION: 53 dB(A)

MAX. TEMP. GRADIENT: 9° F/HR

MAX. NOISE GENERATION: 55 dB(A)

MAX. NOISE GENERATION: 48 dB(A)

MAXIMUM TEMPERATURE GRADIENT: 9° F/HR

EXAMINATION AND CONTROL TEMPERATURE RANGE:

SYSTEM CONTROL CABINET TEMPERATURE RANGE:

AXIS IMAGE SYSTEM

POLYDOROS A100

TUBE COOLING UNIT

STAND WITH FLAT PANEL

GENERATOR

ENVIRONMENTAL CONDITIONS

FOR SYSTEM WITH FLAT PANEL DETECTOR

20% - 75% NON-CONDENSING

20%-75% NON CONDENSING

20%-75% NON CONDENSING

FOR SYSTEM WITH IMAGE INTENSIFIER

20% - 75% NON-CONDENSING

FOR SYSTEM WITH FLAT PANEL DETECTOR

41°F-86°F (RECOMMENDED TEMPERATURE 70°F)

700hPa - 1040hPa

MAXIMUM 10G/16MS

MAXIMUM 0.1G/10-200HZ

500 ĆFM

94 ĆFM

9°F/HR

294 CFM

FROST FREÈ

MAX. NOISE GENERATION: 55 dB(A) AT 50 HZ, 59 dB(A) AT 60 HZ

559 CFM

CEILING HEIGHT REQUIREMENT 8 FT. - 11 IN.

PROJECT MANAGER: CHRISTOPHER THOMAS
FEL: (801) 209-6582 SIEMENS INTERMOUNTAIN MEDICAL CENTER 5121 COTTONWOOD STREET, MURRAY, UT. 84107 ADDITION OF OEM BOOMS CATH LAB #6 - ARTIS Q.ZEN CEILING PER CUSTOMER REQUEST REVISED EQUIPMENT ROOM PER CUSTOMER REQUEST THIS TITLE BLOCK WITHOUT PROJECT #: THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW. 1803659 R-101R(A) VERSION DATED 09/24/18 APPROVED BY CUSTOMER FOR FINALS DRAWN BY:
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ATTENTION:

PHYSICIST TO SPECIFY RADIATION PROTECTION.

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

-ISSUE BLOCK-

SCALE: REF. #: 30219677