

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16

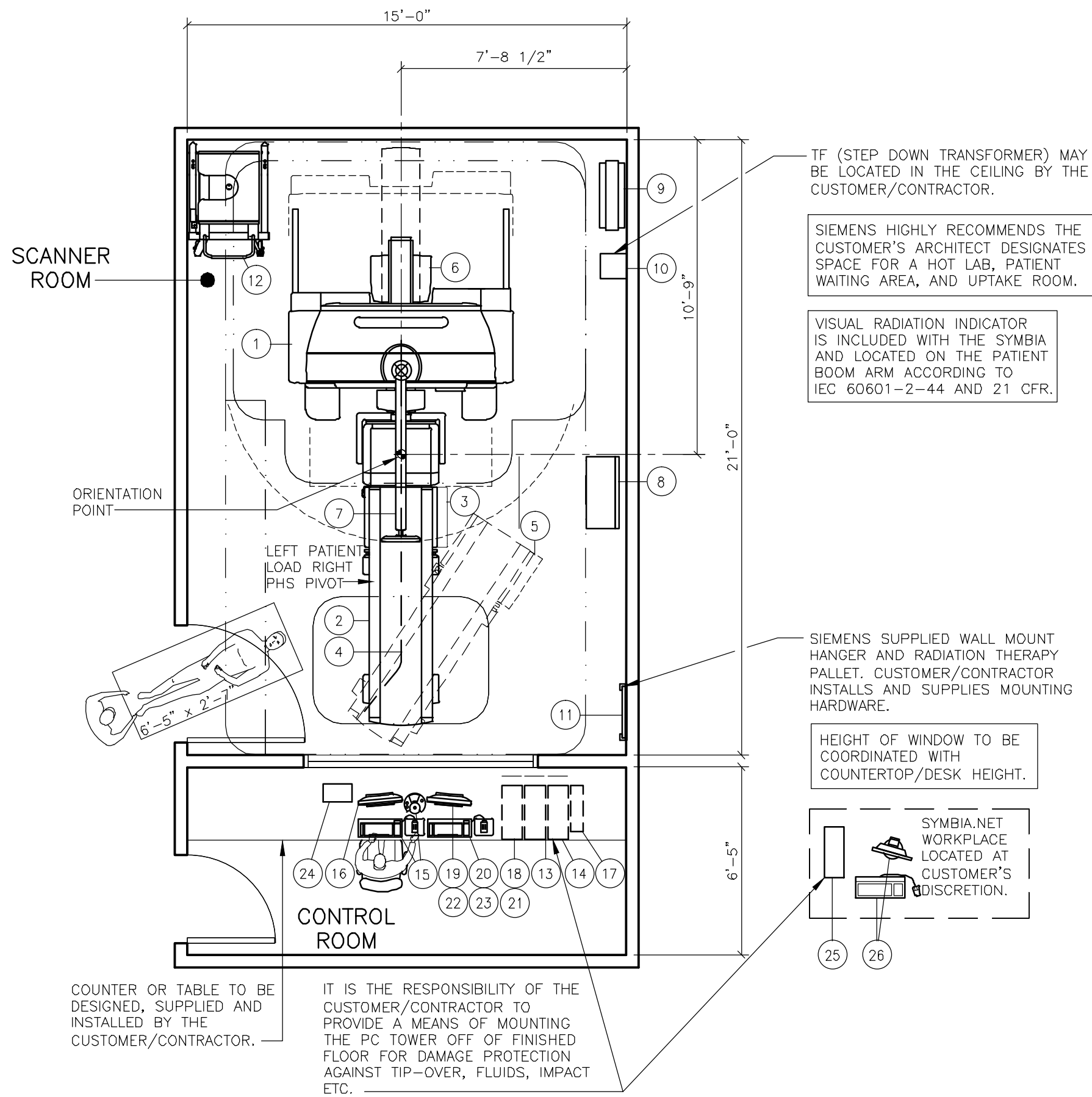


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Typical Drawing #: 13041

SIEMENS
SIEMENS MEDICAL SOLUTIONS
51 Valley Stream Parkway
Malvern, PA 19355
www.usa.siemens.com/medical



ARCHITECTURAL EQUIPMENT PLAN

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

ROOM MEASUREMENTS

ALL ROOM MEASUREMENTS AND ROOM DETAIL SPECIFICATIONS MUST BE VERIFIED ON SITE PRIOR TO BEGINNING ANY CONSTRUCTION WORK.

CASEWORK & ACCESSORY NOTES

- ALL CASEWORK IS EITHER EXISTING OR IS TO BE DESIGNED, DETAILED, FURNISHED AND INSTALLED BY THE CUSTOMER AND/OR CONTRACTOR. FOLLOW DESIGN RECOMMENDATIONS INCLUDED HEREWITH, AS THEY ARE ESSENTIAL FOR THE SUCCESSFUL INSTALLATION & OPERATION OF THE SIEMENS EQUIPMENT.
- ALL FURNITURE (CHAIRS, ETC.) FOR THE CONTROL ROOM ARE TO BE PROVIDED BY THE CUSTOMER.

RADIATION SAFETY

LEAD OR EQUIVALENT SHIELDING MAY BE REQUIRED IN THE WALLS OF THE SCANNER ROOM, HOTLAB AND/OR PATIENT PREPARATION AREAS. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO VERIFY WITH THE SITE'S RADIATION SAFETY OFFICER THAT RADIATION DOSE RATES FROM THE SPECT PATIENT AND/OR ISOTOPE WILL NOT EXCEED LOCAL RADIATION SAFETY GUIDELINES IN THE ROOM ADJACENT TO SCANNER, HOTLAB, AND/OR PATIENT PREPARATION AREAS.

IMPROPER SHIELDING MAY AFFECT CAMERA'S PERFORMANCE.

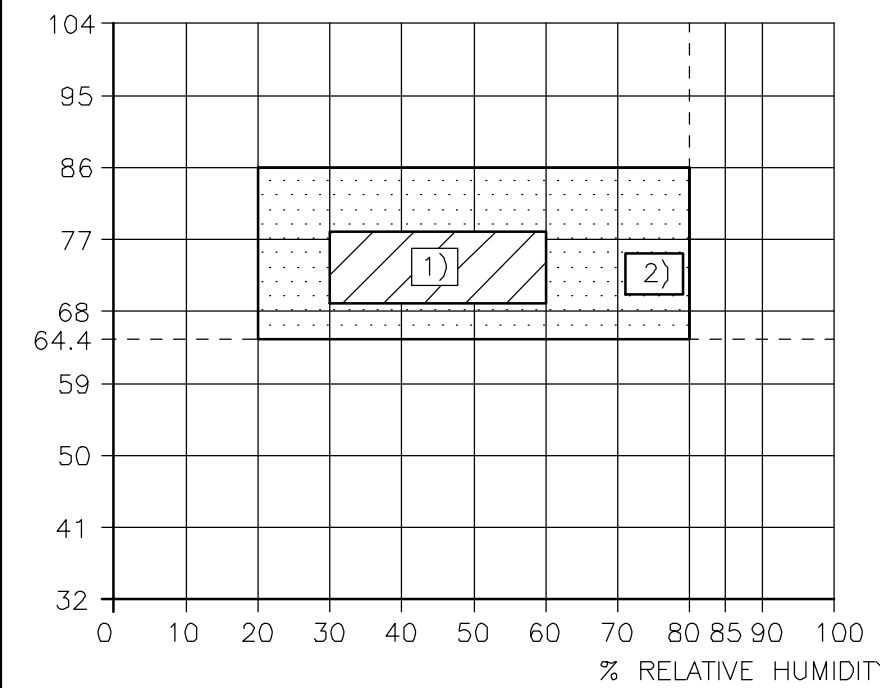
NOISE LEVEL

SYSTEM COMPONENT	DECIBEL LEVEL (AT 3'-3" DISTANCE)
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16 GANTRY	68
FRONT PHS (PATIENT TABLE)	60
UPS FOR IMS	<45

1) NOISE DEPENDS ON THE ROOM TEMPERATURE AND THE PROCESSOR LOAD.

ENVIRONMENTAL REQUIREMENTS

TEMPERATURE (°F)



- RECOMMENDED OPERATING CONDITIONS.
- REQUIRED OPERATING CONDITIONS.

TEMPERATURE, HUMIDITY, DUST, AIR CONTAMINATION:
REFER TO THE CLIMATOGRAM ABOVE FOR THE PERMITTED CLIMATE RANGE.

THE MAXIMUM TEMPERATURE GRADIENT IS 8°F PER HOUR.

THE OPTIMAL ENVIRONMENT FOR THE SCANNER ROOM AND THE SYSTEM IS 65°F-86°F (± 8°F/HR.) WITH A RELATIVE HUMIDITY OF 20%-80% NON-CONDENSING. THE OPTIMAL ENVIRONMENT FOR THE CONTROL ROOM 75°F (± 8°F/HR.) WITH A RELATIVE HUMIDITY OF 20%-80%, NON-CONDENSING. TEMPERATURE RANGES FOR THE SCANNER ROOM AND CONTROL CANNOT BE GUARANTEED IN ALL SEASONS OF THE YEAR, AN APPROPRIATE AIR-CONDITIONING SYSTEM MUST BE INSTALLED ON-SITE BY THE CUSTOMER/CONTRACTOR.

FOR EXTERNAL AIR SUPPLY (FRESH AIR) IT IS RECOMMEND THAT COURSE FILTERS OF THE CLASS EU3 TO EU4 BE USED ON-SITE TO FILTER OUT DUST PARTICLES >10µm.

THE VENTILATION SHOULD ENSURE THAT AGGRESSIVE POLLUTANTS ARE PREVENTED FROM ENTERING THE ROOM. THE ROOM AIR SHOULD BE PROTECTED AGAINST CONTAMINATION BY HYDROGEN SULFIDE, EVEN IN SMALL AMOUNTS. THE MOST WELL KNOWN SOURCES OF HYDROGEN SULFIDE INCLUDE: EXHAUST FUMES AND WASTE WATER FROM DEVELOPERS, EXPOSED SEWER DRAINS, EXHAUST FUMES FROM DIESEL POWER UNITS. IF A DANGER OF SUCH CONTAMINATION EXISTS, CORRECTIVE ACTIONS HAVE TO BE TAKEN E.G.: EXTRACTOR FANS, SIPHON, AND MODIFICATION OF VENTILATION INTAKE.

RADIOACTIVE SOURCES

THE FOLLOWING RADIOACTIVE SOURCES ARE REQUIRED FOR ALL SYMBIA INTEVO SYSTEMS AT THE TIME OF INSTALLATION FOR CALIBRATION:

- 10-20 mCi Co57 (COBALT 57) OR LIQUID FILLED Tc99 (TECHNETIUM 99) SHEET SOURCE (FOR EXTRINSIC FLOOD).
- POINT SOURCE 30-35 uCi Tc99 (FOR INTRINSIC FLOODS, TUNING AND PEAKING).
- QUANTITY OF 5 - 1 mCi Tc99 POINT SOURCES (FOR MHR CALIBRATION).
- QUANTITY OF 10 Tc99 POINT SOURCES WITH COMBINED ACTIVITY OF ALL SOURCES 5 mCi TO 20 mCi (FOR NM/CT FOV).

IT IS CUSTOMER'S RESPONSIBILITY TO OBTAIN THESE SOURCES PRIOR TO INSTALLATION. CO-57 RECTANGULAR FLOOD SHEET SOURCE MAY BE ORDERED FROM SIEMENS (ASK SIEMENS SALES ASSOCIATE). Tc99 MUST OBTAINED THROUGH CUSTOMER'S LOCAL RADIOACTIVE SOURCE PROVIDER.

THESE RADIOACTIVE SOURCES AREA NEEDED TO COMPLETE CALIBRATION OF EQUIPMENT. PLEASE NOTE SOURCE PROVIDERS WILL NOT SHIP SOURCES TO SITE WITHOUT A VALID RAM LICENSE.

RAM LICENSE

RAM LICENSE NEEDS TO BE APPLIED FOR THROUGH GOVERNMENT AGENCY AS EARLY AS POSSIBLE. PLEASE ADDRESS WITH YOUR RSO (RADIATION SAFETY OFFICER).

RAM LICENSE MUST BE OBTAINED NO LATER THAN 4 WEEKS AHEAD OF SCHEDULED DELIVERY. DELAY OF INSTALLATION MAY OCCUR IF SITE HAS NOT OBTAINED RAM LICENSE AT THIS TIME. RADIOACTIVE SOURCES NEEDED TO COMPLETE CALIBRATION OF EQUIPMENT WILL NOT BE SHIPPED TO SITE WITHOUT VALID RAM LICENSE.

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

EQUIPMENT LEGEND

NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES)			REMARKS
					W	D	H	
1	SYMBIA INTEVO EXCEL, INTEVO 2 GANTRY W/COLLIMATORS	Ⓢ	7,413	21,161	93	84 1/2	90 1/2	6,485 BTU ON STANDBY, WORST CASE WEIGHT 7,963 LBS. WITH (2) HIGH ENERGY COLLIMATORS AT 275 LBS. EACH
1	SYMBIA INTEVO 6, INTEVO 16 GANTRY W/COLLIMATORS	Ⓢ	7,413	24,574	93	84 1/2	90 1/2	6,826 BTU ON STANDBY, WORST CASE WEIGHT 7,963 LBS. WITH (2) HIGH ENERGY COLLIMATORS AT 275 LBS. EACH
2	FRONT PHS	Ⓢ	2,512	-	31 1/8	97 1/2	23 3/16	MAXIMUM HEIGHT 41"
3	SYMBIA INTEVO-ACC WITH AQC - PRODUCTIVITY PACKAGE (OPTION)	Ⓢ	684	-	31 1/8	97 1/2	23 3/16	WEIGHT CALCULATED WITH 1 SET LOW AND MEDIUM ENERGY COLLIMATORS.
4	UNDER THE FLOOR PHS CABLE STANDARD	Ⓢ	-	-	-	-	-	UNDER FLOOR
5	PHS STANDARD PIVOT	Ⓢ	-	-	-	-	-	STANDARD PIVOT - 33 DEGREES
6	REAR PHS WITH SNAC	Ⓢ	415.3	-	-	-	-	ON FLOOR
7	PATIENT BOOM SWING ARM	Ⓢ	-	-	-	-	-	-
8	LINE CONNECTION BOX	Ⓢ	227	1,365	29 1/2	11 3/4	32	ON FLOOR
9	UPS FOR SPECT (OPTION)	Ⓢ	120	1,024	10	28 3/8	17 7/8	ON FLOOR
10	TRANSFORMER REQUIRED WITH UPS FOR SPECT (SPS) (OPTION)	Ⓢ	-	-	-	-	-	CUSTOMER SUPPLIED PRIOR TO INSTALLATION. SEE POWER SCHEDULE
11	RTP PALLET (OPTION)	Ⓢ	24.5	-	21	10	80 1/2	SIEMENS/CUSTOMER SUPPLIED WALL MOUNT
12	COLLIMATOR CART (EMPTY) (OPTION)	Ⓢ	400	-	47 3/8	32 5/8	47 1/2	WORST CASE 1330 LBS. WITH 1 SET HE AND 1 SET ME
13	IMAGE CONSTRUCTION SYSTEM FOR SYNGO MI (ACQUISITION) WORKPLACE	Ⓢ	66	2,389	8	22	18	OFF FLOOR.
14	IMAGE RECONSTRUCTION SYSTEM FOR SYNGO MI (ACQUISITION) WORKPLACE	Ⓢ	66	*	8	22	18	OFF FLOOR. *BTU'S INCL. WITH ICS
15	CONTROL AND KEYBOARD	Ⓢ	-	-	-	-	-	ON CUSTOMER'S COUNTER
16	18" MONITOR	Ⓢ	31	-	18 3/8	2 5/8	14 13/16	ON CUSTOMER'S COUNTER
17	SYNGO MI (ACQUISITION) WORKPLACE UPS FOR IMS STANDARD COMPONENT	Ⓢ	70	-	5	19	17 1/4	OFF FLOOR.
18	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE - INTEVO EXCEL (OPTION)	Ⓢ	55	*	8	20 3/4	18	OFF FLOOR. *BTU'S INCL. WITH ICS
19	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE MONITOR - INTEVO EXCEL (OPTION)	Ⓢ	31	-	18 3/8	2 5/8	14 13/16	ON CUSTOMER'S COUNTER
20	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE KEYBOARD - INTEVO EXCEL (OPTION)	Ⓢ	-	-	-	-	-	ON CUSTOMER'S COUNTER
21	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE - STANDARD INTEVO 2, INTEVO 6, INTEVO 16	Ⓢ	55	*	8	20 3/4	18	OFF FLOOR. *BTU'S INCL. WITH ICS
22	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE MONITOR - STANDARD INTEVO 2, INTEVO 6, INTEVO 16	Ⓢ	31	-	18 3/8	2 5/8	14 13/16	ON CUSTOMER'S COUNTER
23	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE KEYBOARD - STANDARD INTEVO 2, INTEVO 6, INTEVO 16	Ⓢ	-	-	-	-	-	ON CUSTOMER'S COUNTER
24	DVD (OPTION)	Ⓢ	-	-	-	-	-	ON CUSTOMER'S COUNTER
25	SYMBIA.NET WORKPLACE CPU (OPTION)	Ⓢ	51	1,400	8	21	17 1/2	OFF FLOOR
26	SYMBIA.NET WORKPLACE KEYBOARD AND MONITOR (OPTION)	Ⓢ	31	*	17 5/8	18 5/16	17	*BTU'S INCL. WITH SNW CPU

MAGNETIC FIELD PRECAUTIONS

THE PRESENCE OF MAGNETIC FIELDS IN THE VICINITY OF EQUIPMENT MAY HAVE AN ADVERSE EFFECT. IT IS THE CUSTOMER'S RESPONSIBILITY TO VERIFY THAT THE FOLLOWING VALUES ARE NOT EXCEEDED.

MAXIMUM ALLOWABLE MAGNETIC FIELD	DEVICES
1.0mT (10 GAUSS)	COMPUTERS, MAGNETIC DISK DRIVES
0.2mT (2 GAUSS)	SIEMENS CT PORTION OF SYMBIA SIEMENS CT SCANNERS
0.15mT (1.5 GAUSS)	COLOR MONITOR (FOR LIQUID CRYSTAL DISPLAYS ONLY)
0.1mT (1.0 GAUSS AC OR DC)	SIEMENS HAS ESTABLISHED THE UPPER LIMITS OF MAGNETIC FIELD EXPOSURE FOR THE SYMBIA DETECTORS
MAGNETIC FIELDS SHOULD BE MEASURED PRIOR TO DELIVERY.	

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.

FINISHED ROOM HEIGHT

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8'-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16, WITH CEILING MOUNTED COMPONENT OTHER THAN RADIATION ON LAMP	MINIMUM 8'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT BOOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

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.

ARCHITECTURAL NOTES

- ALL PRELIMINARY EQUIPMENT LAYOUTS SUBMITTED BY SIEMENS MEDICAL SOLUTIONS, INC. (SMS HEREAFTER) ARE BASED ON THE RECOMMENDED SPACE NECESSARY FOR THE OPERATION AND SERVICEABILITY OF THE EQUIPMENT BEING PROPOSED. SMS WILL NOT SUBMIT AN EQUIPMENT LAYOUT THAT IS NOT IN THE BEST INTEREST OF BOTH THE CUSTOMER AND SMS. ALL EQUIPMENT LAYOUTS ARE BASED EITHER ON AN ACTUAL SITE LOCATION SURVEY OR ARCHITECTURAL DRAWINGS SUPPLIED TO SMS. SMS WILL NOT BE RESPONSIBLE FOR ANY ALTERATIONS THAT ENCRDACH WITHIN DESIGNATED SAFETY AND SERVICE CLEARANCE ZONES AS INDICATED ON DRAWINGS (IE. PIPE CHASES, VENTILATION DUCTS, CASEWORK, AND SOFFITS, ETC.) MADE BY THE CUSTOMER OR REQUIRED BY A CUSTOMER'S ARCHITECTURAL FIRM ONCE PRELIMINARY DRAWINGS HAVE BEEN SUBMITTED AND APPROVED. DO NOT ALTER ANY SPECIFICATIONS AND/OR DIMENSIONS WITHOUT CONTACTING AND RECEIVING WRITTEN CONFIRMATION FROM SMS PROJECT MANAGER.
- SMS IS NOT AN ARCHITECTURAL OR ENGINEERING FIRM. DRAWINGS SUPPLIED BY SMS ARE NOT CONSTRUCTION DRAWINGS. THEREFORE, THESE DRAWINGS ARE TO BE USED ONLY FOR INFORMATION TO COMPLEMENT ACTUAL CONSTRUCTION DRAWINGS AVAILABLE FROM A CUSTOMER APPOINTED ARCHITECTURAL REPRESENTATIVE OR A CUSTOMER'S ENGINEERING DESIGN GROUP. THE CUSTOMER'S ARCHITECT AND GENERAL CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE CODES AND PROFESSIONAL DESIGN REQUIREMENTS.
- THE CUSTOMER IS RESPONSIBLE FOR ALL ROOM AND AREA PREPARATION COSTS, PROFESSIONAL FEES, PERMITS, REPORTS, AND INSPECTION FEES.
- EQUIPMENT WARRANTIES, EXPRESSED OR IMPLIED ON THE PART OF SMS SHALL BE CONTINGENT UPON STRICT COMPLIANCE WITH THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL AND RECOMMENDATIONS AND REQUIREMENTS CONTAINED IN THESE DRAWINGS. UNLESS SPECIFIED OTHERWISE.
- ALL DIMENSIONS SHOWN ARE TAKEN FROM FINISHED SURFACES UNLESS SPECIFIED OTHERWISE.
- 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.
- SMS SHALL BE RESPONSIBLE FOR SMS EQUIPMENT INSTALLATION AND CALIBRATION, CONNECTION AND INSTALLATION OF SMS PROVIDED CABLES, AND CONNECTION OF CONTRACTOR PROVIDED WIRES TO SMS 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 JOB SUPERVISION TO BE PROVIDED BY SMS. 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.
- THE CUSTOMER SHALL VERIFY WITH SMS PROJECT MANAGER FINAL INSTALLATION DRAWINGS THE LOCATIONS AND TRAVEL OF ALL ANCILLARY EQUIPMENT TO BE CEILING OR WALL MOUNTED (IE: 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.).
- 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 SMS EQUIPMENT AND ANY ASSOCIATED SUPPORT APPARATUS.

ENVIRONMENTAL/POWER AUDIT

AS AN INDICATION OF OUR COMMITMENT TO QUALITY, SIEMENS MAY, AT NO COST TO YOUR FACILITY, CHECK THE OPERATING ENVIRONMENT AFTER SYSTEM TURNOVER TO DETERMINE IF THE REQUIREMENTS FOR TEMPERATURE, HUMIDITY, POWER, AND GROUNDING ARE MET AS PER SIEMENS' PUBLISHED SPECIFICATIONS. SIEMENS WILL GENERATE A WRITTEN REPORT DETAILING THE ENVIRONMENTAL AND ELECTRICAL CONDITION OF THE SITE AFTER TURNOVER AND WILL SHARE THE REPORT WITH YOU. IN THE EVENT WE IDENTIFY ANY ENVIRONMENTAL/POWER DEFICIENCIES AT THE SITE, YOUR FACILITY WILL BE REQUESTED TO CORRECT DEFICIENCIES WITHIN THIRTY (30) DAYS. SHOULD ANY CORRECTIVE ACTIONS BE NECESSARY, AND UPON REQUEST, SIEMENS WILL PROVIDE GUIDANCE IN AN EFFORT TO FACILITATE RESOLUTION. PLEASE BE ADVISED THAT AFTER 30 DAYS, NOTICE ANY REPAIR OR MAINTENANCE SERVICES NECESSITATED BY SEVERE DEFICIENCIES WILL FALL OUTSIDE YOUR WARRANTY COVERAGE.

RESOURCE LIST (SMS USE ONLY)

DESIGNATION	PG NUMBER	DATE
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16	NM02-001.891.11.03.02	10/13

SYMBIA INTEVO
REV 2

SIEMENS

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16 TYPICAL FINAL DRAWING SET

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.

SCALE: AS NOTED

REF. #:

PROJECT #:

13041

SHEET 1 OF 7

DATE:

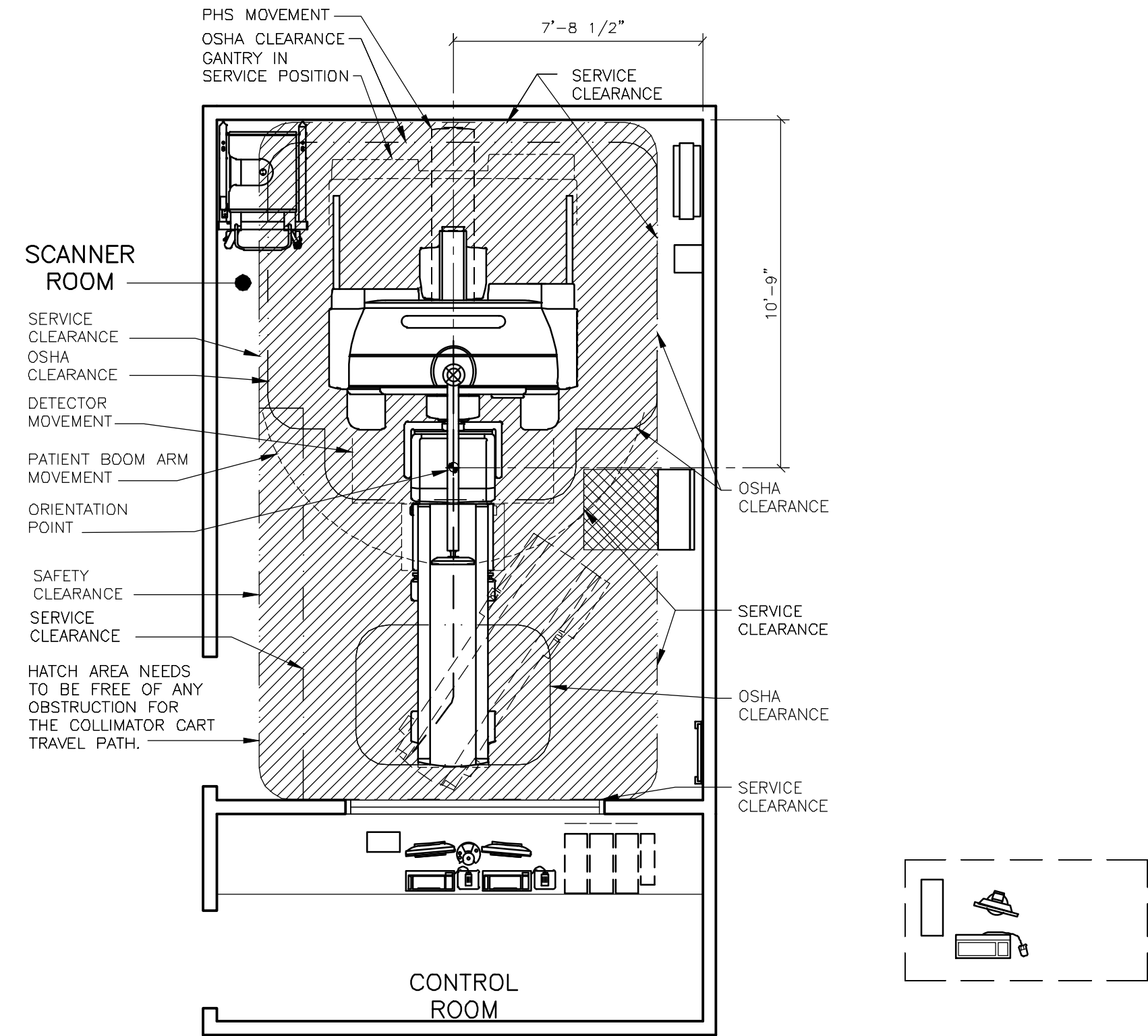
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A-101

DRAWN BY:
C. MC DONNELL

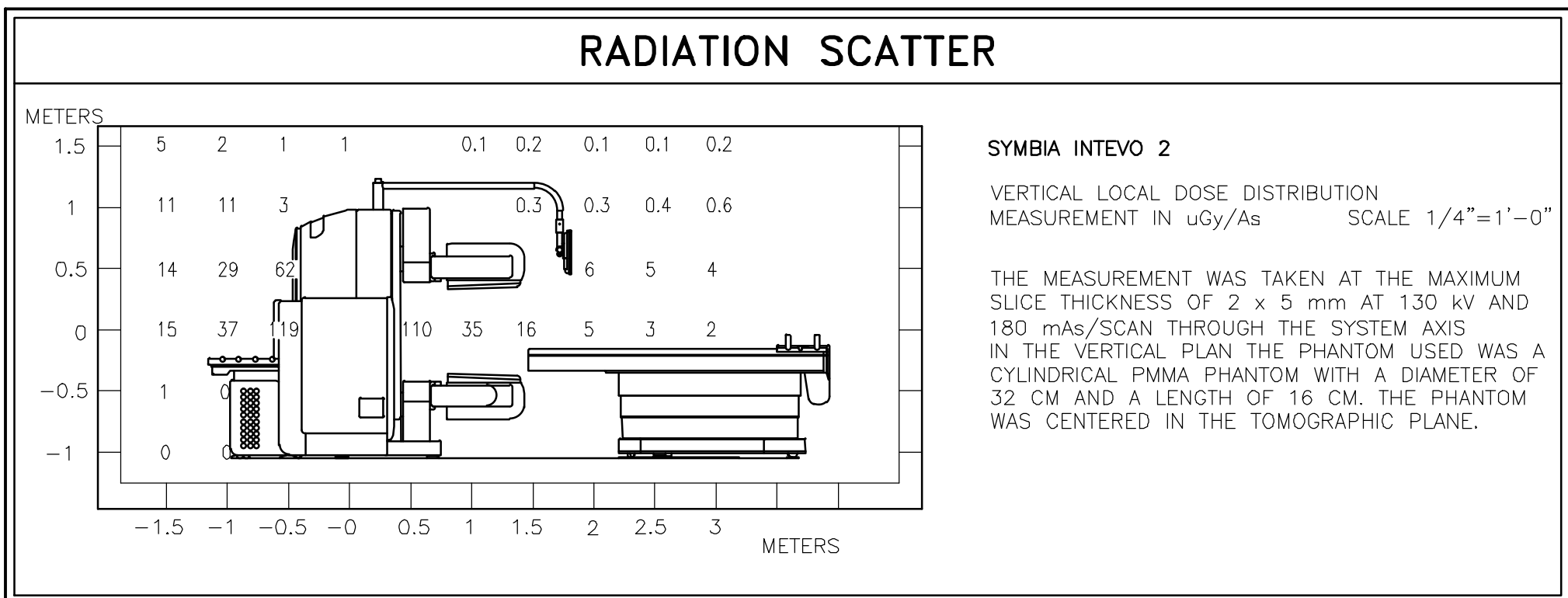
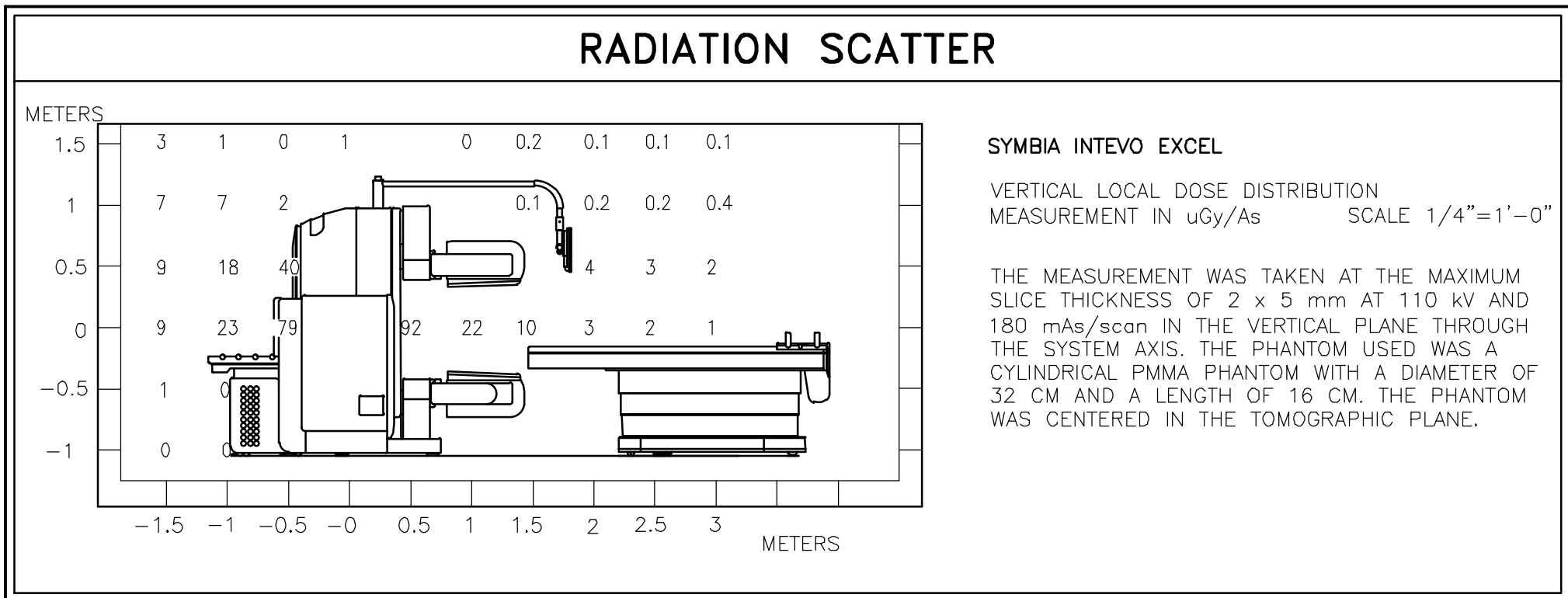
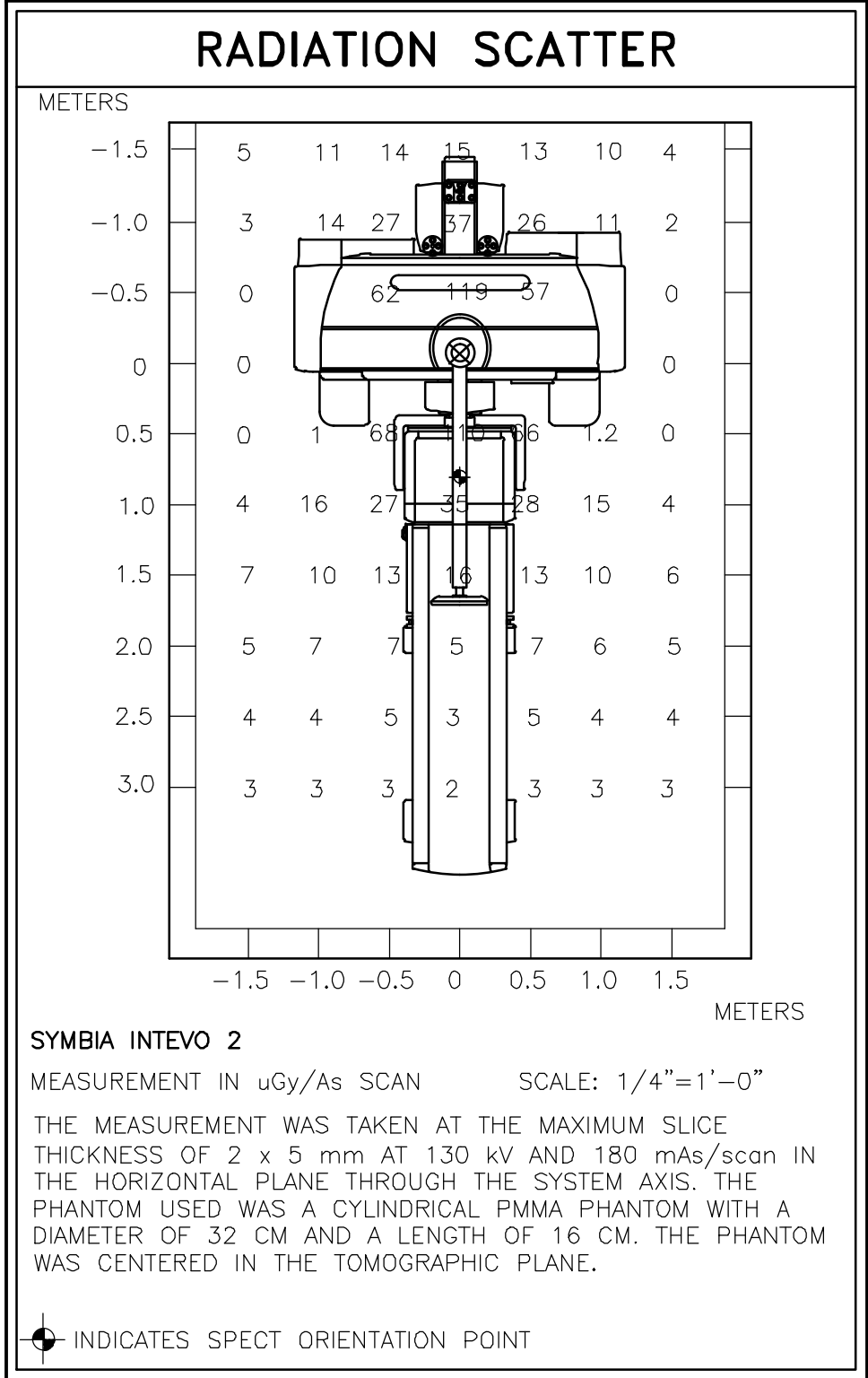
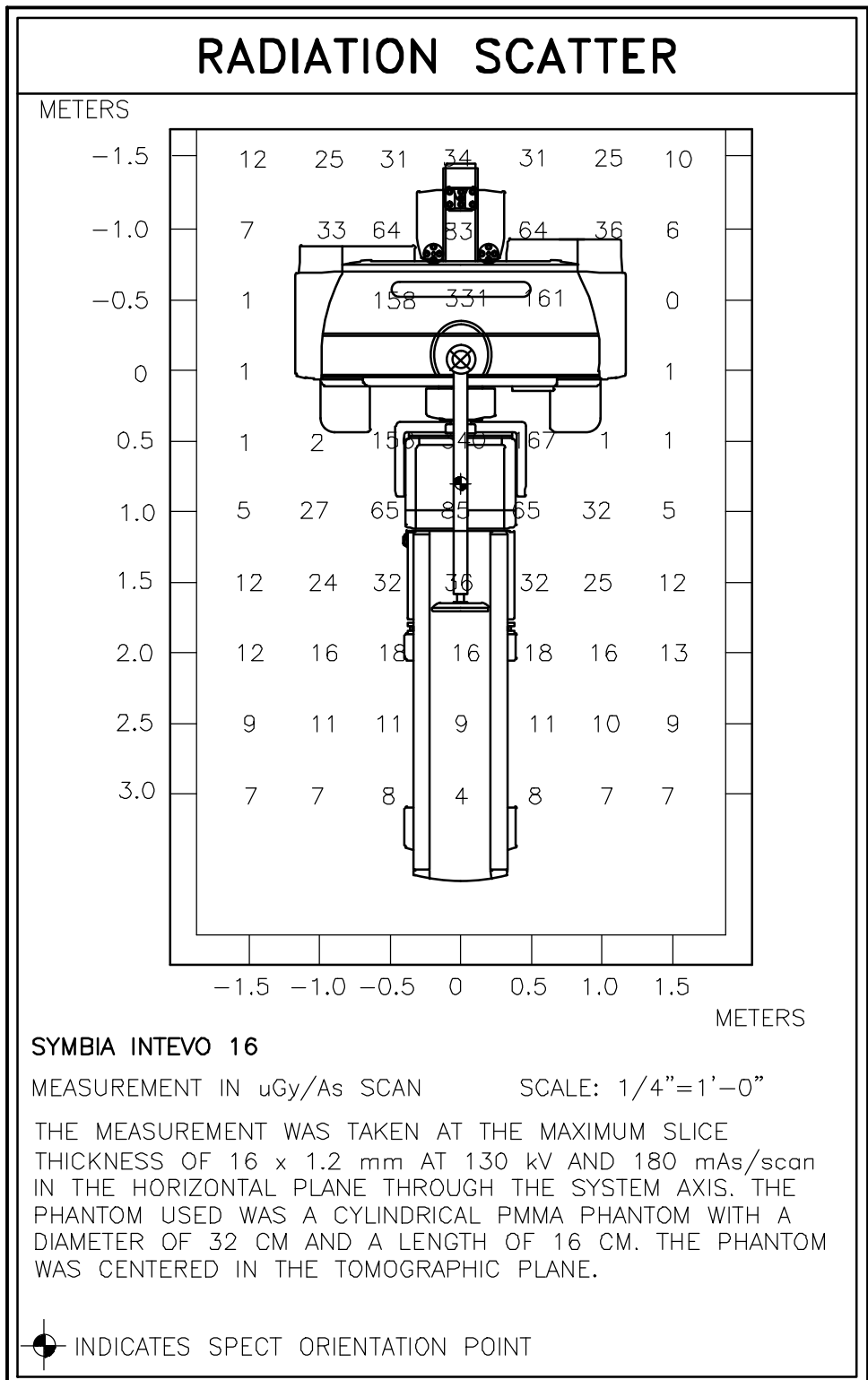
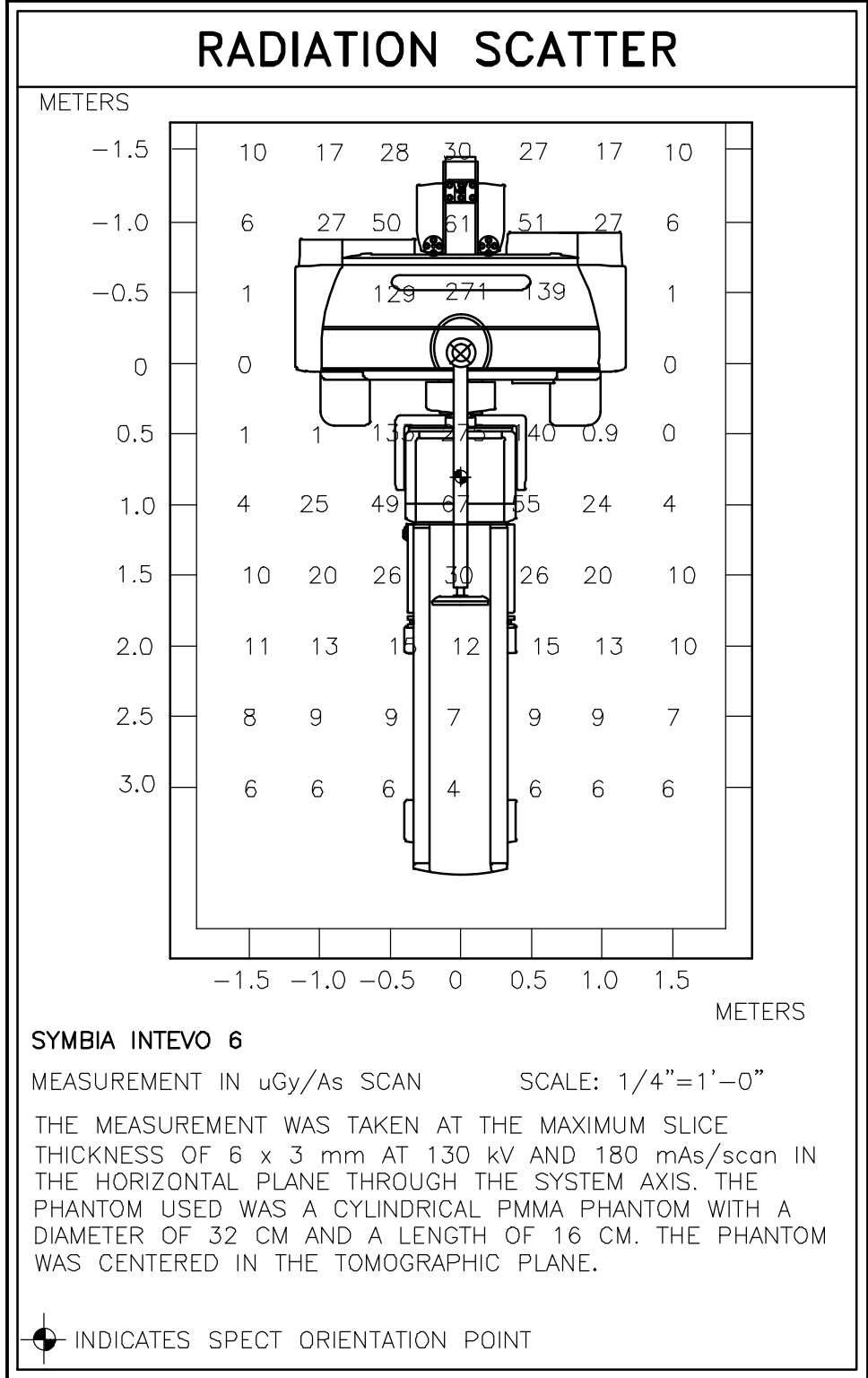
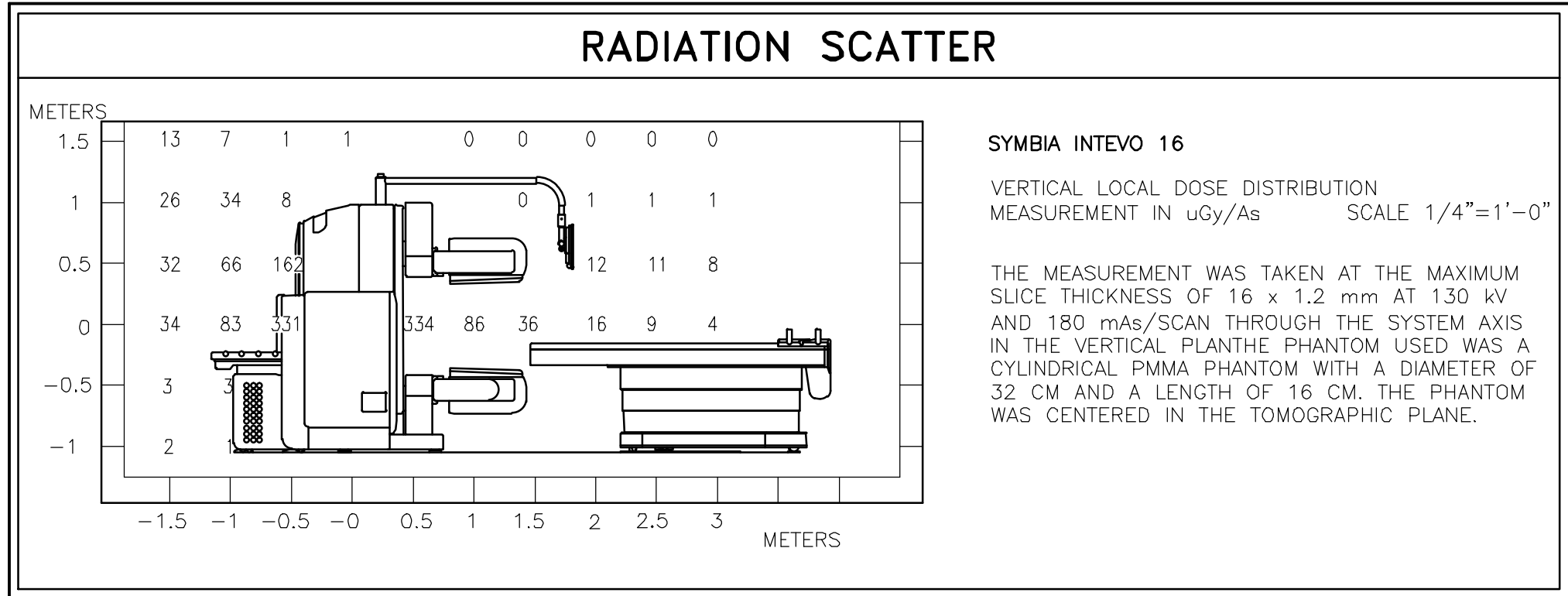
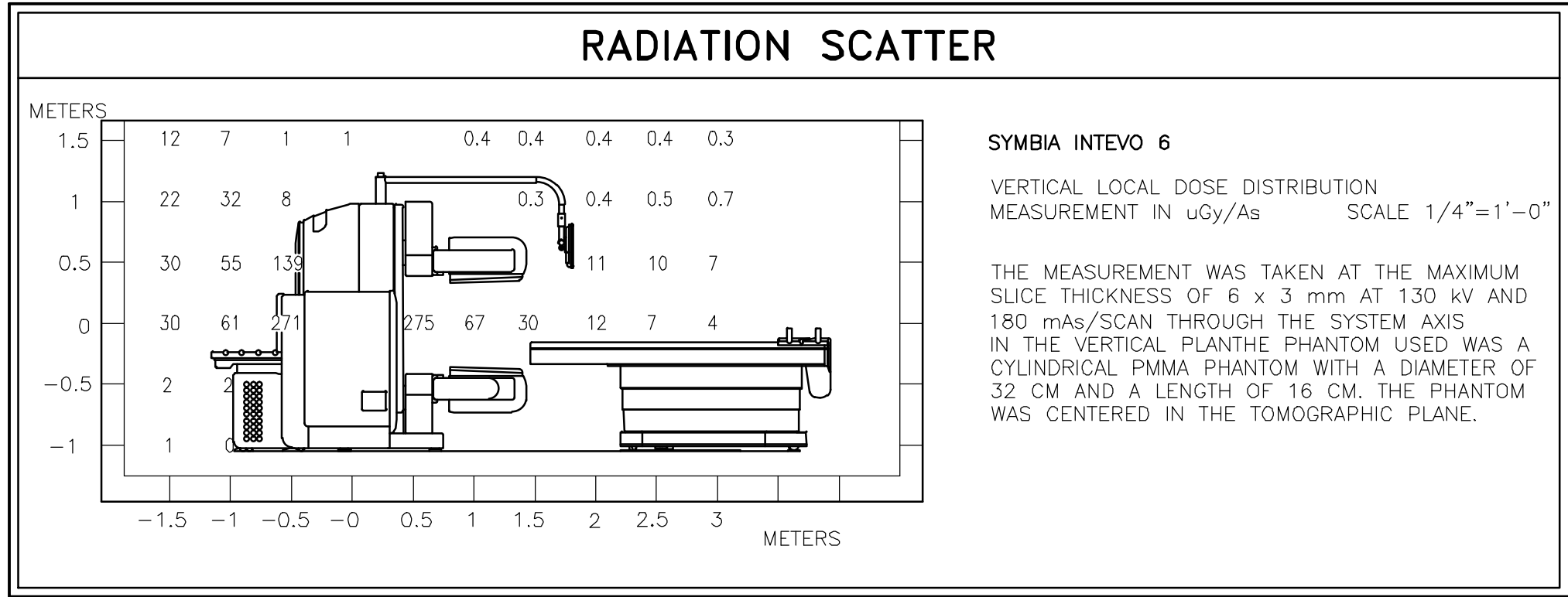
ATTENTION:

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



SAFETY/SERVICE CLEARANCE PLAN

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



SAFETY CLEARANCE NOTE

IF THE SAFETY DISTANCES ARE NOT OBSERVED, SAFETY MEASURES IN ACCORDANCE WITH LOCAL CODES SHOULD BE UTILIZED (FOR EXAMPLE BARRIERS, WARNING SIGNS, AND SAFETY MATS).

LIGHTING GUIDELINES

ROOM LIGHTING IS THE RESPONSIBILITY OF THE CUSTOMER. HOWEVER, SIEMENS OFFERS THE FOLLOWING RECOMMENDATIONS, AS A GENERAL GUIDE ONLY, WHEN PLANNING FOR LIGHTING.

- 1) OVERALL GENERAL ILLUMINATION IS NECESSARY FOR CLEAN UP AND MAINTENANCE OF EQUIPMENT.
- 2) THE LIGHTING IN ROOMS IN WHICH DIAGNOSES ARE MADE ON VIDEO DISPLAY UNITS (MONITORS) MUST MEET THE FOLLOWING REQUIREMENTS:
 - ADJUSTABLE, GLARE-FREE AND REPRODUCIBLE SETTING OF LIGHTING (I.E. DIMMER WITH SCALE)
 - NO REFLECTIONS FROM WINDOWS, LAMPS AND VIEWING BOXES WHEN THE MONITORS ARE IN THEIR STANDARD OPERATING POSITION.

SIEMENS REMOTE SERVICES (SRS)

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.

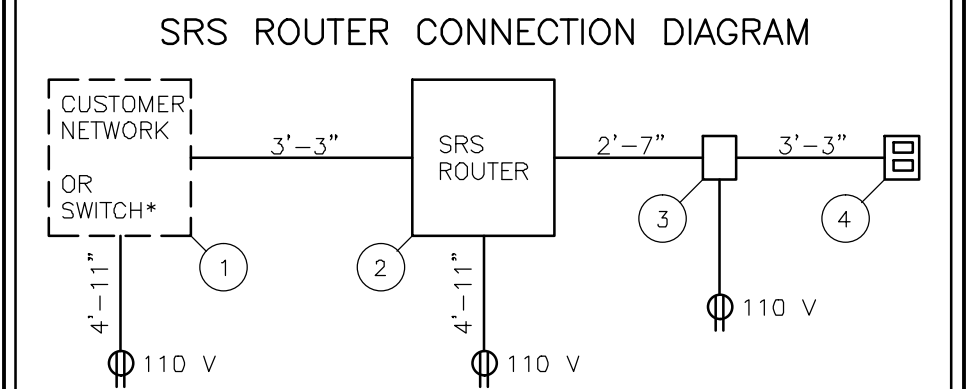
SRS REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:

(PREFERRED) VPN CONNECTION

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 REMOTE SERVICES (800-888-SIEM) TO DETERMINE IF THIS METHOD IS SUITABLE FOR YOUR SITE.

(OPTIONAL) SRS ROUTER CONNECTION

- THE SRS ROUTER IS SUPPLIED BY SIEMENS AND INSTALLED AT THE CUSTOMER'S SITE, WHILE STILL REMAINING THE PROPERTY OF SIEMENS. THE CUSTOMER'S NETWORK ADMINISTRATOR AND SIEMENS REMOTE SERVICES SHALL DETERMINE THE TYPE AND LOCATION OF THE SRS ROUTER REQUIRED.
- THE SRS ROUTER IS CONNECTED TO AN ANALOG MODEM THAT IS SUPPLIED BY SIEMENS, WHICH THEN IN TURN IS CONNECTED TO AN ANALOG PHONE LINE THAT IS SUPPLIED BY THE CUSTOMER. ONE SRS ROUTER ALLOWS REMOTE DIAGNOSTICS TO MULTIPLE MEDICAL SYSTEMS.
- THE SRS ROUTER SHOULD BE INSTALLED IN A SECURE LOCATION (CUSTOMER'S NETWORK COMPUTER ROOM) THAT HAS LIMITED ACCESS. IT CAN BE LOCATED ON A SHELF, TABLE, OR IN A CABINET. THE CONNECTION CABLES (WITH INDICATED LENGTHS BELOW) ARE INCLUDED WITH DELIVERY.



NOTE: ALL POWER OUTLETS ARE SUPPLIED/INSTALLED BY CUSTOMER.

- 1) ETHERNET SWITCH OR HUB, SUPPLIED BY CUSTOMER
- 2) SRS ROUTER, SUPPLIED BY SIEMENS (SIZE: 11.2"W X 8.7"D X 5.5"H, WEIGHT: 2 LBS.)
- 3) ANALOG MODEM, SUPPLIED BY SIEMENS
- 4) ANALOG PHONE LINE, SUPPLIED BY CUSTOMER

* OPTIONAL SWITCH AND CABLES ARE NOT INCLUDED, BUT CAN BE ORDERED FROM SIEMENS.

SIEMENS REMOTE SERVICE SCALE: NONE

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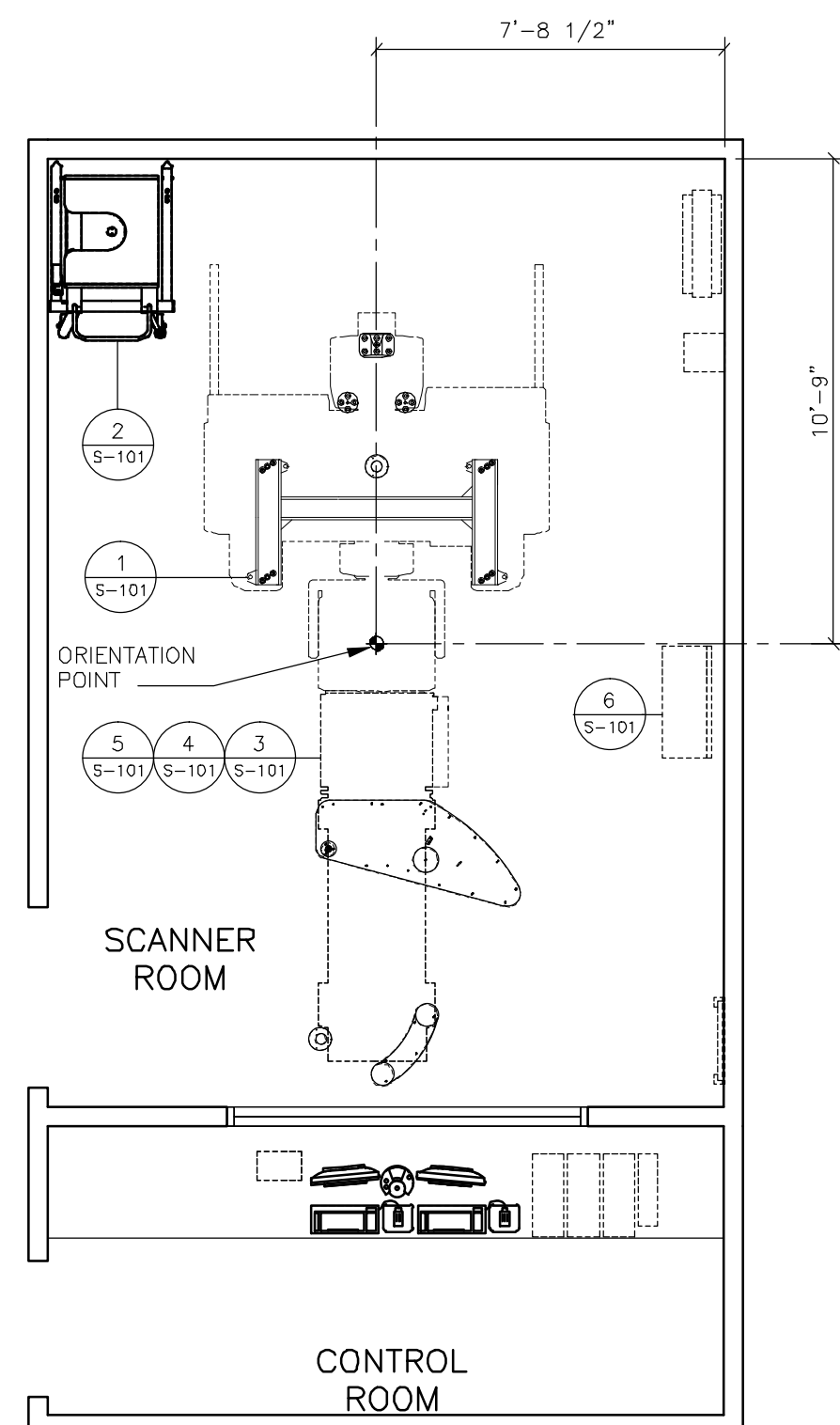
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FINISHED ROOM HEIGHT	
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8'-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16 WITH CEILING MOUNTED COMPONENT OTHER THAN RADIATION ON LAMP	MINIMUM 8'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT BOOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

										SYMBIA INTEVO REV. 2	
SIEMENS											
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16											
TYPICAL FINAL DRAWING SET											
THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.						PROJECT #:		SHEET:		A-102	
ALL RIGHTS ARE RESERVED.						13041					
SCALE: AS NOTED						REF. #:		DRAWN BY: C. MC DONNELL			
—ISSUE BLOCK—						DATE:		SHEET 2 OF 7			



STRUCTURAL FLOOR PLAN

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

FLOOR REQUIREMENTS

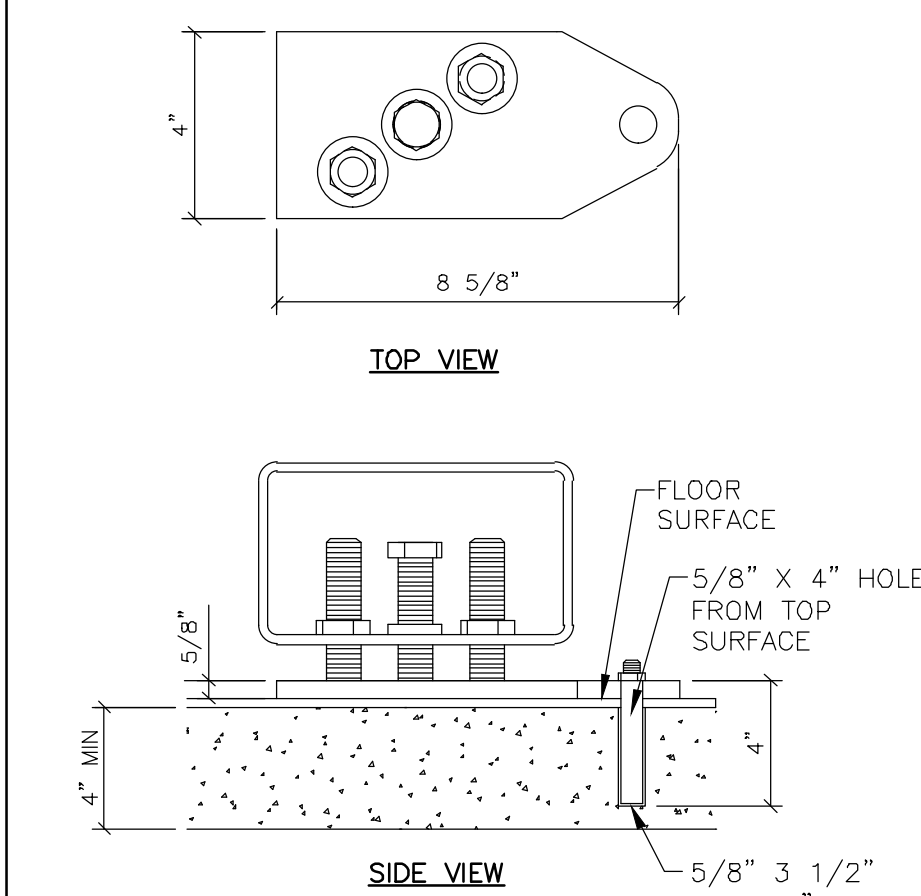
- 1) THE MINIMUM ALLOWABLE CONCRETE THICKNESS FOR NONSEISMIC REGIONS OF THE SCANNER ROOM FLOOR IS 4".
- 2) CONDITIONS OF FLOORING:
 - VIBRATION FREE LOCATION AS FOUND IN A TYPICAL CLINICAL ENVIRONMENT.
 - INSTALLATION OF THE GANTRY AND PATIENT TABLE ON:
 - CONCRETE FLOORING CLASS C20/25 TO C50/60.
 - COMPOSITE FLOORING OR ACCESS FLOOR WITH SUITABLE ON SITE MOUNTING FRAME, SUB CONSTRUCTION, OR EQUIVALENT STRUCTURE.
 - 3) WEIGHT CAPACITY OF FLOORING SHOULD BE TESTED BY A STRUCTURAL ENGINEER.
 - 4) ANY FLOORING OTHER THAN LISTED ABOVE REQUIRES AN ON SITE FRICTION FREE SUB CONSTRUCTION MADE FROM STEEL IN THE AREAS OF SUPPORT. PLEASE CONSULT STRUCTURAL ENGINEER.
 - 5) THE MINIMUM EXTRACTION FORCE FOR THE POINTS WHERE THE PATIENT TABLE IS ATTACHED IS 610 LBF. PER ANCHOR.
 - INSTALLATION ON A FLOATING FLOOR WITHOUT SUB-CONSTRUCTION IS PROHIBITED.
 - 6) THE BASE FRAME FOOT PADS ARE MOUNTED TO THE FLOOR USING (4) 5/8" X 3 1/2" ANCHORS.
 - 7) FLOOR LEVELNESS REFER TO FLOOR LEVELING AND FLATTENING DETAIL LOCATED ON THIS SHEET.
 - 8) THE MINIMUM REQUIREMENTS FOR COMPRESSIVE STRENGTH FOR THE FLOOR COVERING BASED ON SYMBIA COLLIMATOR CART SHALL BE 375 PSI. THIS IS BASED ON WORSE CASE LOADING WITH 2-HIGH ENERGY AND 2-MEDIUM ENERGY COLLIMATORS PLACED ON THE COLLIMATOR CART.

STRUCTURAL NOTES

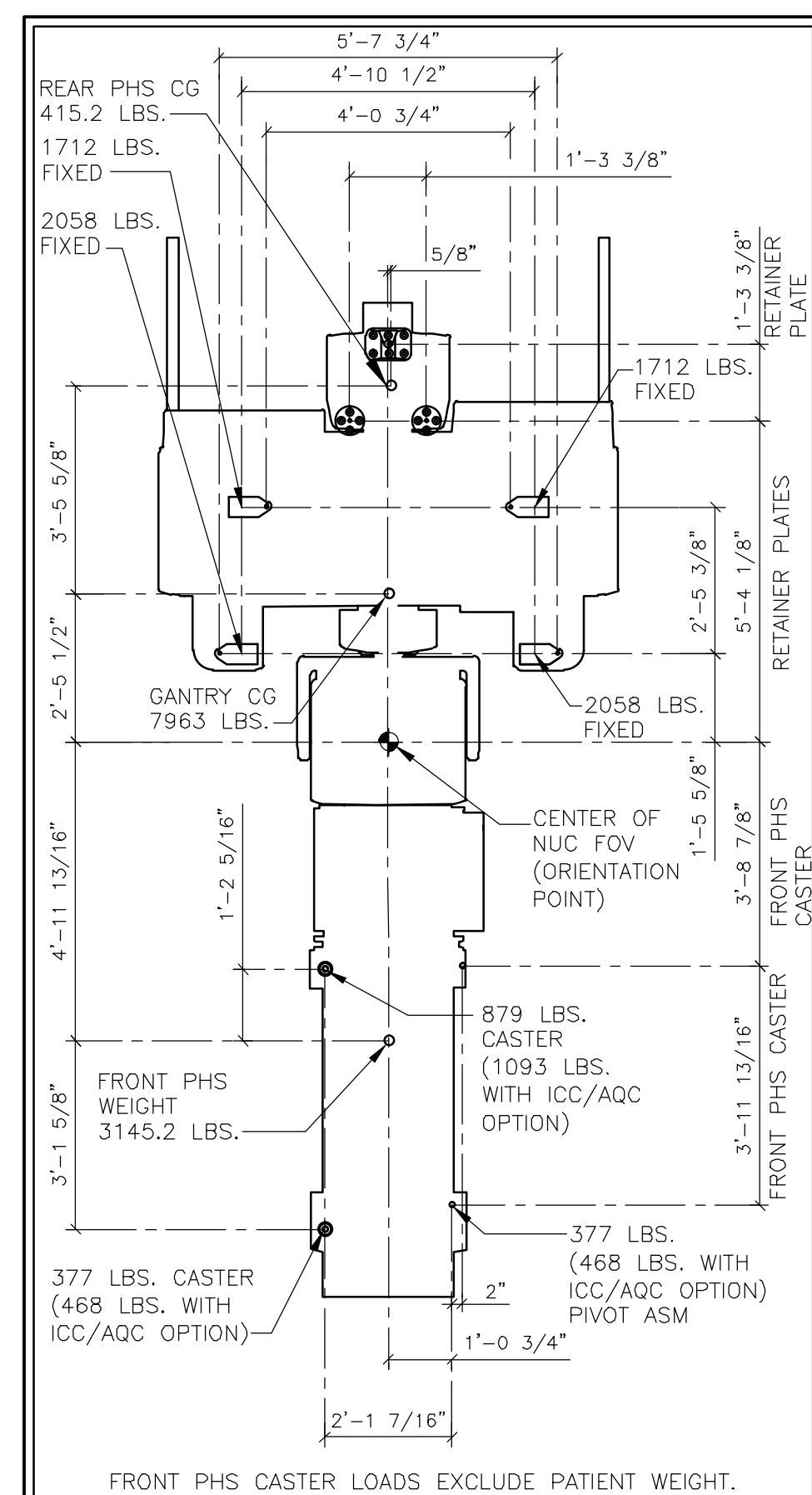
- 1) THE CUSTOMER/CONTRACTOR SHALL FURNISH AND INSTALL ALL STRUCTURAL SUPPORT MEMBERS AND NEEDED HARDWARE FOR THE INSTALLATION OF THE SIEMENS EQUIPMENT.
- 2) THE OVERHEAD STRUCTURAL SUPPORT SYSTEM SHALL BE FIXED, RIGID AND BRACED FOR SWAY.
- 3) ALL STRUCTURAL SUPPORT MEMBERS SHALL BE TRUE, SQUARE, LEVEL, PARALLEL AND COPLANAR WITH RESPECT TO EACH OTHER, WITH A HORIZONTAL STRUCTURAL SUPPORT MEMBER TO BE LOCATED AND SET WITHIN 1/4" TOLERANCE.
- 4) 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 OR THE PROVIDED MATERIALS. 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.
- 5) MOUNTING PLATES, FRAMES, AND HARDWARE SUPPLIED BY SIEMENS AS DETAILED IN THIS DRAWING SET ARE INSTALLED BY SIEMENS UNLESS OTHER REQUIREMENTS BY CODE OR FROM THE PROVIDED MATERIALS. OR MOUNTING METHODS MUST BE DESIGNED AND DOCUMENTED BY THE STRUCTURAL ENGINEER OF RECORD. ALTERNATE MOUNTING MATERIALS AND ANCHORS OTHER THAN THOSE PROVIDED BY SIEMENS SHALL BE SUPPLIED BY THE CUSTOMER/CONTRACTOR. SIEMENS MAY REQUIRE ASSISTANCE FROM THE CUSTOMER/CONTRACTOR WITH INSTALLATION WHEN UTILIZING ALTERNATE MOUNTING MATERIALS.
- 6) ALL CEILING FIXTURES (I.E. AIR SUPPLY GRILLES, AIR RETURN GRILLES, EXHAUST GRILLES, SPRINKLER HEADS, INCANDESCENT AND FLUORESCENT LIGHT FIXTURES, INTERCOM SPEAKERS, MEDICAL GAS COLUMNS, ETC.) SHALL BE INSTALLED FLUSH MOUNTED WITH THE FINISHED CEILING TO PROVIDE FREE AND UNRESTRICTED TRAVEL OF THE SMS CEILING MOUNTED EQUIPMENT.
- 7) THE BOTTOM SIDE OF THE UNISTRUT CEILING GRID AND ANY CEILING MOUNTED SUPPORT SHALL BE INSTALLED FLUSH WITH THE FINISHED CEILING. THE CUSTOMER/CONTRACTOR SHALL ALSO PROVIDE COVERPLATES FOR THE UNISTRUT.
- 8) THE STRUCTURAL PLANNING AS SHOWN ON THE 1/4" STRUCTURAL PLAN HAS BEEN COORDINATED WITH THE EQUIPMENT LOCATION AS SHOWN ON THE 1/4" EQUIPMENT LAYOUT PLAN. FOR THIS REASON, ANY DEVIATIONS FROM THE STRUCTURAL PLANNING AS SHOWN MUST BE APPROVED BY SMS PLANNING DEPARTMENT.
- 9) THE STRUCTURAL ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAIL OF FLOOR, WALL AND CEILING STRUCTURES IN ACCORDANCE WITH THE WEIGHTS, MOMENTS AND FORCES AS SHOWN ON THE STRUCTURAL PLANNING. THE STRUCTURAL ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL STRUCTURES AND FORCES AS DETERMINED PER LOCAL GOVERNING BUILDING CODES.

BASE FRAME FOOT PAD

EACH PAD SURFACE HAS AN AREA OF 30.16 SQ IN. LOAD PER PAD IS APPROXIMATELY 40 LBS./SQ. IN.

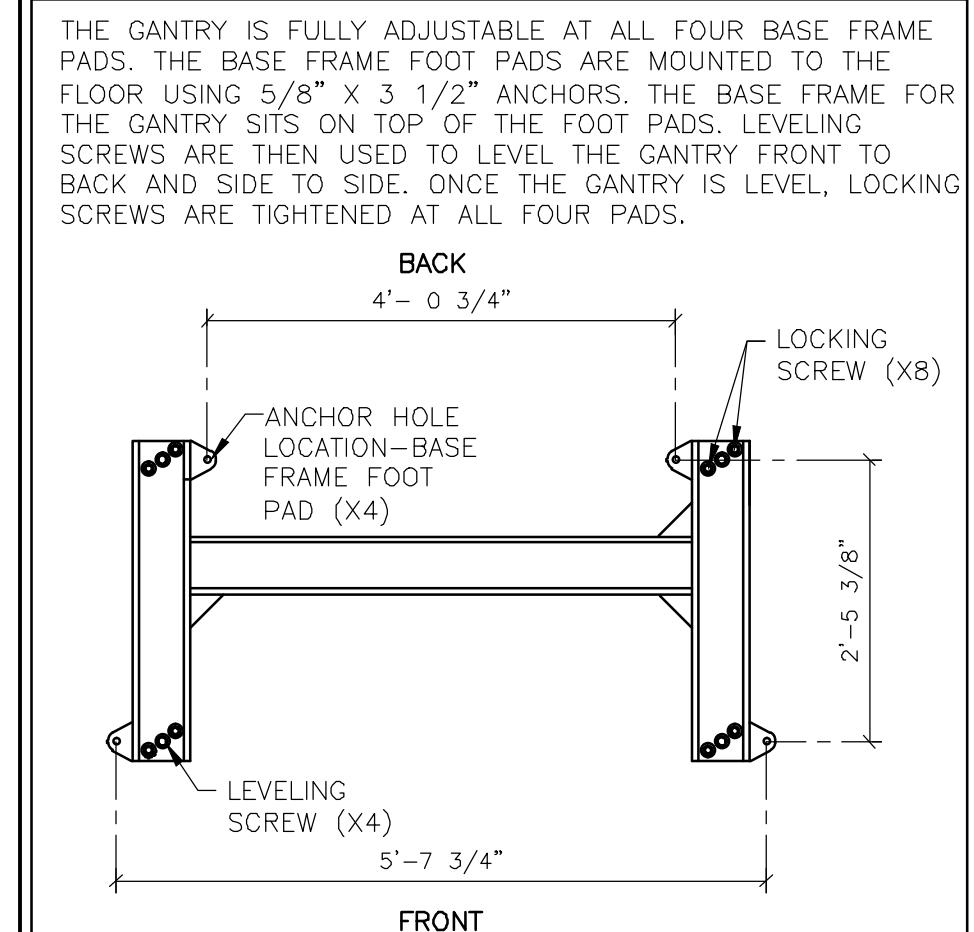


(4) 5/8" HOLES, 4" DEEP DRILLED FROM THE TOP SURFACE OF EACH OF THE FOUR BASE FRAME FOOT PADS.



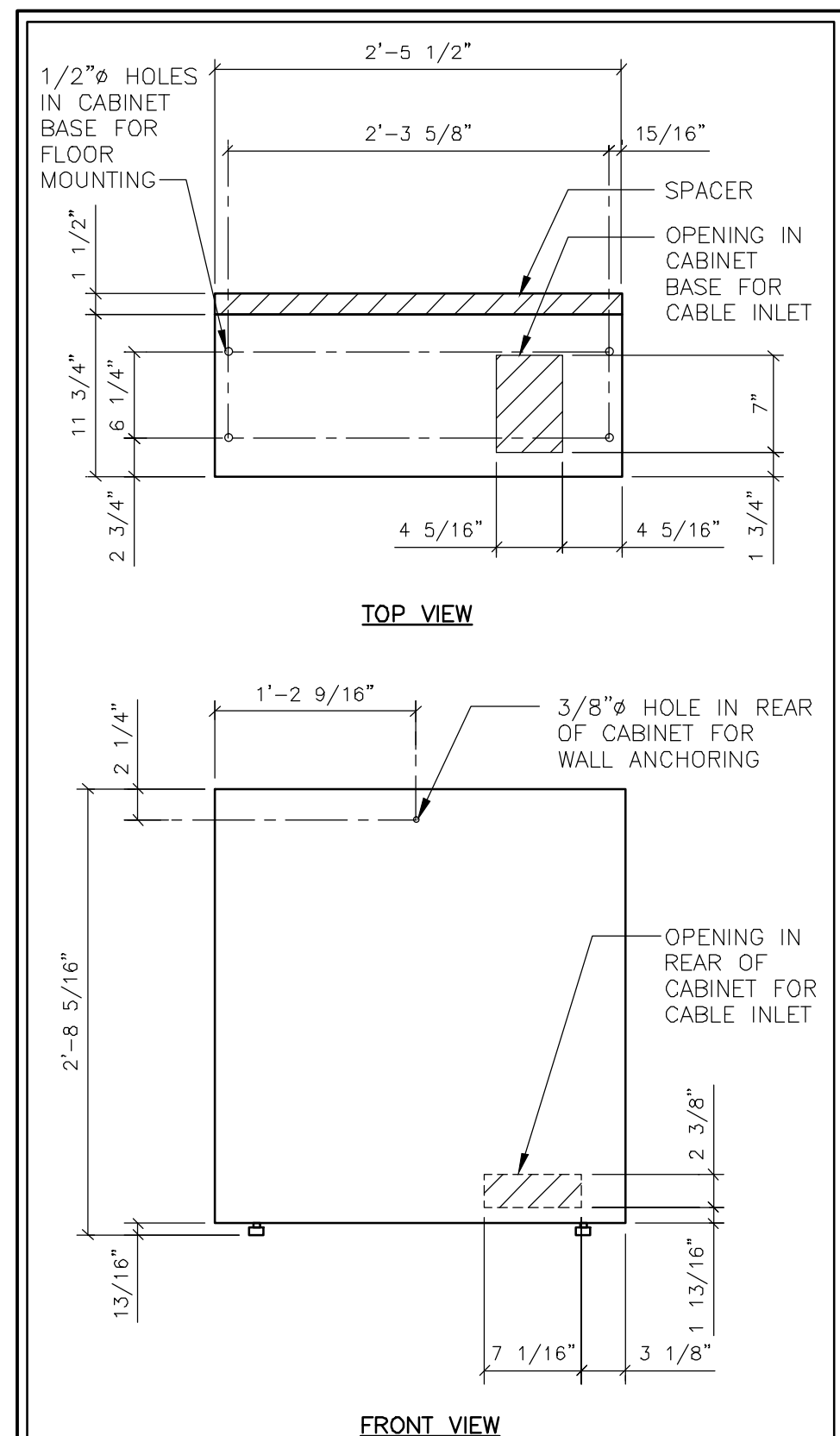
LOAD CONCENTRATIONS

SCALE:
3/8"=1' 0"

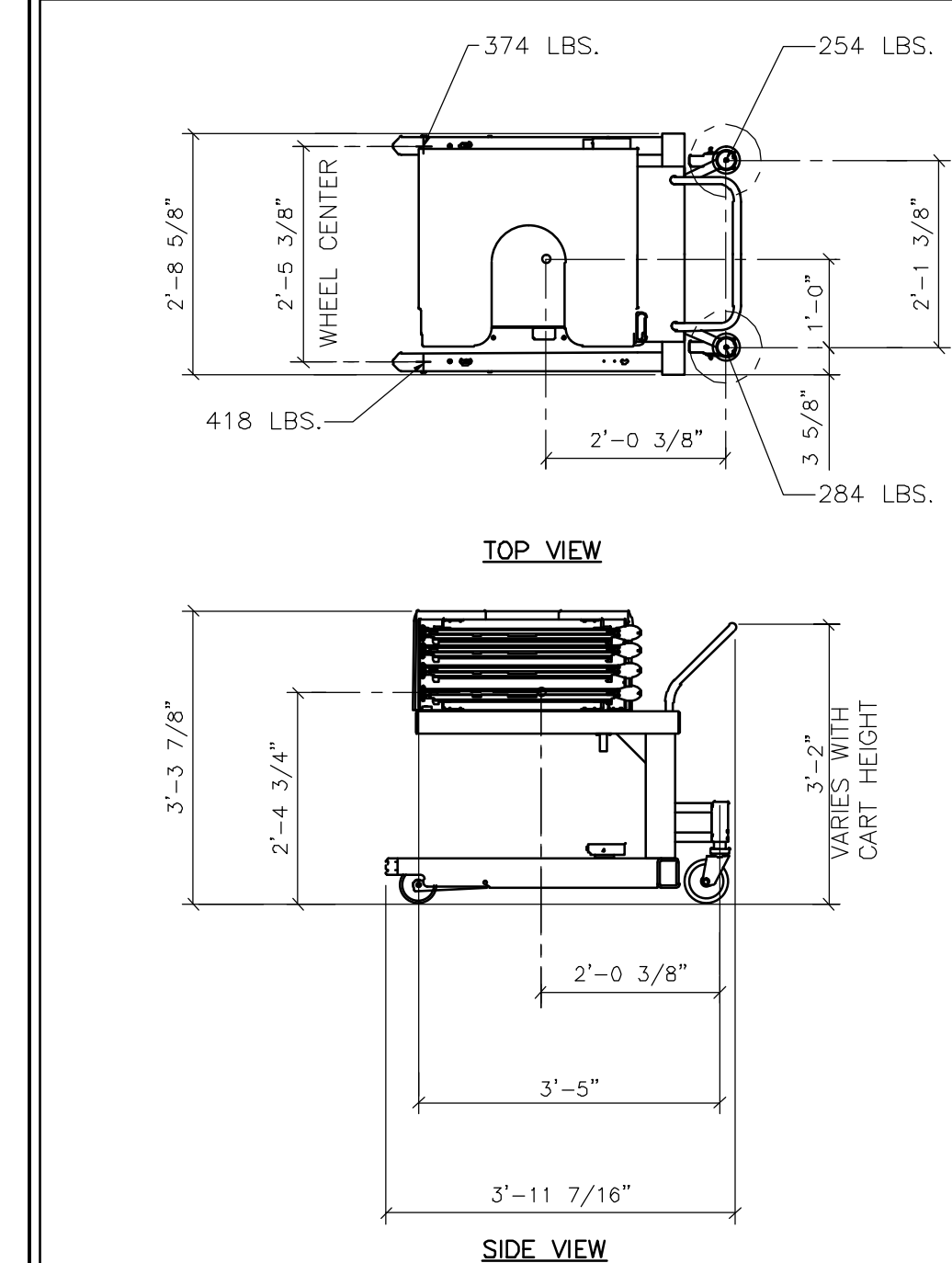


SYMBIA INTEVO
BASE FRAME

SCALE:
NO SCALE

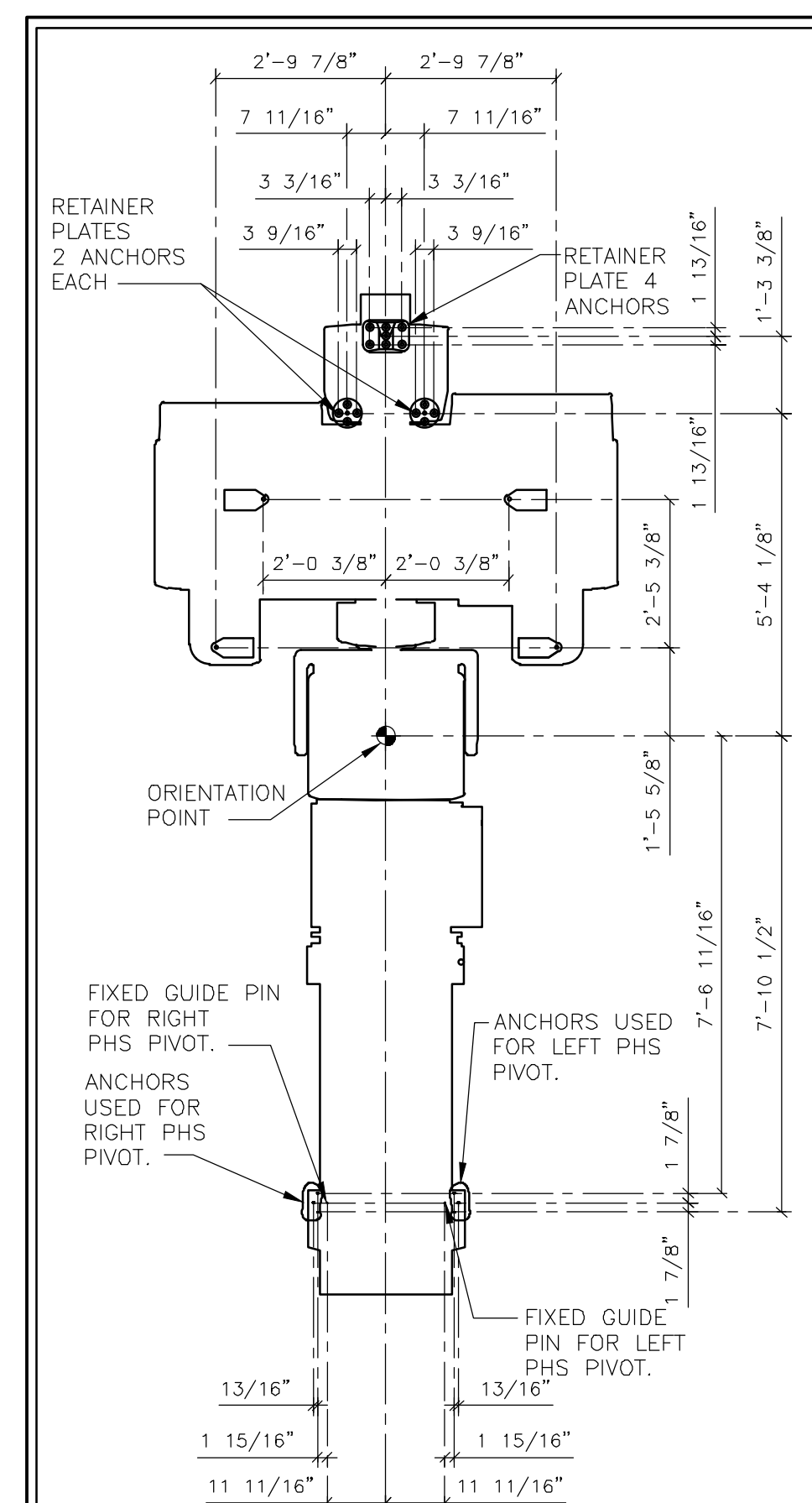


6	LCB CABINET DETAIL
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SCALE:
FULL

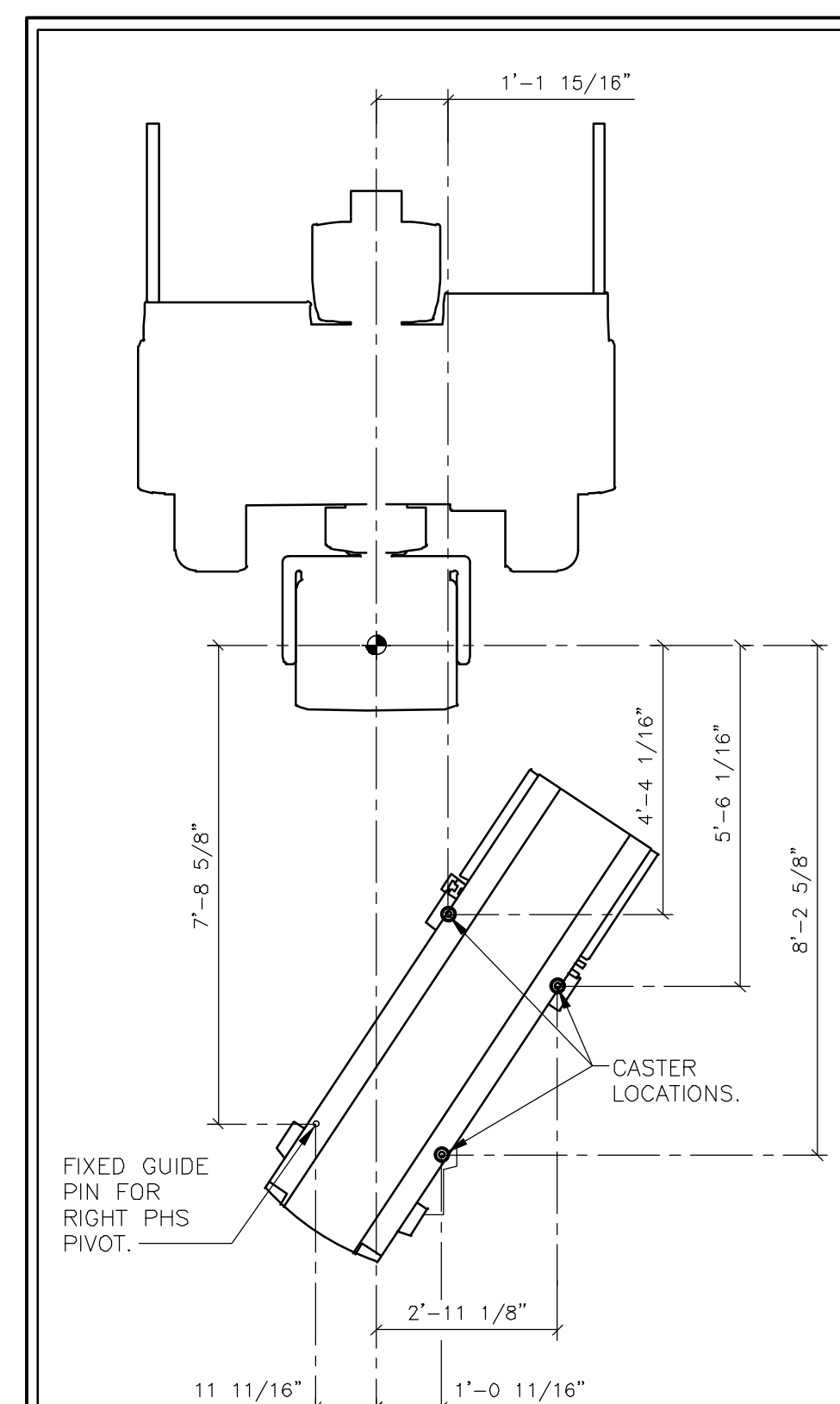
COLLIMATOR CART

SCALE:
1/2"=1'-0"



ANCHOR LOCATION

SCALE:
3/8"=1'-0'



STANDARD RIGHT ANGLE PHS PIVOT

SCALE:
3 4 5 6 7 8 9

FINISHED ROOM HEIGHT	
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8'-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16 WITH CEILING MOUNTED COMPONENT OTHER THAN RADATION ON LAMP	MINIMUM 12'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT ROOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

FINISHED ROOM HEIGHT

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8"-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16 WITH CEILING MOUNTED COMPONENT OTHER THAN RADATION ON LAMP	MINIMUM 8'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT ROOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

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- 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.

ATTENTION:

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SIEMENS

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16
TYPICAL FINAL DRAWING SET

PROJECT #:

13041

SHEET 4 OF 7	DRAWN BY: C. MC DONNELL
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SHEET:

S-101

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

SCALE: AS NOTED	REF. #:
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DATE:

	N/A	TYPICAL REV 1
SYM	DATE	DESCRIPTION
-ISSUE BLOCK-		

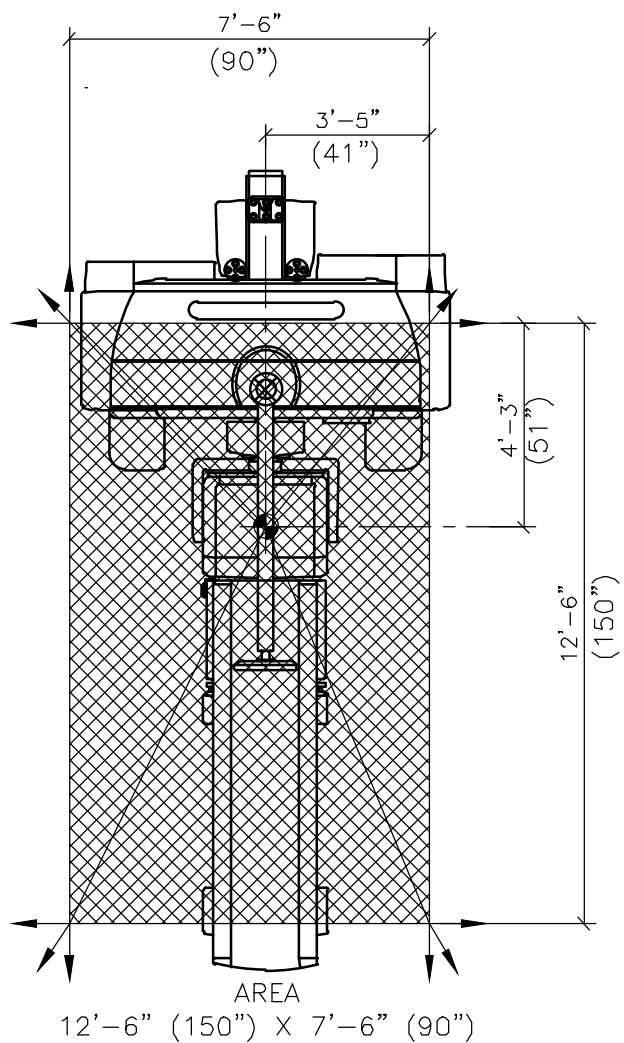
PREPARATION/PROCEDURE FOR FLOOR LEVELING AND FLATTENING

PREPARATION LEVELING AND FLATTENING THE FLOOR AREA

THE SCANNER ROOM FLOOR MUST BE LEVELED AND THE SURFACE MUST BE SMOOTH. ANY DEVIATION IN LEVELS WILL HAVE A DETRIMENTAL EFFECT ON THE PATIENT HANDLING TABLE (PHS) TO THE GANTRY ALIGNMENT WHICH MAY EFFECT COLLIMATOR EXCHANGE.

IT IS RECOMMENDED THAT THE FLOOR IN THE ENTIRE ROOM WILL BE LEVELED AND FLATTENED ACCORDING TO THE SIEMENS SPECIFICATIONS GIVEN BELOW. IT IS IMPERATIVE THAT THE SYSTEM INSTALLATION AREA, AS INDICATE BY THE HATCH AREA BELOW, IS LEVELED AND FLATTENED.

UPON COMPLETION OF THE INSTALLATION FLOOR AREA, VERIFY THE SURFACE FLATNESS, USING A STRAIGHT EDGE 4'-0" IN LENGTH OR LONGER.

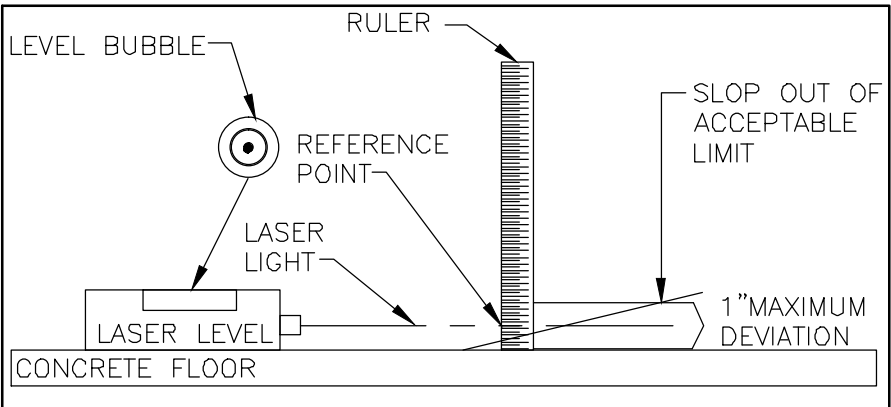


FLOOR CHECKING PROCEDURE

THIS PROCEDURE PROVIDES DETAILS ON HOW TO VERIFY THAT THE FLOOR IS BOTH FLAT AND LEVEL BEFORE SYSTEM INSTALLATION BEGINS. THIS PROCEDURE SHOULD BE COMPLETE BY THE SIEMENS PROJECT MANAGER AND CUSTOMER/CONTRACTOR. MEASUREMENTS SHOULD BE TAKEN LEFT TO RIGHT OR RIGHT TO LEFT, FRONT TO BACK OR BACK TO FRONT AND DIAGONALLY IN EITHER DIRECTION. REFER TO THE DIAGRAM ON THE LEFT.

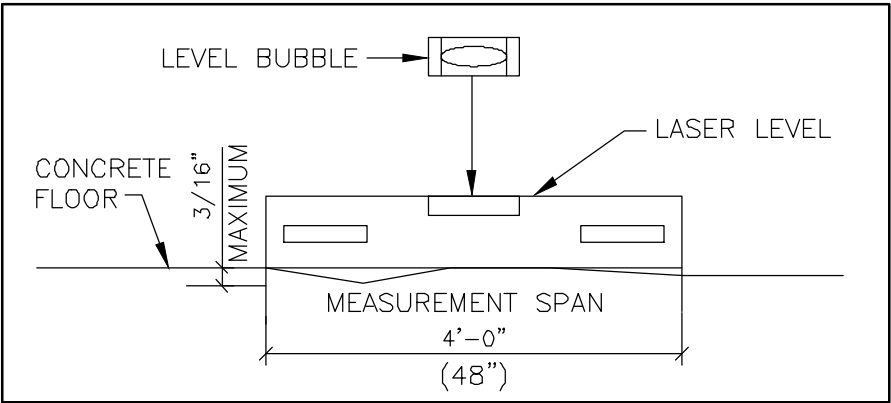
SLOPE – FLOOR SLOPE SHOULD BE WITHIN ±1" OVER 12'-6" (150")

- 1) PLACE LASER LEVEL ON FLOOR.
- 2) MAKE SURE THAT THE LASER LEVELING DEVICE IS ABSOLUTELY LEVEL.
- 3) TURN ON LASER.
- 4) USE A RULE TO MEASURE THE HEIGHT OF THE LASER LIGHT FROM THE FLOOR NEXT TO THE LASER LEVEL. THIS IS REFERENCE POINT ON THE RULER FOR ALL OTHER MEASUREMENTS.
- 5) KEEP THE LASER ON AND USE A RULE TO MEASURE THE HEIGHT OF THE LASER LIGHT BEAM AT VARIOUS POINTS 12'-6" (150") FROM THE LASER. THE MEASUREMENT FROM THE FLOOR SHOULD BE WITHIN 1" OF THE ORIGINAL LASER LIGHT REFERENCE POINT. REPEAT AT VARIOUS POINTS AND DIRECTIONS REPRESENTED AS HATCH AREA IN THE DIAGRAM TO THE LEFT.



FLATNESS – FLOOR SURFACE SHOULD BE SMOOTH AND HAVE NO MORE THEN 3/16" DEVIATION IN ANY 4'-0" (48") SEGMENT IN ENTIRE THE SCANNER ROOM AREA.

- 1) VERIFY SURFACE FLATNESS FOR THE ENTIRE SCANNER ROOM AREA, USE STRAIGHT EDGE OR BUBBLE LEVEL THAT IS 4'-0" (48") LONG.



IT IS THE CUSTOMER/CONTRACTOR'S RESPONSIBILITY IF ANY MEASUREMENT OUT OF ACCEPTABLE LIMITS ARE AN INDICATION THAT THE FLOOR NEEDS TO BE LEVELED WITH SOME SORT OF LEVELING COMPOUND.

WHERE THE UNACCEPTABLE DEVIATION EXIST, THE WHOLE (MINIMUM SYSTEM AREA) SHOULD BE RE-SUFACED.

LEVELING SPECIFICATIONS

FLOOR LEVELING AREA	12'-6" (150") X 7'-6" (90").
SLOPE	WITHIN ±1" OVER 12'-6" (150").
FLATNESS	FLOOR SURFACE SHOULD BE SMOOTH AND HAVE NO MORE THAN 3/16" DEVIATION IN ANY 4'-0" (48") THROUGHOUT THE SCANNER ROOM OR SYSTEM INSTALLATION AREA.
FLOOR SURFACE	FLOOR SHOULD HAVE ONE SINGLE POURED SURFACE. NO FILL MATERIAL SHOULD BE USED TO COMPENSATE FOR HOLES OR DEPRESSIONS IN THE FLOOR SURFACE.

SYMBIA INTEVO
REV. 2

SIEMENS

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16
TYPICAL FINAL DRAWING SET

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ALL RIGHTS ARE RESERVED.

PROJECT #:
13041

SHEET 5 OF 7
DRAWN BY:
C. MC DONNELL

SHEET:

S-501

ATTENTION:

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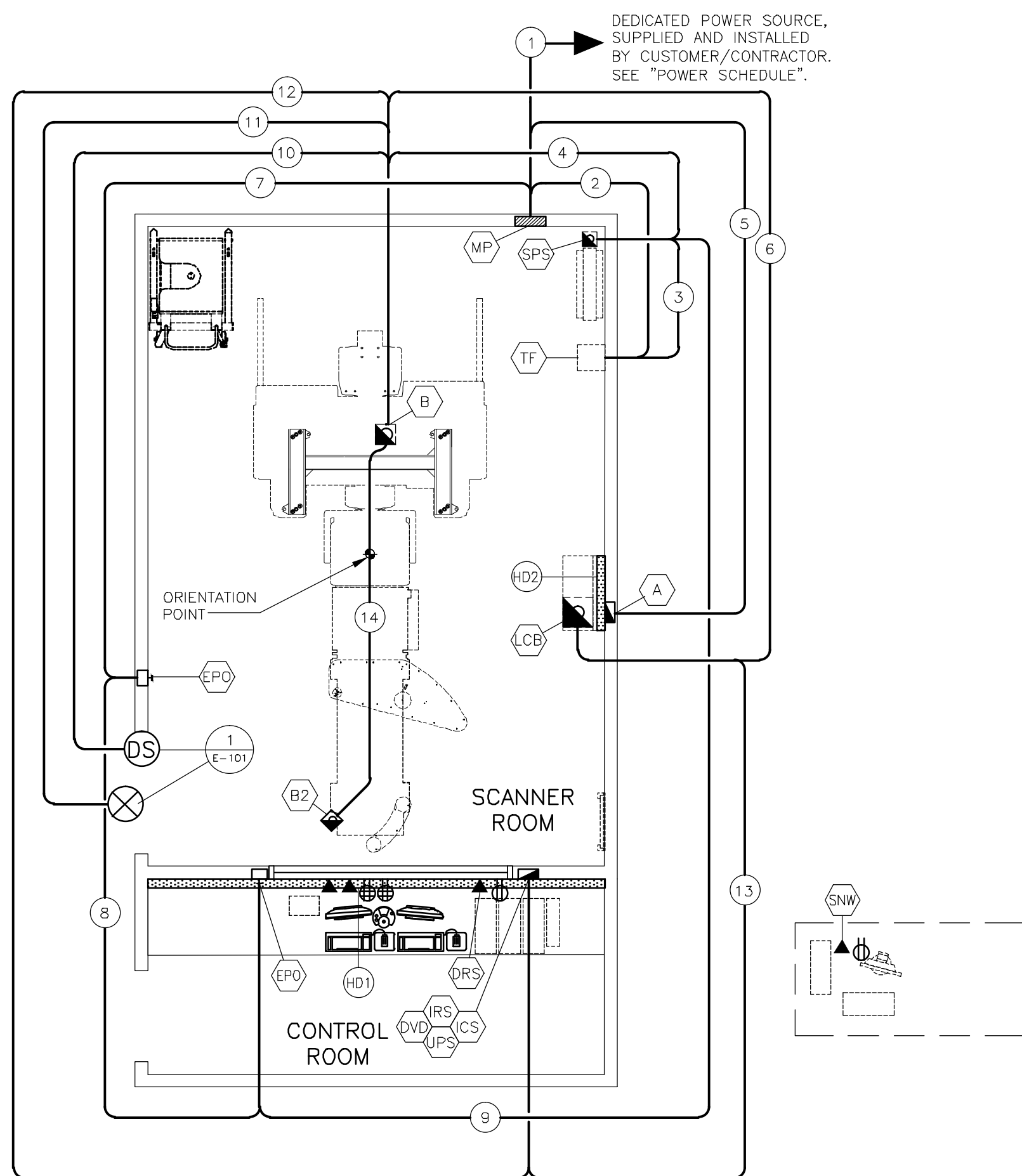
SYM	DATE	DESCRIPTION
△	N/A	TYPICAL REV. 1

—ISSUE BLOCK—

SCALE: AS NOTED

REF. #:

DATE:



ELECTRICAL RACEWAY PLAN

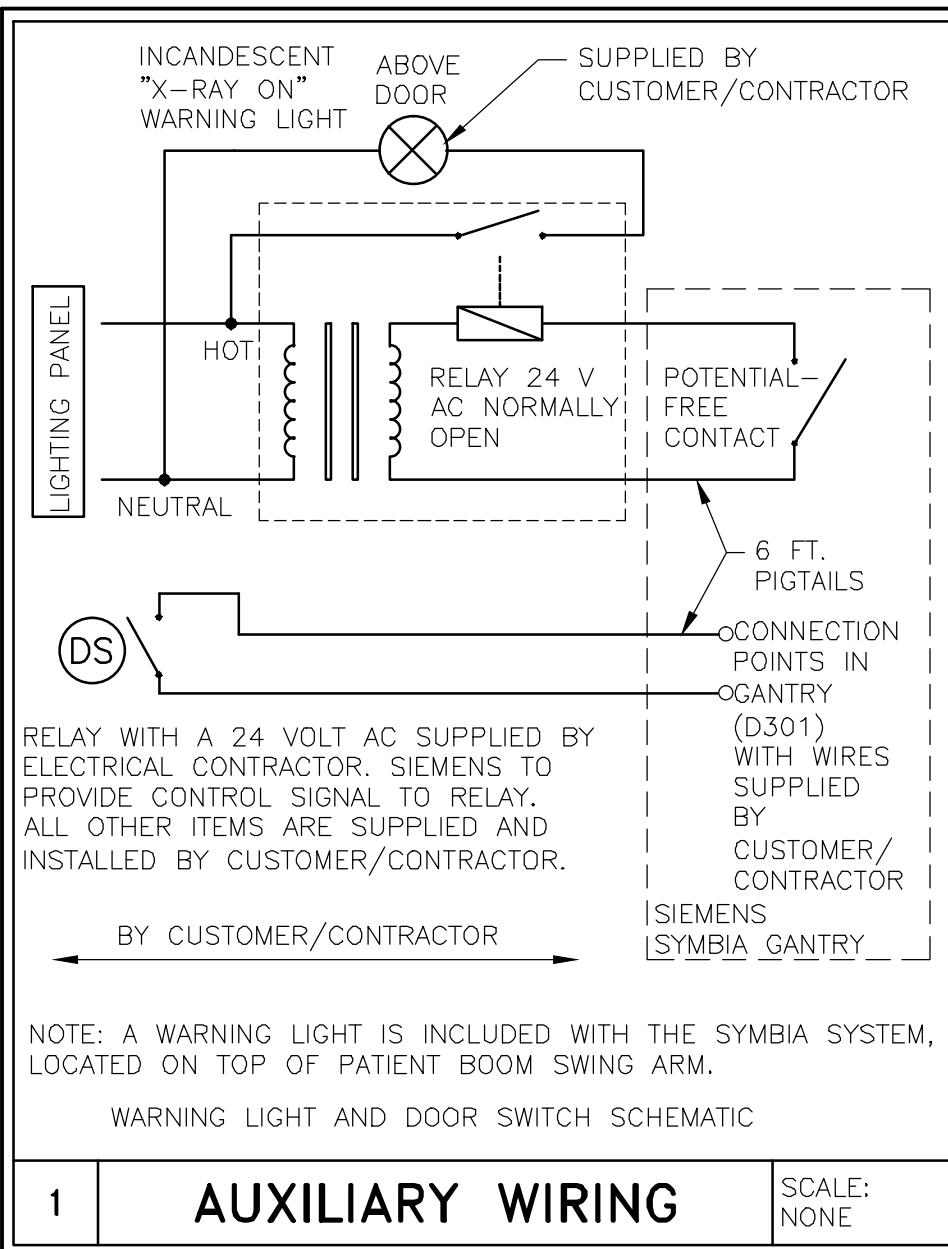
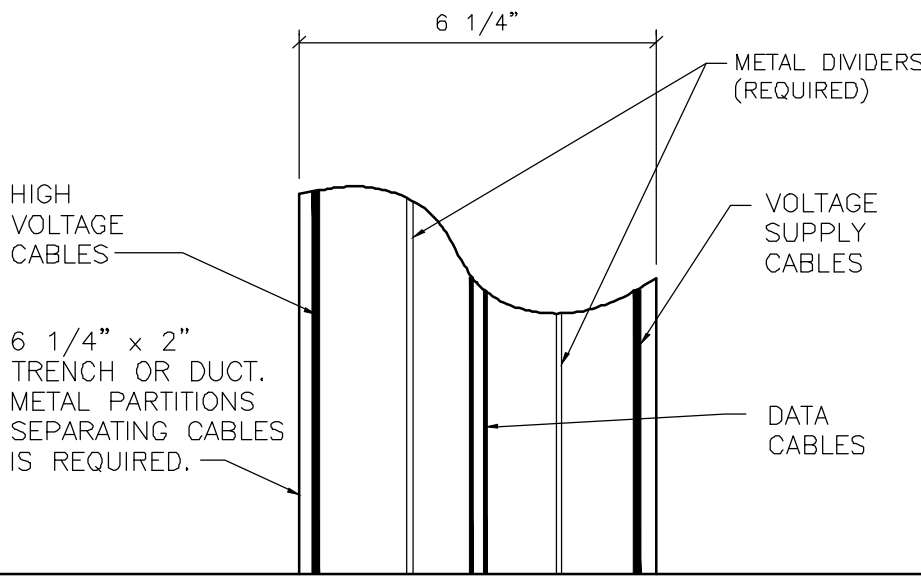
SIEMENS SUPPLIED CABLES					
FROM	VIA	TO	DESCRIPTION	REMARKS	
ICS/IRS	12	B	POWER CABLE: 300V.	MAXIMUM LENGTH 82'-0"	
ICS/IRS	12	B	CAT 5 CROSS OVER CABLE: 150V.	MAXIMUM LENGTH 82'-0"	
ICS/IRS	12	B	UNMARKED CABLE.	MAXIMUM LENGTH 82'-0"	
ICS/IRS/ DVD	12	B	DVD CABLE, DATA CABLE, FIBER CABLE: 30V.	MAXIMUM LENGTH 82'-0"	
LCB	13	UPS	POWER CABLE: 300V.	MAXIMUM LENGTH 82'-0"	
B	14	B2	PHS CABLE, POWER CABLE: 300V.	MAXIMUM LENGTH 20'-0"	

TRENCH/DUCT REQUIREMENTS

IF USING TRENCH OR SURFACE MOUNT DUCT, VOLTAGE SUPPLY CABLES AND/OR HIGH VOLTAGE CABLES MUST BE LAID SEPARATELY FROM THE DATA CABLES. 6 1/4" x 2" TRENCH OR DUCT MUST BE SUPPLIED WITH 2 METAL DIVIDERS TO KEEP CABLES SEPARATED.

HIGH VOLTAGE AND SUPPLY CABLES:
ON SITE POWER LINE CABLE TO THE SYMBIA INTEVO EXCEL, SYMBIA INTEVO 2, SYMBIA INTEVO 6 AND SYMBIA INTEVO 16 SYSTEMS.

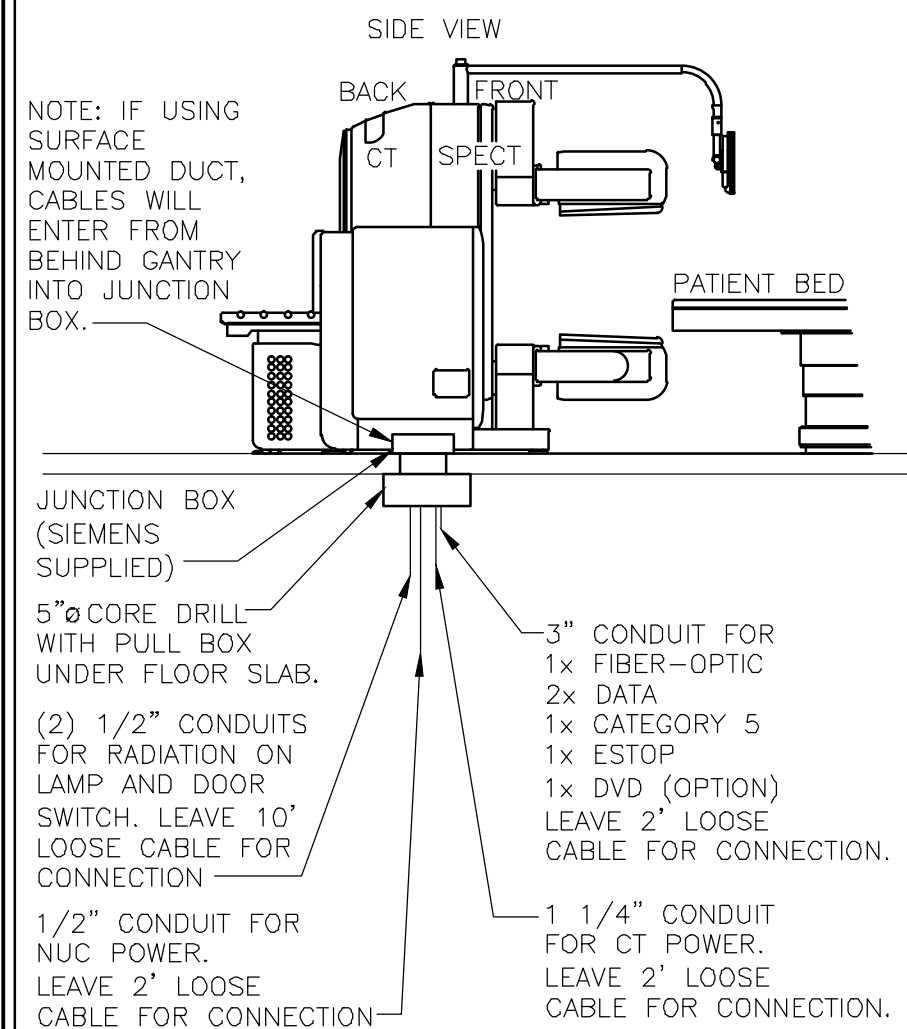
FOR SYMBIA INTEVO EXCEL, SYMBIA INTEVO 2, SYMBIA INTEVO 6 AND SYMBIA INTEVO 16 SYSTEMS:
THE VOLTAGE SUPPLY CABLE FROM THE LCB TO THE JUNCTION BOX FOR THE GANTRY.



CABLE ENTRANCES

CABLES MAY ENTER FROM CONDUITS BENEATH FLOOR, SURFACE MOUNTED DUCT, OR FLUSH IN FLOOR TRENCH DUCT. PLEASE REFER TO SITE SPECIFIC SHEET E-101 AND E-102 TO SEE HOW CABLES ACCESS GANTRY.

EXAMPLE SHOWN IS CONDUITS BENEATH FLOOR:



ELECTRICAL LEGEND

SYM	SIZE	DESCRIPTION	REMARKS
A	AS REQUIRED	PULL BOX MOUNTED FLUSH WITH FINISHED WALL AT FLOOR LINE IN SHOWN LOCATION.	ANCILLARY WIRING
B	8" x 8"	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 5" CORE DRILL WITH SLEEVE THROUGH FLOOR SLAB ENDING FLUSH WITH FINISHED FLOOR IN EXAM ROOM IN SHOWN LOCATION.	GANTRY CABLE ACCESS
B2	6" x 6"	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 3" CORE DRILL WITH SLEEVE THROUGH FLOOR SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION. SIEMENS SUPPLIED COVER.	PHS CABLE ACCESS UNDER THE PHS
DS	---	ETHERNET CONNECTION TO HOSPITAL NETWORK, EXACT LOCATION TO BE COORDINATED WITH SIEMENS PROJECT MANAGER.	DEDICATED RECONSTRUCTION SYSTEM WORKPLACE
DS	---	FIXED POINT DESIGNATION, SAME PULL BOX/OPENING AS ICS.	
DS	---	EMERGENCY POWER OFF BUTTON WITH PROTECTIVE COVER, MOUNTED ON WALL AT 5'-0" ABOVE FINISH FLOOR THAT PREVENTS RESETTING OF CIRCUIT BREAKER WHEN IN THE OFF POSITION. THERE SHALL BE AN EPO IN EACH ROOM OF THE SUITE WHERE SIEMENS EQUIPMENT IS LOCATED, EXACT LOCATIONS TO BE DETERMINED BY CUSTOMER/CONTRACTOR. SUPPLIED BY CUSTOMER/CONTRACTOR.	SEE POWER SCHEDULE
DS	AS REQUIRED	PULL BOX MOUNTED FLUSH WITH FINISHED WALL AT FLOOR LINE IN SHOWN LOCATION.	IMAGE CONSTRUCTION SYS
DS	---	FIXED POINT DESIGNATION, SAME PULL BOX/OPENING AS ICS.	IMAGE RECONSTRUCTION SYS
DS	AS REQUIRED	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 6" SLEEVE THROUGH FLOOR SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION.	LINE CONNECTION BOX
DS	---	MAIN PANEL WITH MAIN BREAKER FLUSH OR SURFACE MOUNTED. REFER TO POWER SCHEDULE.	SEE POWER SCHEDULE
DS	---	ETHERNET CONNECTION TO HOSPITAL NETWORK, EXACT LOCATION TO BE COORDINATED WITH SIEMENS PROJECT MANAGER.	SYMBIA.NET WORKPLACE
DS	AS REQUIRED	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 3" SLEEVE THROUGH SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION.	UPS FOR SPECT
DS	AS REQUIRED	TRANSFORMER PROVIDING STEP DOWN POWER FOR THE SPECT UPS (SPS). EXACT LOCATION DETERMINED BY CUSTOMER/CONTRACTOR BASED ON LOCATION OF MP AND SPS. SUPPLIED BY CUSTOMER/CONTRACTOR.	SEE POWER SCHEDULE
DS	---	FIXED POINT DESIGNATION, SAME PULL BOX/OPENING AS ICS.	
DS	6" x 3 1/2"	ELECTRICAL DUCT THAT RUNS HORIZONTALLY ON THE WALL AT THE FLOOR LINE AND SURFACE MOUNTED ON FINISHED WALL AS SHOWN FOR EXCESS CABLE STORAGE.	RACEWAY
DS	AS REQUIRED	CONDUIT FROM POWER SOURCE TO "MP" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	AS REQUIRED	CONDUIT FROM "MP" TO "TF" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	AS REQUIRED	CONDUIT FROM "TF" TO "SPS" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	1/2"	CONDUIT FROM "SPS" TO "B" SIZED BY ELECTRICAL ENGINEER OF RECORD.	MAXIMUM CONDUIT LENGTH 76'-0"
DS	1 1/4"	CONDUIT FROM "MP" TO "A" (LCB) SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	1 1/4"	CONDUIT FROM "LCB" TO "B" SIZED BY ELECTRICAL ENGINEER OF RECORD.	MAXIMUM CONDUIT LENGTH 76'-0"
DS	AS REQUIRED	CONDUIT FROM "MP" TO "EPO" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	AS REQUIRED	CONDUIT FROM "EPO" TO "EPO" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	AS REQUIRED	CONDUIT FROM "EPO" TO "SPS" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
DS	1/2"	CONDUIT FROM "B" TO "DOOR SAFETY SWITCH" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE SHEET E-101
DS	1/2"	CONDUIT FROM "B" TO "WARNING LIGHT" (X-RAY ON) SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE SHEET E-101
DS	(2) 3"	CONDUIT "B" TO "ICS".	MAXIMUM CONDUIT LENGTH 76'-0"
DS	1 1/2"	CONDUIT FROM "LCB" TO "UPS".	MAXIMUM CONDUIT LENGTH 76'-0"
DS	3"	CONDUIT FROM "B" TO "B2".	MAXIMUM CONDUIT LENGTH 14'-0"

CONTRACTOR SUPPLIED CABLES

FROM	VIA	TO	DESCRIPTION	REMARKS
POWER SOURCE	1	MP	3-PHASE CONDUCTORS, 1 NEUTRAL AND GROUND ALL TO BE THE SAME SIZE. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	2	TF	POWER CABLE FOR SPECT PORTION OF SYMBIA. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
TF	3	SPS	POWER CABLE FOR SPECT PORTION OF SYMBIA. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
SPS	4	B	POWER CABLE FOR SPECT PORTION OF SYMBIA. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	5A	LCB	POWER CABLE FOR CT PORTION OF SYMBIA. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
LCB	6	B	POWER CABLE FOR CT PORTION OF SYMBIA. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	7	EPO	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
EPO	8	EPO	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
EPO	9	SPS	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
B	10	DOOR SAFETY SWITCH	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE SHEET E-101
B	11	WARNING LIGHT	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE SHEET E-101

FINISHED ROOM HEIGHT

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8'-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16, WITH CEILING MOUNTED COMPONENT OTHER THAN RADIATION ON LAMP	MINIMUM 8'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT BOOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

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— 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.

ELECTRICAL NOTES

1) COMPLIANCE: ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA-70), O.S.H.A. REGULATIONS, AS WELL AS APPLICABLE REGULATIONS OF CITY, COUNTY, STATE AND FEDERAL AGENCIES. PROVIDE MATERIALS AND EQUIPMENT THAT COMPLY TO ANSI, IEEE AND NEMA STANDARDS. WHERE APPLICABLE, PROVIDE ONLY MATERIALS AND PRODUCTS THAT ARE U.L. LISTED AND LABELED. CUSTOMER'S/CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF NECA STANDARD OF INSTALLATION.

2) QUALITY ASSURANCE: THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD TO INSURE THAT THE NEW WORK WILL FIT TO 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 SMS PROGRAM MANAGER. ALL DIMENSIONS ARE FROM FINISHED SURFACES. CONDUIT AND PULL BOXES TO BE INSTALLED BY THE CUSTOMER/CONTRACTOR WITH LOCATIONS BEING FIELD VERIFIED BY SMS PROJECT MANAGER.

3) POWER SUPPLY SOURCE: POWER SUPPLIES FOR SIEMENS MEDICAL SOLUTIONS EQUIPMENT SHALL BE DEDICATED SERVICES KEPT ENTIRELY FREE AND INDEPENDENT OF ALL OTHER BUILDING WIRING AND EQUIPMENT, SUCH AS: ELEVATORS, GENERATORS, PUMPS, HVAC SYSTEMS, ETC. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE CUSTOMER/UTILITY COMPANY FIELD REPRESENTATIVE.

4) WORK FURNISHED BY CUSTOMER/CONTRACTOR: WORK NOT PROVIDED BY SIEMENS MEDICAL SOLUTIONS BUT SHOWN ON DRAWINGS TO BE FURNISHED AND INSTALLED BY CUSTOMER/CONTRACTOR INCLUDES THE FOLLOWING BUT IS NOT LIMITED TO UNLESS NOTED OTHERWISE: ELECTRICAL RACEWAYS AND DUCTS, WIRING TROUGHS, PULL BOXES, CONDUITS, CIRCUIT BREAKERS, EMERGENCY OFF BUTTONS, CONDUIT SWITCHES, WARNING LIGHTS, WIRING, WIRING DEVICES, CONNECTORS, LIGHTING EQUIPMENT AND GROUNDING.

5) RACEWAY AND CONDUIT NOTES: RACEWAY SHALL BE ELECTRIC METALLIC TUBING (EMT) FOR RIGID CONDUIT WORK OR WHERE SHORT OFF-SET CONNECTIONS ARE REQUIRED LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE USED. FIELD BENDS SHALL NOT BE LESS THAN AS SHOWN IN TABLE 346-10 OF THE NATIONAL ELECTRICAL CODE. PROVIDE A JETLINE "SUPER TRUE TAPE" OR EQUIVALENT CONDUIT MEASURING TAPE FISH LINE IN ALL RACEWAYS AND CONDUITS. CONDUIT BODIES SHALL NOT BE USED. WHERE A CONDUIT ENTERS A BOX, FITTING, OR OTHER ENCLOSURE, THE CONDUIT SHALL BE PROVIDED BY THE CUSTOMER/CONTRACTOR SHALL BE PROVIDED TO PROTECT THE WIRE FROM ABRASION. CONNECTORS SHALL BE DOUBLE SET SCREW TYPE, STEEL CONCRETE TIGHT.

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. 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 MEDICAL SYSTEMS CABLES DO NOT EXCEED THE SPECIFIED MAXIMUM DISTANCES AS SHOWN ON THE ELECTRICAL DETAILS.

PROVIDE ENCLOSED METAL RACEWAY SYSTEM (WIRE DUCT) WHERE SHOWN ON DRAWINGS WITH DIVIDERS TO SEPARATE THE DUCT (FOR POWER AND SIEMENS MEDICAL SOLUTIONS CABLEING). DIVIDERS AND CROSSOVER PIECES TO BE PROVIDED AS NECESSARY. FOR UL CERTIFIED SYSTEMS, THE CABLE TO CABLE AS WELL AS THE CIRCUIT TO CIRCUIT SEPARATION REQUIREMENT WAS EVALUATED DURING THE UL SYSTEM INVESTIGATION OF THIS EQUIPMENT. ADDITIONAL SEPARATION OF THE SYSTEM CABLE ASSEMBLIES INTO SEPARATE OR PARTITIONED RACEWAYS, UNLESS OTHERWISE NOTED, IS NOT NECESSARY TO INSURE SEPARATION OF CIRCUITS, AS THEY CAN BE IN THE SAME RACEWAY. PROVIDE WIRE DUCT/RACEWAY WITH ACCESSIBLE REMOVABLE COVERS. LOCATIONS OF OPENINGS TO BE CUT IN FIELD ARE TO 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. IN- FLOOR TRENCH DUCT AND FLUSH FLOOR BOXES SHALL BE PROVIDED WITH FULLY GASKETED REMOVABLE COVERS.

6) WIRING: WIRING SHALL BE INSTALLED IN METAL RACEWAY, 600 VOLT CLASS, STRANDED TYPE THHN-THWN, SINGLE CONDUCTOR ANNEALED COPPER FOR A MAXIMUM OPERATING TEMPERATURE OF 75° C (165° F). SIZED AS INDICATED. THE CUSTOMER/CONTRACTOR SHALL LEAVE MINIMUM 10 FT. WIRE TAILS AT ALL OUTLET POINTS WITH WIRE IDENTIFICATION TAGGED AT BOTH ENDS FOR FINAL CONNECTION BY SIEMENS MEDICAL SOLUTIONS.

7) IN ADDITION TO THE CIRCUIT BREAKER LOAD CURRENT RATING, CONSIDERATION MUST ALSO BE GIVEN TO SELECTING CIRCUIT BREAKERS THAT HAVE A HIGH ENOUGH SHORT CIRCUIT CURRENT WITHSTAND RATING TO SAFELY COORDINATE WITH THE POWER SYSTEM AVAILABLE SHORT CIRCUIT CURRENT. GENERALLY, WHEN THE 480 VOLT, 3 PHASE, X-RAY EQUIPMENT IS SERVED FROM A POWER SUPPLY SYSTEM THAT IS PROVIDED WITH A 500 KVA OR SMALLER TRANSFORMER, A STANDARD 14,000 RMS AMPERE WITHSTAND RATED CIRCUIT BREAKER WILL BE ADEQUATE. HOWEVER, IF THE POWER SUPPLY SYSTEM TRANSFORMER IS LARGER THAN 500 KVA, THEN THE CIRCUIT BREAKERS HAVING A SHORT CIRCUIT WITHSTAND RATING GREATER THAN 14,000 RMS AMPERES MAY BE REQUIRED.

SYMBIA INTEVO
REV. 2

SIEMENS

SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16

TYPICAL FINAL DRAWING SET

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.

SCALE: AS NOTED REF. #:

PROJECT #:

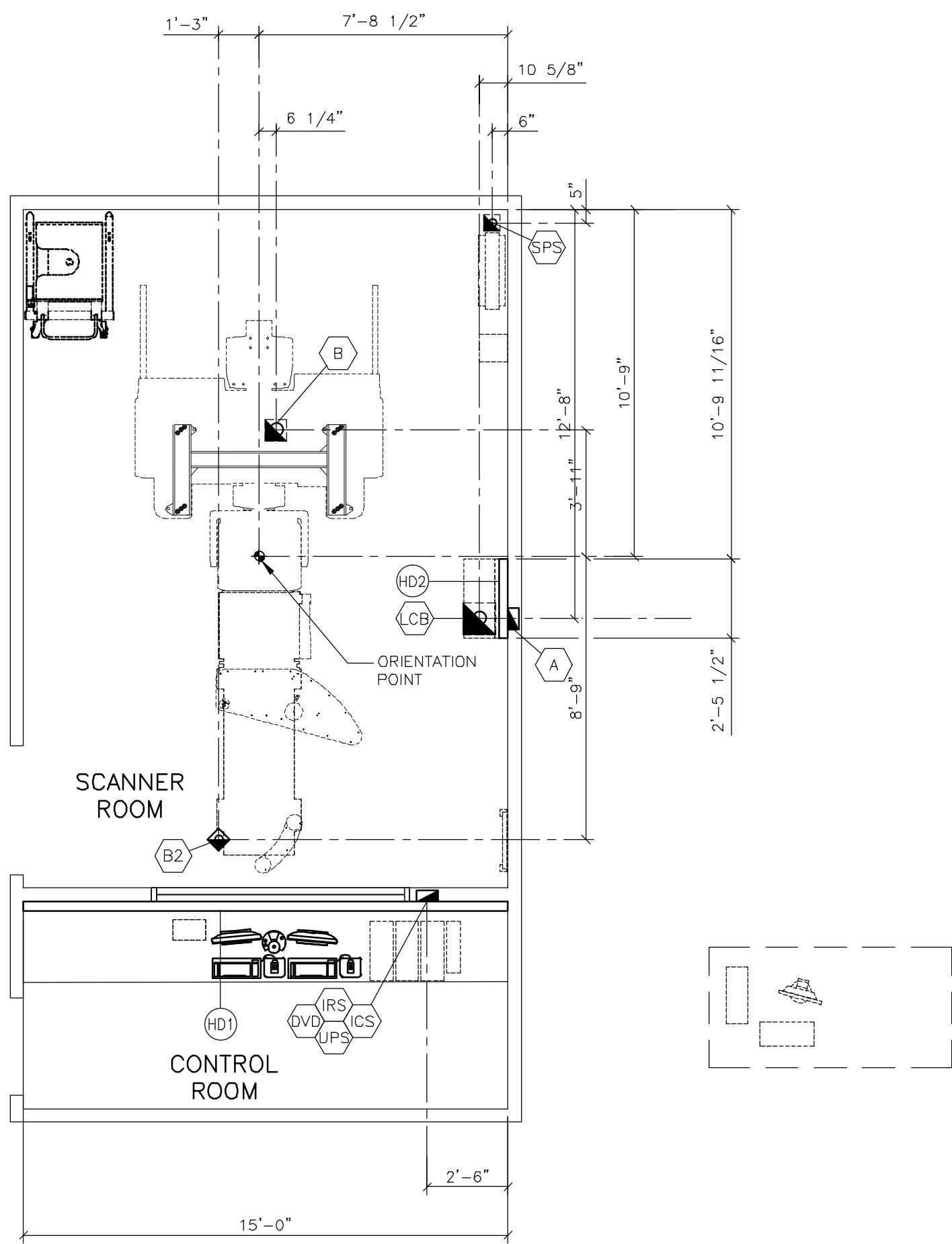
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SHEET 6 OF 7 DRAWN BY: C. MC DONNELL

DATE:

SHEET:

E-101



ELECTRICAL DIMENSION PLAN

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

POWER SCHEDULE			ALL CONDUITS AND WIRE SIZES MUST BE DETERMINED BY THE ELECTRICAL ENGINEER ON RECORD PER N.E.C. AND TO MAINTAIN SIEMENS IMPEDANCE REQUIREMENTS.				
ITEM	QTY	DESCRIPTION					
MP	1	MAIN PANEL WITH MAIN BREAKER FLUSH OR SURFACE MOUNTED. MAIN BREAKER MUST HAVE A TRIPPING DEVICE SO WHEN ANY EPO IS PRESSED THE MAIN BREAKER TRIPS. THIS TRIPPING DEVICE CONTROL CIRCUIT MUST BE OF FAIL-SAFE DESIGN. THE CONTROL CIRCUIT FOR THE EPO'S MUST HAVE AN ENERGY STORAGE SOURCE SO THAT THE CONTROL CIRCUIT NEVER LOSES POWER.					
		MAIN BREAKER AMPS: SEE POWER REQUIREMENTS					
		VOLTS	PHASES	NEUTRAL	GROUND	TOTAL WIRES	
		480Y/277Y	3	1	1	5 (NOTE 1)	
A	1	BREAKER AMPS: 80 FOR LINE CONNECTION BOX (LCB) AND CT GENTRY (B)					
		VOLTS	PHASES	NEUTRAL	GROUND	TOTAL WIRES	
		480Y/277Y	3	1	1	5 (NOTE 1)	
		B	1	BREAKER AMPS: 25 UPS FOR SPECT (SPS) AND SPECT GENTRY (B)			
VOLTS	PHASES			NEUTRAL	GROUND	TOTAL WIRES	
277Y	1			1	1	3 (NOTE 1)	
1) ALL WIRES MUST BE SAME SIZE.							
EPO	VARIES	EMERGENCY POWER OFF BUTTON WITH PROTECTIVE COVER THAT PREVENTS ACCIDENTAL ACTIVATION OF THE EPO BUTTON. THE EPO MUST BE OF FAIL-SAFE DESIGN. THE CONTROL CIRCUIT FOR THE EPO'S MUST HAVE AN ENERGY STORAGE SOURCE SO THAT THE CONTROL CIRCUIT NEVER LOSES POWER. ALL EPO'S ARE TO BE LATCHING TYPE AND MUST BE RESET BEFORE MAIN BREAKER CAN BE RESET.					
		IF ANY OPTIONAL UPS EQUIPMENT IS PROVIDED BY SIEMENS, THE CUSTOMER/CONTRACTOR SHALL PROVIDE AN ADDITIONAL CONTACT IN EACH EPO AND PROVIDE SEPARATE WIRING FOR AN ADDITIONAL EPO CIRCUIT AS REQUIRED. PLEASE COORDINATE THE TYPE OF CONTACT REQUIRED FOR THE UPS CIRCUIT WITH SIEMENS PROJECT MANAGER.					
		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 MEDICAL EQUIPMENT IS POWERED. THE CUSTOMER IS SOLELY RESPONSIBLE FOR THE IMPLEMENTATION OF THE EPOS AND THEIR ASSOCIATED CIRCUITS AND MUST MAKE THE FINAL DETERMINATION CONSIDERING ALL SITE CONDITIONS AND REGULATORY FACTORS.					
		THE EPO SHALL BE MAINTAINED TYPE, PROVIDED WITH (1) SET(S) OF CONTACTS FOR TRIPPING OF THE MAIN IN THE MP. A SECOND SET OF NORMALLY OPEN CONTACTS IS REQUIRED FOR EACH EPO FOR THE SIEMENS SUPPLIED UPS FOR SPECT. THE EPO SHALL BE CONNECTED IN PARALLEL WITH THE (2) SETS OF CONTACTS, THEREBY WHEN ANY EPO IS ACTIVATED, THE NORMALLY OPEN CONTACT WILL CLOSE SHUTTING DOWN THE UPS FOR SPECT. THE OTHER CONTACT (NORMALLY OPEN/NORMALLY CLOSED) WILL TRIP THE MAIN BREAKER.					
		ALL ITEMS LISTED IN THIS SCHEDULE SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR.					
		REV 0					

FINISHED ROOM HEIGHT	
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16	MINIMUM 8'-0"
SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6, INTEVO 16 WITH CEILING MOUNTED COMPONENT OTHER THAN RADIATION ON LAMP	MINIMUM 8'-2" MAXIMUM 12'-0"
CONSIDER THE WARNING LIGHT WILL BE PLACED ON TOP OF THE PATIENT BOOM. ANY OTHER CEILING MOUNTED COMPONENT MUST BE PLACED AS TO NOT COLLIDE WITH WARNING LIGHT.	

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 CONTRACTORS RESPONSIBILITY TO RECALCULATE THE MAXIMUM CONDUIT LENGTHS.	
ASSUMED VALUES USED IN CALCULATING STATED MAXIMUM CONDUIT LENGTHS:	
VERTICAL DUCTS - 10'-0"	
FLOOR PENETRATIONS - 3'-0"	

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.	

SYMBOLS	
ALL MAY NOT APPLY	
	MAIN PANEL OR ENCLOSURE 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
	TRENCHDUCT
	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 UNLESS OTHERWISE STATED.

CUSTOMER SUPPLIED	
DOOR (SAFETY) SWITCH REQUIRED ON ALL DOORS ACCESSING THE EXAMINATION ROOM IN ACCORDANCE WITH LOCAL CODES.	
RADIATION WARNING LIGHTS REQUIRED ON ALL DOORS ACCESSING THE EXAMINATION ROOM IN ACCORDANCE WITH FDA CODES.	
EMERGENCY POWER OFF BUTTON SHOULD BE INSTALLED IN BOTH THE SCANNER AND CONTROL ROOM.	

POWER DISTRIBUTION	
TO ENSURE TROUBLE-FREE OPERATION, WE RECOMMEND THAT THE MAIN POWER LINE RUN DIRECTLY FROM THE HOUSE TRANSFORMER TO THE ON-SITE POWER DISTRIBUTOR.	
THE MAIN POWER LINE SHOULD BE ROUTED DIRECTLY FROM THE ON-SITE POWER DISTRIBUTOR TO THE SYMBIA SYSTEM MAIN POWER PANEL.	

POWER REQUIREMENTS					
SYSTEM	LINE VOLTAGE (VOLTS)	POWER CONSUMPTION (kVA) SEE NOTE BELOW	AUTOMATIC CIRCUIT BREAKER (AMPS)	INCOMING LINE IMPEDANCE (mΩ)	HZ
SYMBIA INTEVO EXCEL AND INTEVO 2	3ø 480±10%	44.8 kVA SCAN	100	400	60
SYMBIA INTEVO EXCEL AND SYMBIA INTEVO 2 POWER CONSUMPTION: ≤40 kVA MAXIMUM POWER CONSUMPTION ≤1 kVA STANDBY					
SPECT GENTRY, PHS, UPS, AND SNAC: 4.8 kVA MAXIMUM POWER CONSUMPTION ≤1.5 kVA STANDBY					
TOTAL CONSUMPTION = 44.8 kVA TOTAL STANDBY = 2.5 kVA					
NOTE: THE SPECT UNITS NEED TO BE WIRED SINGLE PHASE TO NEUTRAL WITH APPROPRIATE BREAKER AND WIRE SIZE.					
DO NOT CONNECT ANY EXTERNAL USERS TO THE SPECT/CT POWER LINE. FOR SYMBIA INTEVO EXCEL AND SYMBIA INTEVO 2, THE IMAGING SYSTEM IMS (ICS, IRS, AND MONITOR) MUST BE CONNECTED VIA THE UPS TO THE LCB. THE FUSE IS ALREADY INTEGRATED IN THE LCB.					
AN ON/OFF SWITCH INDICATOR IS INTEGRATED IN THE LCB, A SEPARATE ON/OFF SWITCH MAY BE REQUIRED PER LOCAL CODE.					
THE SCANNER AND CONTROL ROOM SHOULD BE EQUIPPED WITH AT LEAST ONE EACH EMERGENCY POWER OFF BUTTON.					

POWER REQUIREMENTS					
SYSTEM	LINE VOLTAGE (VOLTS)	POWER CONSUMPTION (kVA) SEE NOTE BELOW	AUTOMATIC CIRCUIT BREAKER (AMPS)	INCOMING LINE IMPEDANCE (mΩ)	HZ
SYMBIA INTEVO 6 AND INTEVO 16	3ø 480±10%	74.8 kVA SCAN	100	320	60
SYMBIA INTEVO 6 AND SYMBIA INTEVO 16 POWER CONSUMPTION: ≤70 kVA MAXIMUM POWER CONSUMPTION ≤3 kVA STANDBY					
SPECT GENTRY, PHS, UPS, AND SNAC: 4.8 kVA MAXIMUM POWER CONSUMPTION ≤1.5 kVA STANDBY					
TOTAL CONSUMPTION = 74.8 kVA TOTAL STANDBY = 4.5 kVA					
NOTE: THE SPECT UNITS NEED TO BE WIRED SINGLE PHASE TO NEUTRAL WITH APPROPRIATE BREAKER AND WIRE SIZE.					
DO NOT CONNECT ANY EXTERNAL USERS TO THE SPECT/CT POWER LINE. FOR SYMBIA INTEVO 6 AND SYMBIA INTEVO 16, THE IMAGING SYSTEM IMS (ICS, IRS, AND MONITOR) MUST BE CONNECTED VIA THE UPS TO THE LCB. THE FUSE IS ALREADY INTEGRATED IN THE LCB.					
AN ON/OFF SWITCH INDICATOR IS INTEGRATED IN THE LCB, A SEPARATE ON/OFF SWITCH MAY BE REQUIRED PER LOCAL CODE.					
THE SCANNER AND CONTROL ROOM SHOULD BE EQUIPPED WITH AT LEAST ONE EACH EMERGENCY POWER OFF BUTTON.					

UPS FOR SPECT PREINSTALL REQUIREMENTS	
THE CUSTOMER HAS PURCHASED THE UPS FOR SPECT OPTION FOR THE SPECT PORTION OF THE SYMBIA INTEVO. THE UPS FOR SPECT REQUIRES 208/220/240 VAC AND NEEDS A CUSTOMER/CONTRACTOR SUPPLIED STEP DOWN TRANSFORMER (277 VOLTS PRIMARY 5 KVA STEP DOWN TRANSFORMER TO 208/220/240 VAC). IT IS THE CUSTOMER/CONTRACTOR RESPONSIBILITY TO PROVIDE POWER TO AND CONNECT THE STEP DOWN TRANSFORMER PRIOR TO EQUIPMENT DELIVERY AND INSTALLATION.	

POWER QUALITY	
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.	

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.

			SYMBIA INTEVO EXCEL, INTEVO 2, INTEVO 6 AND INTEVO 16 TYPICAL FINAL DRAWING SET	
			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.	
			SCALE: AS NOTED	REF. #:
			PROJECT #: 13041	SHEET: E-102
			SHEET 7 OF 7 DRAWN BY: C. MC DONNELL	
			DATE:	

SYMBIA INTEVO
REV 2