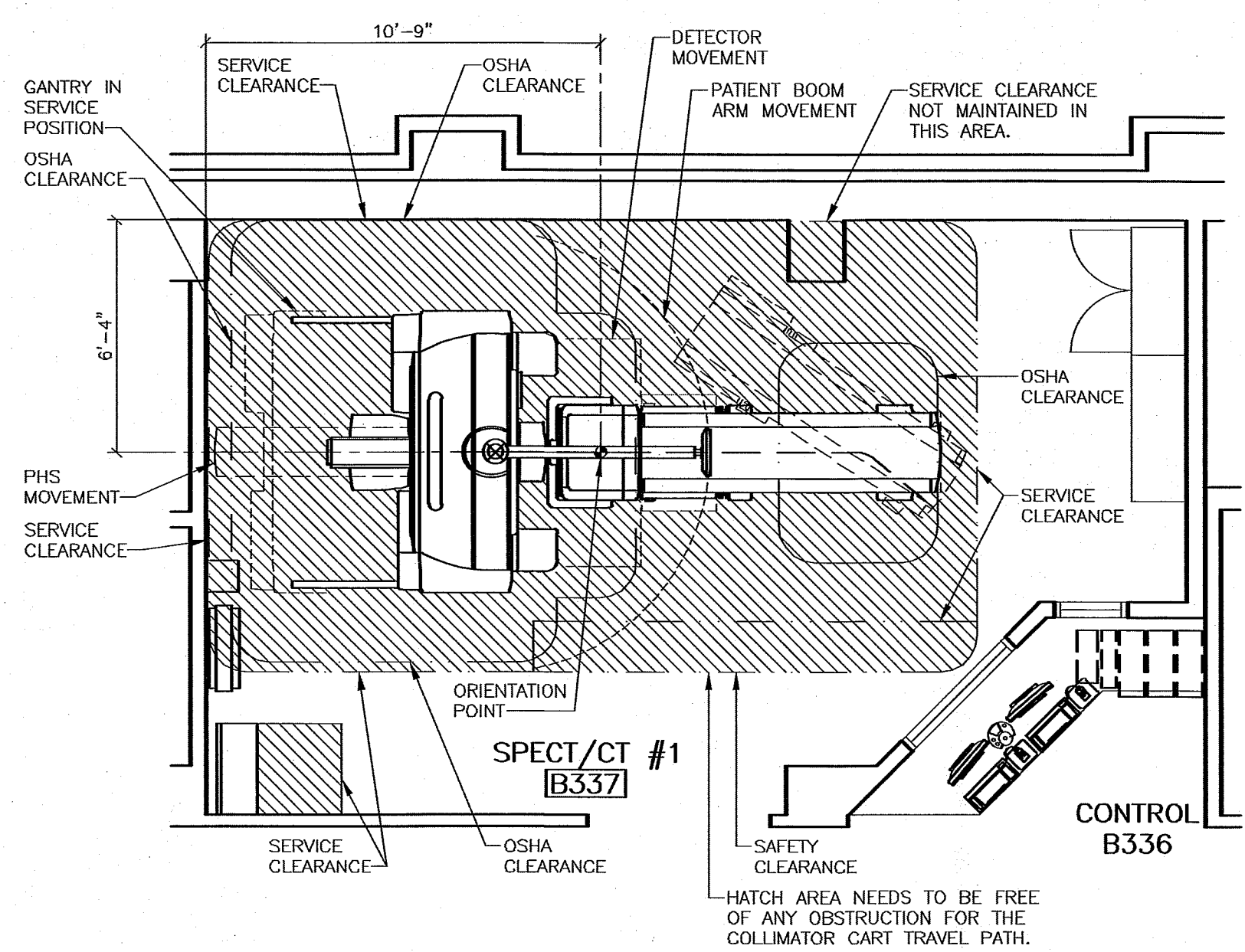


REFERENCE DOCUMENT - NOT FOR CONSTRUCTION

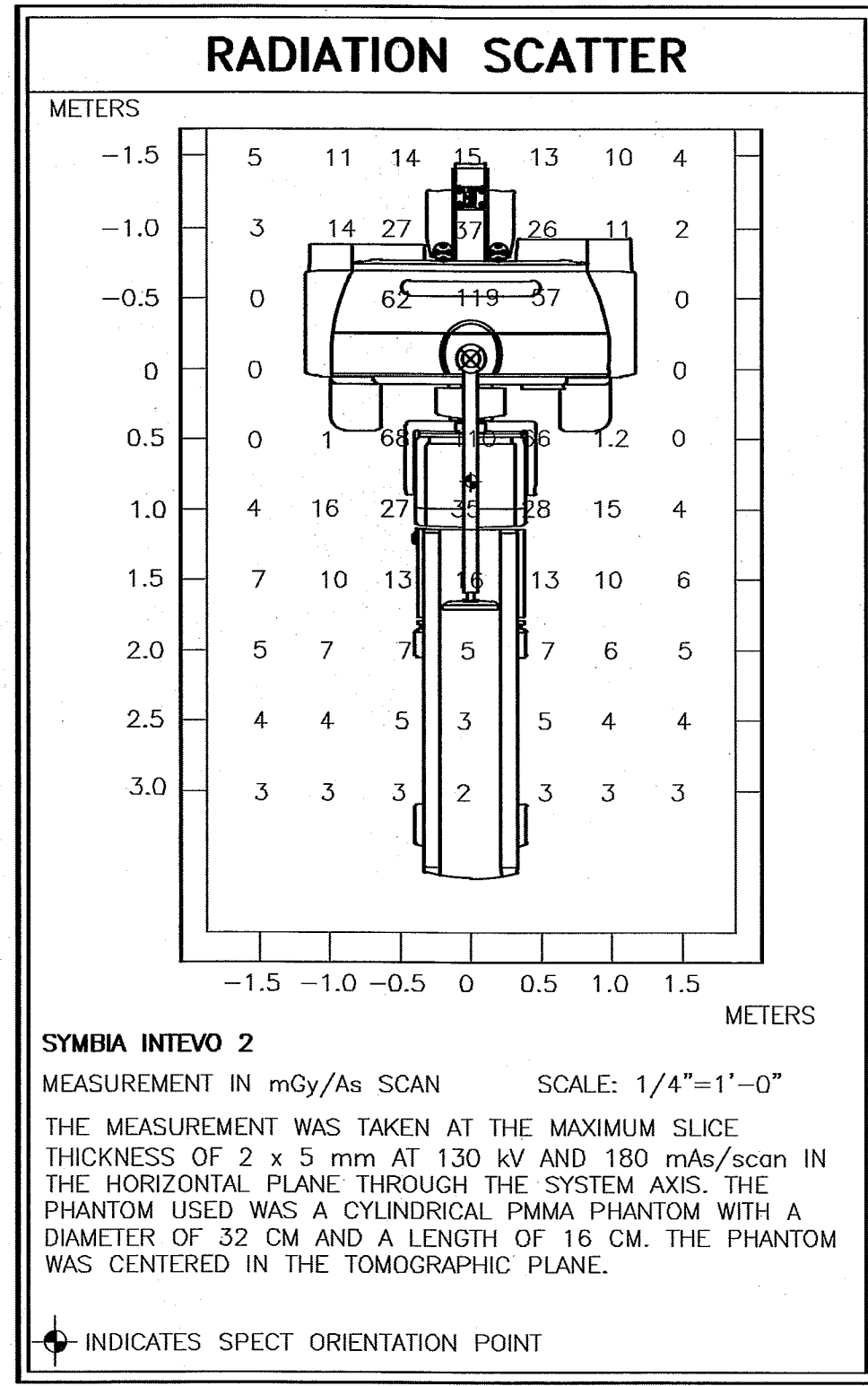
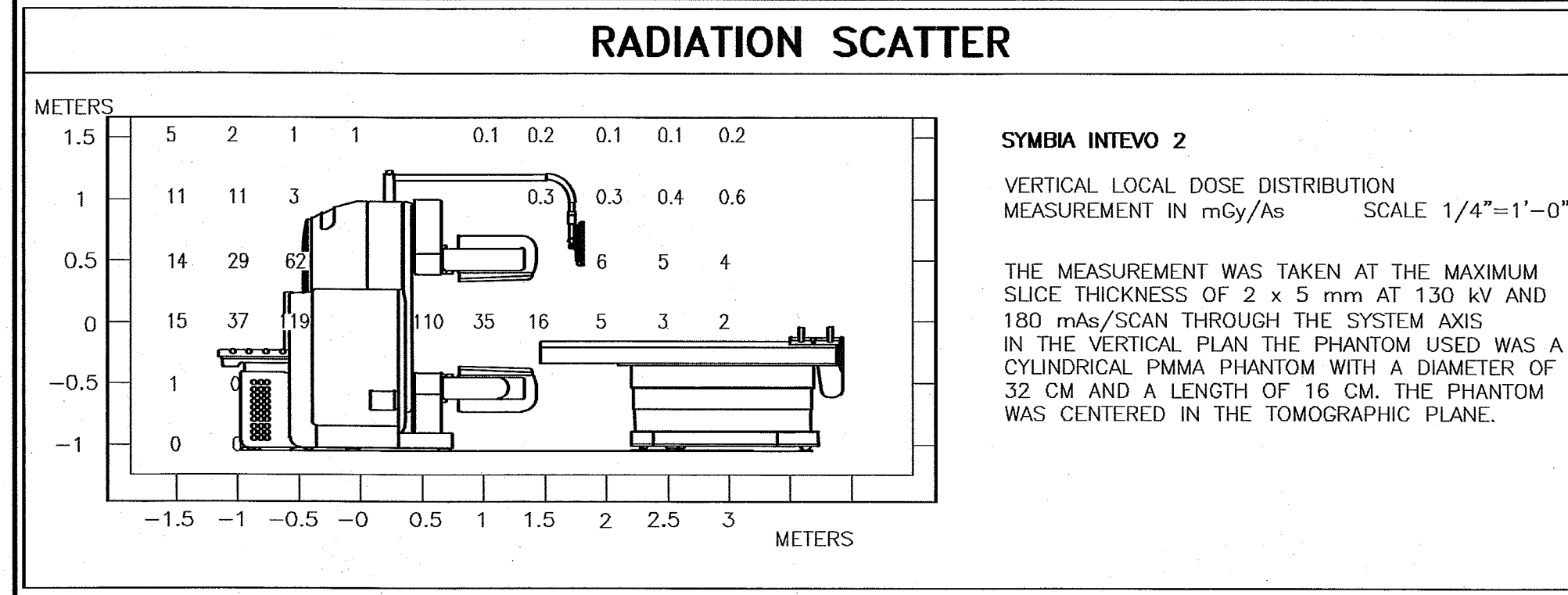
**SAFETY/SERVICE CLEARANCE PLAN**



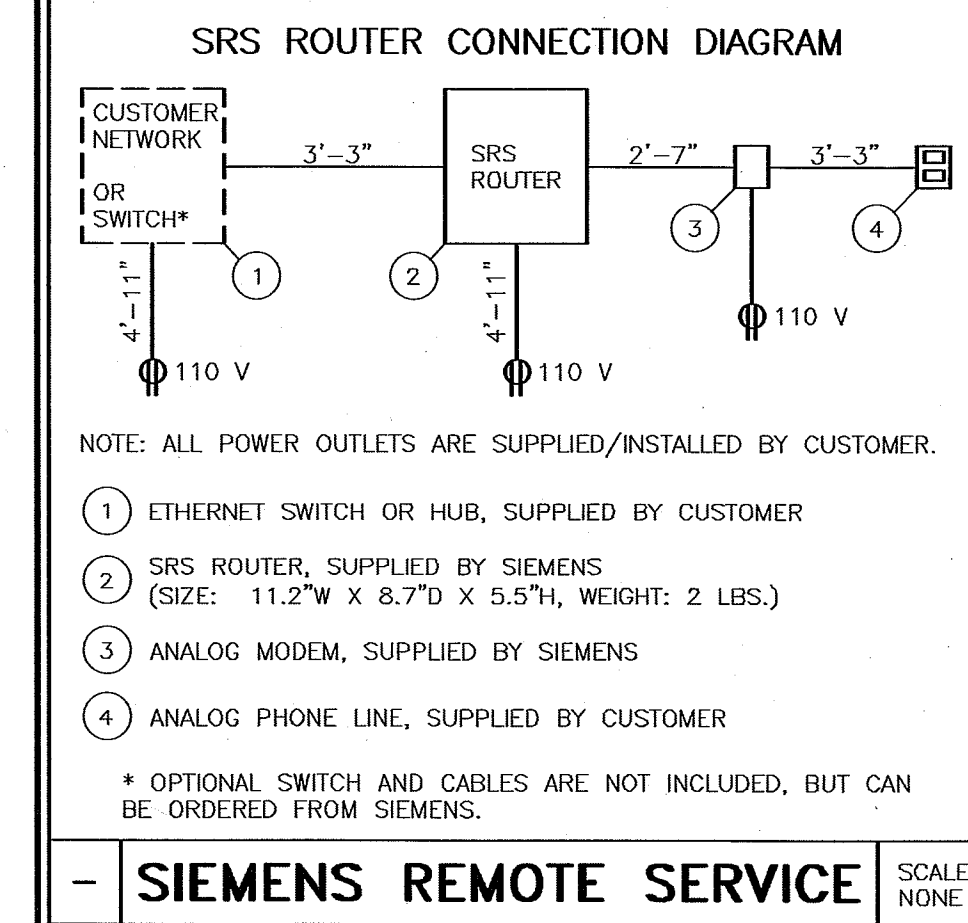
SCALE: 1/4" = 1'-0"

**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.



**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.



**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.

**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.

**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).

**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.

**RADIOACTIVE SOURCES**

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

- 1) 10-20 mCi Co57 (COBALT 57) OR LIQUID FILLED Tc99 (TECHNETIUM 99) SHEET SOURCE (FOR EXTRINSIC FLOOD).
- 2) POINT SOURCE 30-35 uCi Tc99 (FOR INTRINSIC FLOODS, TUNING AND PEAKING).
- 3) QUANTITY OF 5 - 1 mCi Tc99 POINT SOURCES (FOR MHR CALIBRATION).
- 4) 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.

**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.

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**SIEMENS**

**MAINE MEDICAL CENTER**  
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 SPECT/CT #1 B337 - SYMBIA INTEVO 2

PROJECT #: **1402948** SHEET: **A-102**

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DATE: 09/12/14 DRAWN BY: R. HILL  
 SHEET OF 6 DATE: 09/12/14

SCALE: AS NOTED REF: #1-291XKI

SYMBIA INTEVO REV 1