North Carolina Department of Health and Human Services
Division of Health Service Regulation

Pat McCrory
Governor

Aldona Z. Wos, M.D.
Ambassador (Ret.)
Secretary DHHS

Drexdal Pratt
Division Director

December 23, 2013

Toni Lovingood
3990 E. US Hwy. 64 Alt.
Murphy, NC 28906

Exempt from Review - Replacement Equipment

Facility:	Murphy Medical Center
Project Description:	Replace existing MRI scanner
County:	Cherokee
FID #:	943366

Dear Ms. Lovingood:

In response to your letter of November 15, 2013, the above referenced proposal is exempt from certificate of need review in accordance with N.C.G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, the Siemens MAGNETOM Aera to replace the existing Toshiba Excelart AG short Bore 1.5T MRI system, serial #D3542009. This determination is based on your representations that the existing unit will be removed from North Carolina and will not be used again in the State without first obtaining a certificate of need. Further please be advised that as soon as the replacement equipment is acquired, you must provide the CON Section and the Medical Facilities Planning Section with the serial number of the new equipment to update the inventory, if not already provided.

Moreover, you need to contact the Construction and Acute and Home Care Licensure and Certification Sections to determine if they have any requirements for development of the proposed project.

It should be noted that this Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this Agency and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Julie Halatek
Project Analyst

Craig R. Smith, Chief
Certificate of Need Section

cc: Construction Section, DHSR
Acute and Home Care Licensure and Certification, DHSR
Medical Facilities Planning, DHSR

Certificate of Need Section
www.ncdhhs.gov
Telephone: 919-855-3873 • Fax: 919-733-8139
Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603
Mailing Address: 2704 Mail Service Center •Raleigh, NC 27699-2704
An Equal Opportunity/ Affirmative Action Employer

Murphy Medical Center

Julie

November 15, 2013

Mr. Craig Smith, Chief
Division of Health Services Regulations
Certificate of Need Section
2704 Mail Service Center
Raleigh, NC 27699-2704

Re: Replacement of Fixed MRI

Dear Mr. Smith,

Please accept this letter as an official request on behalf of Murphy Medical Center, Inc, (NC License #H0239, Facility ID #943366) to replace the 2004 fixed MRI located at Murphy Medical Center, 3990 E. US Hwy 64 Alt, Murphy, NC 28906.

Background

Following Certificate of Need approval on July 21, 2003 for a fixed MRI scanner Project I.D.#A-6767-03, Murphy Medical Center installed a Toshiba Excelart AG short Bore 1.5T MRI system, Serial #D3542009 that was certified on February 3, 2004. The unit has served our community well for almost 10 years. Recently our radiologists in viewing images from newer technology have determined that it would be in the best interest of our patients to replace our present scanner. Our goal is to insure that the residents of our service area continue to receive the absolute best care that we can provide to them.

Please accept this letter as the Owners documentation that the existing fixed MRI unit that was installed in 2004 has continued to be in operation since that time and continues to be so.

The new MRI we plan to purchase is the Siemens Aera. The present unit will either be scrapped by Murphy Medical Center or sold to a vendor for use out of the state of North Carolina. The Siemens purchase agreement is enclosed.

Below are bullet points outlining supporting information of procedures and services that we will be able to provide to our patients that the present system will not do.

- .70 cm bore versus the current .60 cm bore. This will allow Murphy Medical Center to scan larger patients while addressing claustrophobia issues.
- 550 lb. table weight versus 350 lb. current table weight
- New MRI offers faster scanning capability to improve patient comfort and productivity

T: (828) 837-8161
F: (828) 835-7507
3990 E. US Hwy. 64 Alt.
Murphy, NC 28906
www.murphymedical.org

- Currently 4 channel MRI being replaced with a 48 Channel MRI.

Installation Preparation

The new MRI will be placed in the same room that the present MRI is presently located following removal. In preparation for the removal of the present MRI and installation of the new one, Murphy Medical Center has taken the following steps:

1. Engaged Clark Patterson Lee Architectural/Engineering Design firm. They will provide stamped drawings for DHSR Construction Section to review as necessary.

2. Engaged Wells and West for removal of old MRI and renovation of the existing room.

3. We are in discussion with Insight, Mobile Leasing Group and Shared Imaging for proposals of a mobile MRI unit to be used for up to ninety (90) days during the installation of the new unit. We will utilize a mobile MRI unit on a temporary basis for the time period that our fixed MRI is out of service. At the time the new unit is operational, the mobile unit will be removed. At no time will both units be operational for providing services to Murphy Medical Center patients. The mobile unit will be placed on the mobile pad that Murphy Medical Center has located adjacent to the radiology department and emergency room area of the building.

4. MRI prices will not be increased during this current fiscal year which ends June 30, 2014.

Capital Cost of Project

Engineering/Structural fees	$ 25,100
Construction/Renovation	$ 229,900
Mobile unit lease estimate	$ 40,000
Equipment Cost	$ 1,139,194
Total	$ 1,434,194

Mr. Smith, thank you for your attention to this request. As soon as I receive a favorable response from the CON Section, I will contact the Construction Section to prepare documents that they will require to proceed. If I can provide additional information, please contact me at 828-835-7558 or tlovingood@murphymedical.org.

Respectfully Submitted,

Toni Lovingood

Toni Lovingood
COO
Murphy Medical Center

SIEMENS

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967
Phone: (610) 448-4500

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Customer Number: 0000064081

Date: 11/8/2013

MURPHY MEDICAL CENTER
3990 E US 64 ALT
MURPHY, NC 28906

Siemens Medical Solutions USA, Inc. is pleased to submit the following quotation for the products and services described herein at the stated prices and terms, subject to your acceptance of the terms and conditions on the face and back hereof, and on any attachment hereto.

Table of Contents **Page**

Proposal valid until 12/23/2013

Pricing on this Quotation is contingent upon the Customer signing a POS Service agreement at the same time as the System Purchase.

Customer is responsible for removal of current Toshiba MR system.

Siemens is developing solutions designed to reduce the operating noise level of the System.
Should this solution become available within the next twenty four months, Siemens will provide it at no additional cost to Customer.

This quote is based upon standard delivery terms and conditions (e.g., standard work hours, first floor delivery, etc.), basic rigging, mechanical installation and calibration.

Siemens Medical Solutions USA, Inc., Project Management performed a site-specific assessment and ascertained the actual out-of-scope costs to be $4,200.

Accepted and Agreed to by:

Siemens Medical Solutions USA, Inc.

By (sign): _____
Name: Matthew Behr
Title: Account Executive
Date: _____

MURPHY MEDICAL CENTER

By (sign): [signature]
Name: MIKE STEVENSON
Title: CEO
Date: 11-15-13

All pages of the signed proposal must be returned to Siemens to process the order - Thank you.

SIEMENS

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Quote Nr: **1-74T023 Rev. 7**

Terms of Payment: 00% Down, 80% Delivery, 20% Installation

Purchasing Agreement: Free On Board: Destination
MedAssets

MedAssets terms and conditions apply to Quote Nr 1-74T023

MAGNETOM Aera - USA

All items listed below are included for this system:

Qty	Part No.	Item Description	Extended Price
1	14416900	**MAGNETOM Aera - System** MAGNETOM Aera - 1.5T Tim+Dot system - The integration of the next generation Tim - "Tim 4G" and the Siemens unique Dot Engines (Day optimizing throughput Engine). Short and open appearance (145 cm system length with 70 cm Open Bore Design). Tim 4G's redesigned RF system and all-new coil architecture. - Siemens unique DirectRF(tm) technology enable Tim's new all digital-in/ digital-out design - All-new coil architecture including Dual-Density Signal Transfer Technology - Whole-body superconductive Zero Helium Boil-Off 1.5T magnet - TrueForm Magnet and Gradient Design - Actively Shielded water-cooled Siemens gradient system - Head/Neck 20 DirectConnect, Spine 32 DirectConnect, Body 18, Flex Large/Small 4 Dot offers patient personalization, user guidance and process automation that result in consistent examination results. - Brain Dot Engine is designed to simplify general brain examinations through personalized, guided and automated workflows. - Dot Display and Dot Control Centers - efficient patient preparation. Additional features include: -Tim Application Suite including Neuro, Angio, Cardiac, Body, Onco, Breast, Ortho, Pediatric and Scientific Suite - syngo MR software including 1D/2D PACE, syngo BLADE, iPAT², Phoenix, Inline Technologies. - High performance host computer and measurement and reconstruction system The system (magnet, electronics and control room) can be installed in 30sqm space. For system cooling either the Eco Chiller options or the Separator is required.	$940,021
1	14416901	**Tim [204x48] XJ Gradients #Ae** Tim [204x48] XJ-gradient performance level Tim 4G with it's newly designed RF system and innovative coil architecture enables high resolution imaging and increased throughput. Up to 204 simultaneously connected coil elements in combination with the standard 48 independent RF channels, allow for more flexible parallel imaging. Maximum SNR through the new Tim 4G matrix coil technolgy. XJ - gradients The XJ- gradients are designed combining high performance and linearity to support clinical whole body imaging at 1.5T. The force compensated gradient system minimizes vibration levels and accoustic noise. The XJ gradients combine 33 mT/m peak amplitude with a slew rate of 125 T/m/s.	$1
1	14416916	**Light Green Design #T+D** The MAGNETOM Aera / MAGNETOM Skyra design is available in different light and appealing variants which perfectly integrates into the different environments. The Light Green design variant compromises of a main face plate cover in an optically appealing brilliant white premium PET-G material with a surrounding Silver trim. The Dot Control Centers and the unique Dot Display are neatly integrated into this main face plate.The asymetrical deco area on the left side is colored in a light green satined premium PET-G material with a surrounding brilliant silver trim. The table cover is presented in white with a surrounding silver trim.	$5,024
1	08464872	**PC Keyboard US english #Tim** Standard PC keyboard with 101 keys.	$1

SIEMENS
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Qty	Part No.	Item Description	Extended Price
1	14416905	**Tim Table #Ae** The new Tim Table is designed for maximized patient comfort and smooth patient preparation. The unique design of the Tim Table can support up to 250 kg (550 lbs) patients without restricting the vertical or horizontal movement.	$1
1	14416961	**Hand/Wrist 16 #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and SlideConnect Technology combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility. Hand/Wrist 16 for examinations of the left or right hand and wrist region consists of a base plate and an iPAT compatible 16-channel coil and allows high resolution imaging of the wrist and the hand within one examination. Hand/Wrist 16 will be connected via a SlideConnect plug for fast and easy patient preparation.	$32,657
1	14416962	**Foot/Ankle 16 #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and DirectConnect Technolgy combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility. Foot/Ankle 16 for examinations of the left or right foot and ankle region consists of a base plate and an iPAT compatible 16-channel coil and allows high resolution imaging of the foot and ankle within one examination. Foot/Ankle 16 is a cable-less coil and will be connected via DirectConnect for fast and easy patient preparation.	$37,681
1	14418576	**Body Package #Ae** Text The following SW and HW components are already included in the Body Package #Ae: - Abdomen Dot Engine - Tim Planning Suite - Body 18	$82,896
1	14430432	**Ortho Package #Ae** The following SW and HW components are already included in the Ortho Package #Ae: - LargeJoint Dot Engine - Shoulder 16 Coil Kit - Tx/Rx 15-channel Knee Coil DDST	$91,437
1	14418524	**AutoAlign Spine** Single mouse click double oblique positioning of transverse slice packages in spine imaging. AutoAlign Spine localizes the intervertebral disk on sagittal images and positions the transverse slice packages parallel to the disk in a standardized way. This allows for a faster and easier exam and supports reading by delivering a higher and more standardized image quality.	$9,043
1	14407258	**MR Workplace Table 1.2m** Table suited for syngo Acquisition Workplace and syngo MR Workplace based on syngo Hardware.	$804
1	14407261	**MR Workplace Container, 50cm** 50 cm wide extra case for the syngo host computer with sliding front door to allow change of storage media (CD/DVD/USB).	$1,005
1	14416948	**Patient Supervision TV #T+D** The supervision solution is customizable and designed to address different site specific requirements. Up to 4 cameras can be connected for patient supervision in the examination or waiting room. This package contains a special video camera for monitoring the patient during an MR examination, conveniently mounted on the wall of the examination room. The information is displayed at an LCD monitor in the control room. Note: For Spectra, up to 2 cameras can be connected for patient supervision in the examination room.	$10,048
1	14405351	**Patient TV wall support** Wall mount for the patient monitor.	$301
1	08857828	**UPS Cable #Tim** Power cable for connecting the UPS Powerware PW 9130-3000i (14413662) to the ACC of MAGNETOM Tim and MAGNETOM Tim+Dot systems for backing up the computer. Standard cable length: 9 m.	$1,500

SIEMENS

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Qty	Part No.	Item Description	Extended Price
1	14413662	**UPS Powerware PW9130G-3000T-XLEU** UPS system Eaton PW9130G-3000T-XLEU for MAGNETOM Tim, MAGNETOM Tim+Dot and MAGNETOM Symphony systems for safeguarding computers. Power output: 3.0 kVA / 2.7 kW Bridge time: 5 min full load / 14 min half load Input voltage: 230 VAC	$2,700
1	14413663	**UPS Battery module** UPS battery module Eaton PW 9130N-3000T-EBM for all MAGNETOM Tim, MAGNETOM Tim+Dot and MAGNETOM Symphony systems for safeguarding computers. Extension for: PW9130i-3000T Battery type: Closed, maintenance-free Extension of the bridge time to: 24 minutes with a module Dimensions (H x W x D): Battery module: 346 x 214 x 412 mm incl. bracket set Weight: approx. 50 kg	$1,000
1	MR_STD_RIG_INST	**MR Standard Rigging and Installation** MR Standard Rigging and Installation This quotation includes standard rigging and installation of your new MAGNETOM system Standard rigging into a room on ground floor level of the building during standard working hours (Mon. - Fri./ 8 a.m. to 5 p.m.) It remains the responsibility of the Customer to prepare the room in accordance with the SIEMENS planning documents Any rigging requiring a crane over 80 tons and/or special site requirements (e.g. removal of existing systems, etc.) is an incremental cost and the responsibility of the Customer. All other "out of scope" charges (not covered by the standard rigging and installation) will be identified during the site assessment and remain the responsibility of the Customer.	$0
1	MR_BTL_INSTALL	**MR Standard Rigging & Install**	$15,000
1	MR_PREINST_FIXED	**T+D Preinstall kit for fixed table**	$550
1	MR_CRYO	**Standard Cryogens**	$8,000
1	MR_PM	**MR Project Management** A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemen's equipment. The assigned PM will work with the customer's facilities management, architect or building contractor to assist you in ensuring that your site is ready for installation. Your PM will provide initial and final drawings and will coordinate the scheduling of the equipment, installation, and rigging, as well as the initiation of on-site clinical education.	$0
1	MR_INITIAL_32	**Initial onsite training 32 hrs** MR_INITIAL_32 Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.	$7,800
1	MR_FOLLOWUP_32	**Follow-up training 32 hrs** Up to (32) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.	$7,800
1	MR_INT_DOT_BCLS	**MR Dot Training Class** Tuition for (1) imaging professional to attend Classroom Course at Siemens Training Center. The objectives of this class are to introduce the user interface of the common syngo platform, including Dot, and instructions on building protocols, demonstration of software functions, and hands-on sessions. This class includes lunch, economy airfare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.	$4,500

SIEMENS

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Qty	Part No.	Item Description	Extended Price
2	MR_A_INT_DOT_BCLS	**MR Dot Training Class** Tuition for (1) imaging professional to attend Classroom Course at Siemens Training Center. The objectives of this class are to introduce the user interface of the common syngo platform, including Dot, and instructions on building protocols, demonstration of software functions, and hands-on sessions. This class includes lunch, economy airfare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.	$9,000
1	4MR5142869	**Armrest #MR**	$240
1	KKTECOMR_45	**KKT ECOCHILLER 122L** The KKT ECO 122 -L chiller is a dedicated 20°C cooling system for MAGNETOM Aera which automatically adapts to the different cooling requirements (e.g. system in operation, standby, ...) to reduce the energy consumption for cooling. The cooling system must be used in combination with the IFP (Interface Panel), if there is no on-site chilled water supply at all. The IFP is included in the scope of supply.	$36,500
1	CHILINST_AVT	**Chiller Start-up and Warranty for TIM**	$3,750
1	SIMR250A	**Integrated Electrical Cabinet** NOT approved for OSHPD facilities. The Integrated Electrical Cabinet (IEC) is a device that automatically resets the circuit breakers that have been tripped by temporary voltage fluctuations such as power snags or power surges. Voltage fluctuations are generally caused by lightning or during the start-up of a back-up power supply unit. The IEC minimizes helium losses for MR systems due to the helium compressor/cold head not being operational. The IEC - MR250A, which contains all Siemens brand components, is a power distribution solution for MAGNETOM Skyra, Verio, Trio A TIM System, Avanto, Aera, Espree, and Biograph mMR. The IEC includes the required circuit breaker for the MR system (170A) and the circuit breakers for both the chiller (70A) and RF cabin lighting (25A). It also includes a 250A main disconnect circuit breaker, as well as four Siemens Emergency Stop (EPO) buttons. These mushroom pushbuttons are equipped with: a protective shroud, a positive latching function, and a mechanical switching position indicator. The IEC is intended to be operated in 480V 50-60 Hz grids. Siemens Project Manager will coordinate the delivery of the IEC. The electrical installation of the IEC - MR250A cabinet and the EPO buttons is the responsibility of the customer and has to be performed by a qualified electrician.	$9,110
1	MR_PR_ELEVATE_2	**MR Elevate Program** **$-183,376**	- $183,376
1	MR_ADDL_RIGGING	**Out of Scope** **$4,200**	$4,200
		System Total:	**$1,139,194**

OPTIONS:

Qty	Part No.	Item Description	Extended Price	Initial to Accept
1	14409198	**Native syngo #Tim** Integrated software package with sequences and protocols for non-contrast enhanced 3D MRA with high spatial resolution. syngo NATIVE particularly enables imaging of abdominal and peripheral vessels and is an alternative to MR angiography techniques with contrast medium, especially for patients with severe renal insufficiency.	+ $34,500	X_____

FINANCING: The equipment listed above may be financed through Siemens. Ask us about our full range of financial products that can be tailored to meet your business and cash flow requirements. For further information, please contact your local Sales Representative.

SIEMENS

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

ACCESSORIES: Don't forget to ask us about our line of OEM imaging accessories to complete your purchase. All accessories can be purchased or financed as part of this order. To purchase accessories directly or to receive our accessories catalog, please call us directly at 1-888-222-9944 or contact your local Sales Representative.

COMPLIANCE: Compliance with legal and internal regulations is an integral part of all business processes at Siemens. Possible infringements can be reported to our Helpdesk "Tell us" function at www.siemens.com/tell-us.

SIEMENS
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Siemens Medical Solutions USA, Inc. General Terms and Conditions

1. GENERAL

1.1 Contract Terms. These terms and conditions constitute an integral part of any contract between Seller and Purchaser identified on the first page hereof and shall govern the sale of the products identified in such contract ("Products"). Seller shall not be bound by, and specifically objects to, any terms, conditions or other provisions which are different from or in addition to the provisions of this Agreement (even if provided to Seller concurrently with this Agreement), unless Seller specifically agrees to any such provision in a writing signed by Seller. Neither Seller's lack of objection to any such terms, nor delivery of the Products or provision of any services hereunder, shall constitute the agreement of Seller to any such terms. Purchaser acknowledges that this is a commercial and not a consumer transaction.

1.2 Acceptance. Purchaser shall be deemed to have assented to, and to have waived any objection to, this Agreement upon the earliest to occur of any of the following: Purchaser's completion or execution of this Agreement; Purchaser's acceptance of all or any part of the Products; Purchaser's issuance of a purchase order for any Products identified on Seller's quotation or proposal; or delivery of the Products to the common carrier for shipment pursuant hereto.

1.3 Refurbished/Used Products. For Products identified on this Agreement as used or refurbished Products, these Products have been previously owned and used. When delivered to Purchaser, the Products may have received mechanical, electrical and/or cosmetic reconditioning, as needed, and will comply with the manufacturer's specifications. Since pre-owned Products may be offered simultaneously to several customers, the sale of such Products to Purchaser cannot be guaranteed and is subject to continuing availability at the time Purchaser accepts Seller's offer to sell the Products. If the Products are no longer available, Seller will use its best efforts to identify other products in its inventory that may be suitable for purchase by Purchaser, and if substitute products are not acceptable to Purchaser, then Seller will cancel the order and refund to Purchaser any deposits previously paid. The warranty period for any used or refurbished Products will be separately stated on the quotation.

1.4 Third Party Products. If this Agreement includes the sale of third party products not manufactured by Seller, then Purchaser agrees and acknowledges that (a) Purchaser has made the selection of these products on its own, (b) the products are being acquired by Seller solely at the request of and for the benefit of Purchaser, in order to eliminate the need for Purchaser to issue a separate purchase order to the manufacturer of the products, (c) no representation, warranty or guarantee has been made by Seller with respect to the products, (d) the obligation of Purchaser to pay Seller for the products is absolute and unconditional, (e) Purchaser will indemnify and hold Seller harmless from and against any and all claims, regardless of the form of action, related to, resulting from or caused by the products or any work or service provided by the manufacturer of the products or any other party, (f) use of the products may be subject to Purchaser's agreement to comply with any software licensing terms imposed by the manufacturer, as well as any applicable laws, rule and regulations; and (g) the manufacturer, and not Seller, is solely responsible for any required installation, testing, validation, tracking, product recall, warranty service, maintenance, support, and complaint handling, as well as any other applicable FDA regulatory requirements, and the Purchaser will look solely to the manufacturer regarding these services and will assert no claim against Seller with respect to these products.

2. PRICES

2.1 Quotations. Unless otherwise agreed to in writing or set forth in the quotation, all prices quoted by Seller are based on U.S. dollars, and include standard and customary packaging. F.O.B. terms are set forth in Section 6.2 hereof. Domestic prices apply only to purchasers located in, and who will use the Products in, the U.S. International prices apply to all purchasers located outside of, or who will use or ship or facilitate shipment of the Products outside of, the U.S. Unless otherwise stated, the quotation shall only be valid for forty-five (45) days from the date of the quotation.

2.2 Delay in Acceptance of Delivery. Should the agreed delivery date be postponed by Purchaser, Seller shall have the right to deliver the Products to storage at Purchaser's risk and expense, and payments due upon delivery shall become due when Seller is ready to deliver.

2.3 Escalation. Unless otherwise agreed to in writing, except as to Products to be delivered within six (6) months of Seller's acceptance of Purchaser's order, Seller reserves the right to increase its prices to those in effect at the time of shipment.

3. TAXES

3.1 Any sales, use or manufacturer's tax which may be imposed upon the sale or use of Products, or any property tax levied after readiness to ship, or any excise tax, license or similar fee required under this transaction, shall be in addition to the quoted prices and shall be paid by Purchaser. Notwithstanding the foregoing, Seller agrees to honor any valid exemption certificate provided by Purchaser.

4. TERMS OF PAYMENT; DEFAULT

4.1 Payments; Due Date. Unless otherwise set forth in the quotation, Seller's payment terms are as follows: an initial deposit of 10% of the purchase price for each Product is due upon submission of the purchase order, an additional 80% of the purchase price is due upon delivery of each Product, and the final 10% of the purchase price is due upon completion of installation or when the Products are available for first patient use, whichever occurs first. Unless otherwise agreed, all payments other than the initial deposit are due net thirty (30) days from the date of invoice. Seller shall have no obligation to complete installation until the payment due upon delivery is received. All amounts payable pursuant to this Agreement are denominated in United States dollars, and Purchaser shall pay all such amount in lawful money of the United States. Partial shipments shall be billed as made, and payments for such shipments will be made in accordance with the foregoing payment terms.

4.2 Late Payment. A service charge of 1½% per month, not to exceed the maximum rate allowed by law, shall be made on any portion of Purchaser's outstanding balance which is not paid within thirty (30) days after invoice date, which charge shall be determined and compounded on a daily basis from the due date until the date paid. Payment of such service charge shall not excuse or cure Purchaser's breach or default for late payment.

4.3 Payment of Lesser Amount. If Purchaser pays, or Seller otherwise receives, a lesser amount than the full amount provided for under this Agreement, such payment or receipt shall not constitute or be construed other than as on account of the earliest amount due Seller. Seller may accept any check or payment in any amount without prejudice to Seller's right to recover the balance of the amount due or to pursue any other right or remedy. No endorsement or statement on any check or payment or in any letter accompanying a check or payment or elsewhere shall constitute or be construed as an accord or satisfaction.

4.4 Where Payment Due Upon Installation or Completion. Should any terms of payment provide for either full or partial payment upon completion of installation or thereafter, and completion of installation is delayed for any reason for which Seller is not responsible, then the Products shall be deemed installed upon delivery and the balance of payments shall be due no later than thirty (30) days from the delivery date regardless of the actual installation date.

4.5 Default; Termination. Each of the following shall constitute an event of default under this Agreement: (i) a failure by Purchaser to make any payment due Seller within ten (10) days of receipt of written notice of non-payment from Seller; (ii) a failure by Purchaser to perform any other obligation under this Agreement within thirty (30) days of receipt of written notice from Seller; (iii) a default by Purchaser under any other obligation to or agreement with Seller or Siemens Financial Services, Inc., or any assignee of the foregoing (e.g., a promissory note, lease, rental agreement, license agreement or purchase contract); or (iv) the commencement of any insolvency, bankruptcy or similar proceedings by or against Purchaser (including any assignment by Purchaser for the benefit of creditors). Upon the occurrence of any event of default, at Seller's election: (a) the entire amount of any indebtedness and obligation due Seller under this Agreement and interest thereon shall become immediately due and payable without notice, demand, or period of grace; (b) Seller may suspend the performance of any of Seller's obligations hereunder, including, but not limited to, obligations relating to delivery, installation and warranty services; (c) Purchaser shall put Seller in possession of the Products upon demand; (d) Seller may enter any premises where the Products are located and take possession of the Products without notice or demand and without legal proceedings; (e) at the request of Seller, Purchaser shall assemble the Products and make them available to Seller at a place designated by Seller which is reasonable and convenient to all parties; (f) Seller may sell or otherwise dispose of all or any part of the Products and apply the proceeds thereof against any indebtedness or obligation of Purchaser under this Agreement (Purchaser agrees that a period of 10 days from the time notice is sent to Purchaser shall be a reasonable period of notification of sale or other disposition of the Products by or for Seller); (g) if this Agreement or any indebtedness or obligation of Purchaser under this Agreement is referred to an attorney for collection or realization, Purchaser shall pay to Seller all costs of collection and realization (including, without limitation, a reasonable sum for attorneys' fees, expenses of title search, all court costs and other legal expenses) incurred thereby; and (h) Purchaser shall pay any deficiency remaining after collection of or realization by Seller on the Products. In addition, Seller may terminate this Agreement upon written notice to Purchaser

in the event that Purchaser is not approved for credit or upon the occurrence of any material adverse change in the financial condition or business operations of Purchaser.

4.6 Financing. Notwithstanding any arrangement that Purchaser may make for the financing of the purchase price of the Products, the parties agree that any such financing arrangement shall have no effect on the Purchaser's payment obligations under this Agreement, including but not limited to Sections 4.1 and 4.2 above.

5. EXPORT TERMS

5.1 Unless other arrangements have been made, payment on export orders shall be made by irrevocable confirmed letter of credit, payable in U.S. dollars against Seller's invoice and standard shipping documents. Such letter of credit shall be in an amount equal to the full purchase price of the Products and shall be established in a U.S. bank acceptable to Seller. Purchaser shall procure all necessary permits and licenses for shipment and compliance with any governmental regulations concerning control of final destination of Products.

5.2 Purchaser acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the Products provided under this Agreement, including any export license requirements. Purchaser agrees that such Products shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Seller of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. **PURCHASER AGREES TO INDEMNIFY, DEFEND AND HOLD SELLER HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.** If Purchaser purchases a Product at the domestic price and exports such Product, or transfers such Product to a third party for export, outside of the U.S., Purchaser shall pay to Seller the difference between the domestic price and the international retail price of such Product pursuant to the payment terms set forth herein. Purchaser shall deliver to Seller, upon Seller's request, written assurance regarding compliance with this section in form and content acceptable to Seller.

6. DELIVERY, RISK OF LOSS

6.1 Delivery Date. Delivery and installation dates will be established by mutual agreement of the parties. Seller shall make every reasonable effort to meet the agreed upon delivery date(s), but shall not be liable for any failure to meet such date(s). Partial shipments may be made.

6.2 Risk of Loss; Title Transfer. Unless otherwise agreed to in writing, the following shall apply:

(a) For Products that do not require installation by Seller, and for options and add-on products purchased subsequent to delivery and installation of Products purchased under this Agreement, delivery shall be complete upon transfer of possession to common carrier, F.O.B. Shipping Point, whereupon title to and all risk of loss, damage to or destruction of the Products shall pass to Purchaser.

(b) For Products that require installation by Seller, delivery shall be complete upon delivery of the Products to Purchaser's designated site, F.O.B. Destination; title to and all risk of loss, damage to or destruction of such Products shall pass to Purchaser upon completion of the installation.

(c) All freight charges and other transportation, packing and insurance costs, license fees, custom duties and other similar charges shall be the sole responsibility of Purchaser unless included in the purchase price or otherwise agreed to in writing by Seller. In the event of any loss or damage to any of the Products during shipment, Seller and Purchaser shall cooperate in making a claim against the carrier.

7. SECURITY INTEREST/FILING

7.1 Purchaser grants to Seller a security interest in the Products (and all accessories and replacements thereto and all proceeds thereof) until payment in full by Purchaser and satisfaction of all other obligations of Purchaser hereunder. Purchaser hereby (i) authorizes Seller to file (and Purchaser shall promptly execute, if requested by Seller) and (ii) irrevocably appoints Seller its agent and attorney-in-fact to execute in the name of Purchaser and file, with such authorities and at such locations as Seller may deem appropriate, any Uniform Commercial Code financing statements with respect to the Products and/or this Agreement. Purchaser further represents and covenants that (a) it will keep the Products in good order and repair until the purchase price has been paid in full, (b) it will promptly pay all taxes and assessments upon the Products or the use thereof, (c) it will not attempt to transfer any interest in the Products until the purchase price has been paid in full, and (d) it is solvent and financially capable of paying the full purchase price for the Products.

8. CHANGES, CANCELLATION, AND RETURN

8.1 Orders accepted by Seller are not subject to change except upon Seller's written agreement.

8.2 Orders accepted by Seller are noncancellable by Purchaser except upon Seller's written consent and payment by Purchaser of a cancellation charge equal to 10% of the price of the affected Products, plus any shipping, insurance, inspection and refurbishment charges; the cost of providing any training, education, site evaluation or other services completed by Seller; and any return, cancellation or restocking fees with respect to any Third Party Products ordered by Seller on behalf of Purchaser. Seller may retain any payments received from Purchaser up to the amount of the cancellation charge. In no event can an order be cancelled by Purchaser or Products be returned to Seller after shipment.

8.3 Seller shall have the right to change the manufacture and/or design of its Products if, in the judgment of Seller, such change does not alter the general function of the Products.

9. FORCE MAJEURE

9.1 Seller shall not be liable for any loss or damage for delay in delivery, inability to install or any other failure to perform due to causes beyond its reasonable control including, but not limited to, acts of government or compliance with any governmental rules or regulations, acts of God or the public, war, civil commotion, blockades, embargoes, calamities, floods, fires, earthquakes, explosions, storms, strikes, lockouts, labor disputes, or unavailability of labor, raw materials, power or supplies. Should such a delay occur, Seller may reasonably extend delivery or production schedules or, at its option, cancel the order in whole or part without liability other than to return any unearned deposit or prepayment.

10. WARRANTY

10.1 Seller warrants that the Products manufactured by Seller and sold hereunder shall be free from defects in material or workmanship under normal use and service for the warranty period. The final assembled Products shall be new although they may include certain used, reworked or refurbished parts and components (e.g., circuit boards) that comply with performance and reliability specifications and controls. Seller's obligation under this warranty is limited, at Seller's option, to the repair or replacement of the Product or any part thereof. Unless otherwise set forth in the Product Warranty attached hereto and incorporated herein by reference, the warranty period shall commence upon the earlier of the date that the Products have been installed in accordance with Section 12.6 hereof (which date shall be confirmed in writing by Seller) or first patient use, and shall continue for 12 consecutive months. Seller makes no warranty for any Products made by persons other than Seller or its affiliates, and Purchaser's sole warranty therefor, if any, is the original manufacturer's warranty, which Seller agrees to pass on to Purchaser, as applicable. The warranty provided by Seller under this Section 10 extends only to the original Purchaser, unless the Purchaser obtains the Seller's prior written consent with respect to any sale or other transfer of the Equipment during the term of the warranty.

10.2 No warranty extended by Seller shall apply to any Products which have been damaged by fire, accident, misuse, abuse, negligence, improper application or alteration or by a force majeure occurrence as described in Section 9 hereof or by the Purchaser's failure to operate the Products in accordance with the manufacturer's instructions or to maintain the recommended operating environment and line conditions; which are defective due to unauthorized attempts to repair, relocate, maintain, service, add to or modify the Products by the Purchaser or any third party or due to the attachment and/or use of non-Seller supplied parts, equipment or software without Seller's prior written approval; which failed due to causes from within non-Seller supplied equipment, parts or software including, but not limited to, problems with the Purchaser's network; or which have been damaged from the use of operating supplies or consumable parts not approved by Seller. In addition, there is no warranty coverage for any transducer or probe failure due to events such as cracking from high impact drops, cable rupture from rolling equipment over the cable, delamination from cleaning with inappropriate solutions, or TEE bite marks. Seller's obligation under this warranty is limited to the repair or replacement, at Seller's option, of defective parts. Seller may effectuate such repair at Purchaser's facility, and Purchaser shall furnish Seller safe and sufficient access for such repair. Repair or replacement may be with parts or products that are new, used or refurbished. Repairs or replacements shall not interrupt, extend or prolong the term of the warranty. Purchaser shall, upon Seller's request, return the noncomplying Product or part to Seller with all transportation charges prepaid, but shall not return any Product or part to Seller without Seller's prior written authorization. Purchaser shall pay Seller its normal charges for service and parts for any inspection, repair or replacement that falls outside the warranty set forth in Section 10.1. Seller's warranty does not apply to consumable materials, disposables, supplies, accessories and collateral equipment, except as specifically stated in writing or as otherwise set

forth in the Product Warranty attached hereto and incorporated herein by reference, nor to products or parts thereof supplied by Purchaser.

10.3 This warranty is made on condition that immediate written notice of any noncompliance be given to Seller and Seller's inspection reveals that Purchaser's claim is covered under the terms of the warranty (i.e., that the noncompliance is due to traceable defects in original materials and/or workmanship).

10.4 Purchaser shall provide Seller with both on-site and remote access to the Products. The remote access shall be provided through the Purchaser's network as is reasonably necessary for Seller to provide warranty services under this Agreement. Remote access will be established through a broadband internet-based connection to either a Purchaser owned or Seller provided secure end-point. The method of connection will be a Peer-to-Peer VPN IPsec tunnel (non-client based) with specific inbound and outbound port requirements.

10.5 Warranty service will be provided without charge during Seller's regular working hours (8:30-5:00), Monday through Friday, except Seller's recognized holidays. If Purchaser requires that service be performed outside these hours, such service can be made available at an additional charge, at Seller's then current rates. The obligations of Seller described in this section are Seller's only obligations and Purchaser's sole and exclusive remedy for a breach of product warranty.

10.6 SELLER MAKES NO WARRANTY OTHER THAN THE ONE SET FORTH HEREIN AND IN THE ATTACHED PRODUCT WARRANTY COVERING THE APPLICABLE PRODUCT CATEGORY. SUCH WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES, AND SUCH CONSTITUTES THE ONLY WARRANTY MADE WITH RESPECT TO THE PRODUCTS AND ANY DEFECT, DEFICIENCY OR NONCONFORMITY IN ANY PRODUCT, SERVICE OR OTHER ITEM FURNISHED UNDER THIS AGREEMENT.

10.7 In the event of any inconsistencies between the terms of this Section 10 and the terms of the attached Product Warranty, the terms of the attached Product Warranty shall prevail.

11. LIMITATION OF LIABILITY

11.1 In no event shall Seller's liability hereunder exceed the actual loss or damage sustained by Purchaser, up to the purchase price of the Products. The foregoing limitation of liability shall not apply to claims for bodily injury or damages to real property or tangible personal property to the extent arising from Seller's negligence or a product defect.

11.2 SELLER SHALL NOT BE LIABLE FOR ANY LOSS OF USE, REVENUE OR ANTICIPATED PROFITS; COST OF SUBSTITUTE PRODUCTS OR SERVICES; LOSS OF STORED, TRANSMITTED OR RECORDED DATA; OR FOR ANY INDIRECT, INCIDENTAL, UNFORESEEN, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR ANY OTHER THEORY OR FORM OF ACTION, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY THEREOF, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE SALE OR USE OF THE PRODUCTS. THE FOREGOING IS A SEPARATE, ESSENTIAL TERM OF THIS AGREEMENT AND SHALL BE EFFECTIVE UPON THE FAILURE OF ANY REMEDY, EXCLUSIVE OR NOT.

12. INSTALLATION - ADDITIONAL CHARGES

12.1 General. Unless otherwise expressly stipulated in writing, the Products covered hereby shall be installed by and at the expense of Seller except that Seller shall not provide rigging or site preparation services unless otherwise agreed to in writing by Seller for an additional charge. Seller will not install accessory items such as cabinets, illuminators, darkroom equipment or processors for X-Ray and CT equipment, unless otherwise agreed to in writing by Seller.

12.2 Installation by Seller. If Seller specifies it will install the Products, the following applies: subject to fulfillment of the obligations set forth in Section 12.4 below, Seller shall install the Products and connect them to the requisite safety switches and power lines to be installed by Purchaser. Except as otherwise specified below, if such installation and connection are performed by Seller's technical personnel, prices shown include the cost thereof, provided that the installation and connection can be performed within the Continental United States or Puerto Rico and during normal business hours. Any overtime charges or other special expenses shall be additional charges to the prices shown.

12.3 Trade Unions. In the event that a trade union, or unions, or other local labor conditions prevent Seller from performing the above work with its own employees or contractors, then Purchaser shall either make all required arrangements with the trade union, or unions, to permit Seller to complete the work or shall provide the personnel, at Purchaser's sole cost and expense. Moreover, any additional cost incurred by Seller and related to such labor disputes shall be paid by the Purchaser and Seller's obligations under such circumstances will be limited to providing engineering supervision of installation and connection of the Products to existing wiring.

12.4 Purchaser's Obligations. Purchaser shall, at its expense, provide all proper and necessary labor and materials for plumbing service, carpentry work, conduit wiring, and other preparations required for such installation and connection. All such labor and materials shall be completed and available at the time of delivery of the Products by Seller. Additionally, Purchaser shall provide free access to the installation site and, if necessary, safe and secure space thereon for storage of Products and equipment prior to installation by Seller. Purchaser shall be responsible, at its sole cost and expense, for obtaining all permits, licenses and approvals required by any federal, state or local authorities in connection with the installation and operation of the Products, including but not limited to any certificate of need and zoning variances. Purchaser shall provide a suitable environment for the Products and shall ensure, at its sole cost and expense, that its premises are free of asbestos, hazardous conditions and any concealed, unknown or dangerous conditions and that all site requirements are met. Seller shall delay its work until Purchaser has completed the removal of any asbestos or other hazardous materials or has taken any other precautions and completed any other work required by applicable regulations. Purchaser shall reimburse Seller for any increased costs and expenses incurred by Seller that are the result of or are caused by any such delay. In the event that Seller is requested to supervise the installation of the Products, it remains the Purchaser's responsibility to comply with local regulations. Seller is not an architect and all drawings furnished by Seller are not construction drawings.

12.5 Regulatory Reporting. In the event that any regulatory activity is performed by anyone other than Seller's authorized personnel, then Purchaser shall be responsible for fulfilling any and all reporting requirements.

12.6 Completion of Installation. Installation shall be complete upon the conclusion of final calibration and checkout under Seller's standard procedures to verify that the Products meet applicable written performance specifications. Notwithstanding the foregoing, first use of the Products by Purchaser, its agents or employees for any purpose after delivery shall constitute completion of installation.

13. PATENT, COPYRIGHT AND OTHER INFRINGEMENT CLAIMS

13.1 Infringement by Seller. Seller warrants that the Products manufactured by Seller and sold hereunder do not infringe any U.S. patent or copyright. If Purchaser receives a claim that any such Products, or parts thereof, infringe upon the rights of others under any U.S. patent or copyright, Purchaser shall notify Seller immediately in writing. As to all infringement claims relating to Products or parts manufactured by Seller or one of its affiliates:

(a) Purchaser shall give Seller information, assistance and exclusive authority to evaluate, defend and settle such claims.

(b) Seller shall then, at its own expense, defend or settle such claims, procure for Purchaser the right to use the Products, or remove or modify them to avoid infringement. If none of these alternatives is available on terms reasonable to Seller, then Purchaser shall return the Products to Seller and Seller shall refund to Purchaser the purchase price paid by Purchaser less reasonable depreciation for Purchaser's use of the Products. The foregoing states Seller's entire obligation and liability, and Purchaser's sole remedy, for claims of infringement.

13.2 Infringement by Purchaser. If some or all of the Products sold hereunder are made by Seller pursuant to drawings or specifications furnished by Purchaser, or if Purchaser modifies or combines, operates or uses the Products other than as specified by Seller or with any product, data, software, apparatus or program not provided or approved by Seller, then the indemnity obligation of Seller under Section 13.1 shall be null and void and should a claim be made that such Products infringe the rights of any third party under patent, copyright or otherwise, then Purchaser shall indemnify, defend and hold Seller harmless against any liability or expense, including reasonable attorneys' fees, incurred by Seller in connection therewith.

14. DESIGNS AND TRADE SECRETS; LICENSE; CONFIDENTIALITY

14.1 Any drawings, data, designs, software programs or other technical information supplied by Seller to Purchaser in connection with the sale of the Products are not included in the sale of the Products to Purchaser, shall remain Seller's property and shall at all times be held in confidence by Purchaser. Such information shall not be reproduced or disclosed to others without Seller's prior written consent.

14.2 For all goods purchased hereunder which utilize software for their operation, such "Applications Software" shall be licensed to Purchaser under the terms of Seller's Software License Schedule attached hereto.

14.3 Diagnostic/Maintenance Software is not included under Section 14.2 above, is available only as a special option under a separate Diagnostic Materials License Agreement, and may be subject to a separate licensing fee.
14.4 Seller and Purchaser shall maintain the confidentiality of any information provided or disclosed to the other party relating to the business, customers and/or patients of the disclosing party, as well as this Agreement and its terms (including the pricing and other financial terms under which the Purchaser will be purchasing the Products). Each party shall use reasonable care to protect the confidentiality of the information disclosed, but no less than the degree of care it would use to protect its own confidential information, and shall only disclose the other party's confidential information to its employees and agents having a need to know this information. The obligations of confidentiality set forth herein shall not apply to any information in the public domain at the time of disclosure or that is required to be disclosed by court order or by law.

15. ENGINEERING CHANGES
15.1 Seller makes no representation that engineering changes which may be announced in the future will be suitable for use on, or in connection with, the Products.

16. ASSIGNMENT
16.1 Neither party may assign any rights or obligations under this Agreement without the prior written consent of the other and any attempt to do so shall be void, except that Seller may assign this Agreement without consent to any subsidiary or affiliated company, and may delegate to authorized subcontractors or service suppliers any work to be performed under this Agreement so long as Seller remains liable for the performance of its obligations under this Agreement. This Agreement shall inure to and be binding upon the parties and their respective successors, permitted assigns and legal representatives. Seller shall have no obligations under this Agreement to any assignee of Purchaser that is not approved by Seller in advance.

17. COSTS AND FEES
17.1 In the event that any dispute or difference is brought arising from or relating to this Agreement or the breach, termination or validity thereof, the prevailing party shall be entitled to recover from the other party all reasonable attorneys' fees incurred, together with such other expenses, costs and disbursements as may be allowed by law.

18. MODIFICATION
18.1 This Agreement may not be changed, modified or amended except in writing signed by duly authorized representatives of the parties.

19. GOVERNING LAW; WAIVER OF JURY TRIAL
19.1 This Agreement shall be governed by the laws of the Commonwealth of Pennsylvania.
19.2 EACH OF THE PARTIES EXPRESSLY WAIVES ALL RIGHTS TO A JURY TRIAL IN CONNECTION WITH ANY DISPUTE UNDER THIS AGREEMENT.

20. COST REPORTING
20.1 Purchaser agrees that it will fully and accurately account for and report in all cost reports and otherwise fully and accurately disclose to federal and state health care program payors and fully and accurately reflect where and as appropriate to the applicable reimbursement methodology, all services and other items, including any and all discounts, received from Seller under this Agreement, in compliance with all applicable laws, rules and regulations, including but not limited to the Social Security Act and implementing regulations relating to Medicare, Medicaid and other federal and state health care reimbursement programs.

21. INTEGRATION
21.1 These terms and conditions, including any attachments or other documents incorporated by reference herein, constitute the entire agreement and the complete and exclusive statement of agreement with respect to the subject matter hereof, and supersede any and all prior agreements, understandings and communications between the parties with respect to the Products.

22. SEVERABILITY; HEADINGS
22.1 No provision of this Agreement which may be deemed unenforceable will in any way invalidate any other portion or provision of this Agreement. Section headings are for convenience only and will have no substantive effect.

23. WAIVER
23.1 No failure and no delay in exercising, on the part of any party, any right under this Agreement will operate as a waiver thereof, nor will any single or partial exercise of any right preclude the further exercise of any other right.

24. NOTICES
24.1 Any notice or other communication under this Agreement shall be deemed properly given if given in writing and delivered in person or mailed, properly addressed and stamped with the required postage, to the intended recipient at its address specified on the face hereof. Either party may from time to time change such address by giving the other party notice of such change in accordance with this section.

25. RIGHTS CUMULATIVE
25.1 The rights and remedies afforded to Seller under this Agreement are in addition to, and do not in anyway limit, any other rights or remedies afforded to Seller by any other agreement, by law or otherwise.

26. END USER CERTIFICATION
26.1 Purchaser represents, warrants and covenants that it is acquiring the Products for its own end use and not for reselling, leasing or transferring to a third party (except for lease-back financings).

03/2012 Rev

SIEMENS
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

Software License Schedule to the Siemens Medical Solutions USA, Inc. General Terms and Conditions

1. DEFINITIONS: The following definitions apply to this Schedule:
"**Agreement**" shall mean the attached (i) Quotation for Products and/or Services including the Terms and Conditions of Sale and applicable schedules; and/or (ii) Software License Agreement describing the software licensed herein and the specific system for which the license is issued.
"**Licensor**" shall mean Siemens Medical Solutions USA, Inc.
"**Licensee**" shall mean the end-user to whom Licensor provides Software or Documentation for its internal use under the Agreement.
"**Software**" shall mean the software described in the attached Agreement, including the following as contained therein: (i) software programs consisting of a series of statements or instructions to be used directly or indirectly in a programmable controller or computer to bring about a certain result and (ii) databases consisting of systemized collections of data to be used or referenced directly or indirectly by a programmed controller or computer. Notwithstanding the foregoing, "Software" does not include "firmware" as such term is conventionally understood. Diagnostic/Maintenance Software also is not included within the scope of the Software licensed under this Schedule, and is available only as a special option under a separate Diagnostic Materials License Agreement and may be subject to a separate licensing fee.
"**Documentation**" shall mean the documents and other supporting materials which are intended to support the use of an associated product, including (but not limited to) instructions, descriptions, flow charts, logic diagrams and listings of the Software, in text or graphic form, on machine readable or printed media.
"**Designated Unit**" shall mean a single control unit or computer identified on the first page of the Agreement, on which Software licensed hereunder may be used by Licensee.
2. SCOPE: The following terms and conditions shall apply to all Software and Documentation provided by Licensor to Licensee under the Agreement (whether included with other products listed in the Agreement or listed separately in the Agreement), together with any updates or revisions thereto which Licensor may provide to Licensee, and all copies thereof, except any Software and/or Documentation licensed directly by Licensor's supplier under a separate end-user license agreement accompanying the Software or the Documentation, in which case Licensee agrees to be bound by that license agreement as a condition to using the Software and/or Documentation. Except as expressly provided herein, and provided that in no event shall the warranties or other obligations of Licensor with respect to such Software or Documentation exceed those set forth in this Schedule, this Schedule shall be subject to the liability limitations and exclusions and other terms and conditions set forth in the Agreement. **ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DESIGNATED UNIT, WILL CONSTITUTE LICENSEE'S AGREEMENT TO THIS SOFTWARE LICENSE SCHEDULE (OR RATIFICATION OF ANY PREVIOUS CONSENT).**
3. SOFTWARE AND DOCUMENTATION LICENSE: Subject to the payment of any applicable annual license fee(s), whether stated separately or included in the purchase price of another product, and to Licensee's acceptance of all of the obligations set forth herein and to the fulfillment of those obligations, Licensor or, if applicable, its licensor or supplier, hereby grants to Licensee a paid-up, nonexclusive and nontransferable (except as expressly provided in this Schedule) limited license to use the Software provided by Licensor under the Agreement solely for Licensee's own use on the Designated Unit and to use the Documentation in support of Licensee's authorized use of the Software, for the purpose of operating the Designated Unit in accordance with the instructions set forth in the user's manual supplied with the Designated Unit and for no other purpose whatsoever. A separate license is required for each Designated Unit on which the Software is to be used. Licensee may obtain from Licensor one copy of the Software licensed hereunder for backup and archival purposes only as is necessary to support Licensee's own authorized use of the Software, provided that Licensee includes on or in all copies (in any form) all copyright, trade secret or other proprietary notices contained on or in the Software as provided by Licensor. Additional copies of the Documentation may be licensed from Licensor at its then applicable charges. Licensee may make the Software and Documentation (including any copies) available only to its employees and other persons on Licensee's premises to whom such disclosure is necessary to enable Licensee to use the Software or Documentation within the scope of the license provided in this Schedule. If the Software is supplied to any unit or agency of the United States Government other than the Department of Defense, the Software and Documentation are classified as "restricted computer software" and the Government's rights in the Software and Documentation shall be as provided in paragraph (c) (2) of the Commercial Computer Software-Restricted Rights clause in FAR 52.227-19 and any successor laws, rules or regulations thereto. If the Software is supplied to the United States Department of Defense, the Software is classified as "commercial computer software" and the Government is furnished the Software and Documentation with "restricted rights" as defined in paragraph (c) (1) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013 and any successor laws, rules or regulations thereto.
4. PROPRIETARY PROTECTION AND CONFIDENTIALITY: Ownership of and title to the Software and Documentation and all copies, in any form, licensed under this Schedule are and will remain in Licensor or its suppliers at all times. Licensee shall not (i) remove any copyright, trade secret or other proprietary right notices contained on or in the Software or Documentation as provided by Licensor, (ii) reproduce or modify any Software or Documentation or copy thereof, (iii) reverse assemble, reverse engineer or decompile any Software, or copy thereof, in whole or in part (except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation), (iv) sell, transfer or otherwise make available to others the Software or Documentation, or any copy thereof, except as expressly permitted by this Schedule, or (v) apply any techniques to derive any trade secrets embodied in the Software or Documentation. Licensee shall take all appropriate actions to ensure that: (i) the Software does not leave the Designated Unit's equipment location as set forth above, (ii) the Software is not copied by Licensee or any third parties, and (iii) the Software is not used in any equipment other than the Designated Unit. Licensee shall secure and protect the Software and Documentation and copies thereof from disclosure and shall take such actions with its employees and other persons who are permitted access to the Software or Documentation or copies as may be necessary to satisfy Licensee's obligations hereunder. Prior to disposing of any computer medium, computer memory or data storage apparatus, Licensee shall ensure that all copies of Software and Documentation have been erased therefrom or otherwise destroyed. In the event that Licensee becomes aware that any Software or Documentation or copies are being used in a manner not permitted by the license, Licensee shall immediately notify Licensor in writing of such fact and if the person or persons so using the Software or Documentation are employed or otherwise subject to Licensee's direction and control, Licensee shall use reasonable efforts to terminate such impermissible use. Licensee will fully cooperate with Licensor so as to enable Licensor to enforce its proprietary and property rights in the Software. Licensee agrees that, subject to Licensee's reasonable security procedures, Licensor shall have immediate access to the Software at all times and that Licensor may take immediate possession thereof upon termination or expiration of the associated license or this Schedule. Licensee's obligations under this paragraph shall survive any termination of a license, the Schedule or the Agreement.
5. UPDATES AND REVISIONS: During the warranty period or under a separate service contract or software update subscription, revised or updated versions of the Software licensed under this Schedule may be made available, at Licensor's option, to Licensee to use or to test while Licensee continues use of a previous version. Licensee has the right to decide whether to install any such revised or updated versions or to continue use of the previous version after giving due regard to the United States Food and Drug Administration rules and regulations. However, Licensee shall pay Licensor for any services necessitated by any modifications of the Software by Licensee or by Licensee's failure to utilize the current non-investigational version of the Software provided by Licensor. Software updates that provide new features or capabilities or that require hardware changes will be offered to Licensee at purchase prices established by Licensor. Licensor retains the sole right to determine whether an update represents an enhancement of a previously purchased capability or a new capability for which the Licensee will be charged. In addition, some updates may require Applications Training performed by Licensor's personnel that will be offered at Licensor's prevailing rates. Licensor retains the sole right to determine whether an update requires such training.

6. DELIVERY, RISK OF LOSS AND TITLE: Notwithstanding the provisions of Section 6 of the attached Terms and Conditions of Sale, if any, the Software and Documentation licensed hereunder shall be delivered on or about the delivery date stated in the Agreement unless a separate delivery date is agreed upon. If Software or Documentation licensed hereunder is lost or damaged during shipment from Licensor, Licensor will replace it at no charge to Licensee. If any Software or Documentation supplied by Licensor and licensed hereunder is lost or damaged while in the possession of Licensee, Licensor will replace it at Licensor's then current applicable charges, if any, for materials, processing and distribution. Notwithstanding the provisions of Section 6 of the attached Terms and Conditions of Sale, if any, the Software and Documentation, in any form, and all copies made by Licensee, including partial copies, and all computer media provided by Licensor are and remain the property of Licensor or its supplier. Licensee has no right, title or interest in the Software, the Documentation, or any computer media provided by Licensor, or copies, except as stated herein, and ownership of any such Software, Documentation and computer media shall at all times remain with Licensor or its suppliers.

7. LICENSE TRANSFER: The Software and Documentation, and the license hereunder, may not be assigned, transferred or sublicensed except as hereinafter provided. Upon the sale or lease of the Designated Unit to a third party, Licensee may transfer to such third party, with Licensor's written consent and in accordance with Licensor's then current policies and charges, the license to use the Software and Documentation hereunder, together with the Software, the Documentation, the computer media provided by Licensor, and all copies provided that: (i) Licensee notifies Licensor in writing of the name and address of such third party; (ii) such third party agrees in a written instrument delivered to Licensor to the terms of this Schedule; and (iii) Licensee does not retain any copies of the Software or Documentation in any form.

8. WARRANTIES: Licensor warrants that for the warranty period provided by Licensor under the attached Terms and Conditions of Sale, if any, the Software shall conform in all material respects to Licensor's published specifications as contained in the applicable supporting Documentation. This paragraph replaces Paragraphs 10.1 and 10.4 of any such Terms and Conditions of Sale with respect to the Software and Documentation. Such Documentation may be updated by Licensor from time to time and such updates may constitute a change in specification. Licensee acknowledges that the Software is of such complexity that it may have inherent or latent defects. As Licensee's sole remedy under the warranty, Licensor will provide services, during the warranty period, to correct documented Software errors which Licensor's analysis indicates are caused by a defect in the unmodified version of the Software as provided by Licensor. Licensor does not warrant that the Software will meet Licensee's requirements, or will operate in combinations which may be selected for use by Licensee, or that the operation of the Software will be uninterrupted or error free. Licensee is responsible for determining the appropriate use of and establishing the limitations of the Software and its associated Documentation as well as the results obtained by use thereof.

LICENSOR MAKES NO WARRANTY WITH RESPECT TO THE SOFTWARE AND DOCUMENTATION OTHER THAN THOSE SET FORTH IN THIS SECTION. THE WARRANTY HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED, AND CONSTITUTES THE ONLY WARRANTY MADE WITH RESPECT TO THE SOFTWARE AND DOCUMENTATION.

9. LICENSE TERM AND TERMINATION: The license for the Software and Documentation is effective on the shipment date of the Software and Documentation (F.O.B. shipping point or F.A.S., as the case may be) and continues until Licensee's possession of the Software and all copies ceases (except in connection with a transfer of the license as permitted by this Schedule) or until otherwise terminated as provided herein. Licensee may terminate the license for the Software and Documentation at any time after discontinuance of use of the Software and Documentation and all copies, upon written notice to Licensor. If Licensee (i) fails to comply with its obligations herein and does not cure such failure within ten (10) days after receipt of notice from Licensor, or (ii) attempts to assign the Agreement or this Schedule or any rights or obligations hereunder without Licensor's prior written consent, then Licensor may terminate the license hereunder and require the immediate discontinuance of all use of the Software and Documentation and all copies thereof in any form, including modified versions and updated works. Within five (5) days after the termination of the license, Licensee shall, at Licensor's option either: (i) return to Licensor the Software and Documentation, and all copies, in any form, including updated versions, along with any computer media provided by Licensor; or (ii) destroy the affected Software and Documentation, and all copies, in any form, including updated versions, and certify such return or destruction in writing to Licensor.

10. MISCELLANEOUS: Since the unauthorized use of the Software and/or Documentation may leave Licensor without an adequate remedy at law, Licensee agrees that injunctive or other equitable relief will be appropriate to restrain such use, threatened or actual. Licensee further agrees that to the extent applicable, (i) any of Licensor's suppliers of Software and/or Documentation is a direct and intended beneficiary of this Schedule and may enforce it directly against Licensee with respect to the Software and/or Documentation provided by such supplier, and that (ii) **NO SUPPLIER OF LICENSOR SHALL BE LIABLE FOR ANY GENERAL, SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR OTHER DAMAGES ARISING OUT OF ANY SUBLICENSE OF THE SOFTWARE AND/OR DOCUMENTATION. THIS LIMITATION ON LIABILITY SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE.**

11. ADDITIONAL PROVISIONS RELATING TO THIRD-PARTY SOFTWARE: If the Software includes software licensed by Licensor from third parties, the following additional provisions shall apply:

(a) If Software is provided by Licensor on separate media and labeled "Recovery Media," Licensee may use the Recovery Media solely to restore or reinstall the Software and/or Documentation originally installed on the Designated Unit.

(b) Licensee is licensed to use the Software to provide only the limited functionality (specific tasks or processes) for which the Designated Unit has been designed and marketed by Licensor. This license specifically prohibits any other use of the software programs or functions, or inclusion of additional software programs or functions that do not directly support the limited functionality, on the Designated Unit. If Licensee uses the Designated Unit to access or utilize the services or functionality of Microsoft Windows Server products (such as Microsoft Windows NT Server 4.0 (all editions) or Microsoft Windows 2000 Server (all editions)), or uses the Designated Unit to permit workstation or computing devices to access or utilize the services or functionality of Microsoft Windows Server products, Licensee may be required to obtain a Client Access License for the Designated Unit and/or each such workstation or computing device. Licensee should refer to the end user license agreement for its Microsoft Windows Server product for additional information.

(c) The Software may contain support for programs written in Java. Java technology is not fault tolerant and is not designed, manufactured, or intended for use or resale as online control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of Java technology could lead directly to death, personal injury, or severe physical or environmental damage. Sun Microsystems, Inc. has contractually obligated Licensor's supplier to make this disclaimer.

(d) The Software may permit Licensor, its supplier(s), or their respective affiliates to provide or make available to Licensee Software updates, supplements, add-on components, or Internet-based services components of the Software after the date Licensee obtains its initial copy of the Software ("Supplemental Components").

- If Licensor provides or makes available to Licensee Supplemental components and no other end-user software licensing agreement terms are provided along with the Supplemental Components, then the terms of this Software License Schedule shall apply.

- If a supplier of Licensor or affiliates of such a supplier make available Supplemental Components, and no other end-user software licensing agreement terms are provided, then the terms of this Schedule shall apply, except that the supplier or affiliate entity providing the Supplemental Component(s) shall be the licensor of the Supplemental Component(s).

Licensor, its supplier(s), and their respective affiliates reserve the right to discontinue any Internet-based services provided to Licensee or made available to Licensee through the use of the Software.

(e) **The Software and Documentation supplied by Licensor's suppliers are provided by such suppliers "AS IS" and with all faults. SUCH SUPPLIERS DO NOT BEAR ANY OF THE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY, OR EFFORT (INCLUDING LACK OF NEGLIGENCE) WITH RESPECT TO SUCH SOFTWARE AND DOCUMENTATION. ALSO, THERE IS NO WARRANTY BY SUCH SUPPLIERS AGAINST INTERFERENCE WITH LICENSEE'S ENJOYMENT OF THE SOFTWARE OR AGAINST INFRINGEMENT. IF LICENSEE HAS RECEIVED ANY WARRANTIES REGARDING THE DESIGNATED UNIT OR THE SOFTWARE, THOSE WARRANTIES DO NOT ORIGINATE FROM, AND ARE NOT BINDING ON, LICENSOR'S SUPPLIERS.**

(f) Licensee acknowledges that portions of the Software are of U.S. origin. Licensee agrees to comply with all applicable international and national laws that apply to the Software, including the U.S. Export Administration Regulations, as well as applicable end-user, end-use and destination restrictions issued by U.S. and other governments. For additional

information on exporting software supplied by Microsoft, see http://www.microsoft.com/exporting/.

Revised 03/15/05

SIEMENS
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

TRADE-IN EQUIPMENT REQUIREMENTS

THE FOLLOWING APPLIES ONLY TO THE EXTENT THAT THE QUOTATION INCLUDES AN EQUIPMENT TRADE-IN. THESE REQUIREMENTS ARE IN ADDITION TO ANY OTHER REFERENCED TERMS AND CONDITIONS ON THE QUOTATION AND SHALL REMAIN IN EFFECT REGARDLESS OF ANY CONTRARY LANGUAGE IN THE QUOTATION.

This Quotation includes the trade-in equipment described herein and referenced by either the Project Number identified in the Quotation hereof (non-Ultrasound) or the Trade Allowance Part Number (Ultrasound) as further described in the associated Trade Sheet which is incorporated herein by reference. Purchaser certifies that the description of the trade-in equipment as set forth on the Trade Sheet is a true and accurate representation of the equipment, and that the equipment is in good working condition unless otherwise noted on the Trade Sheet.

The trade-in equipment must be made available for removal no later than turnover of the new equipment. Purchaser must vacate the room of all items not listed on the Trade Sheet, or otherwise clearly identify all items listed on the Trade Sheet, prior to the start of the de-installation. If this is not done, Seller will have no liability for items which are subsequently removed or scrapped. If the de-installation or return of the trade-in equipment is delayed by Purchaser for reasons other than a force majeure event, or if upon inspection by Seller it is determined that the equipment does not meet the manufacturer's operating specifications, or if any items listed as included on the Trade Sheet are not made available at the time of de-installation, then trade-in value will be re-evaluated and any loss in value or additional costs incurred by Seller shall be deducted from the established trade-in value and the pricing set forth on this Quotation will be adjusted by change order. In the event that access to the trade-in equipment is denied past 14 days post-turnover, then Purchaser shall pay to Seller a rental fee in the amount 10% of the total trade-in value plus any additional value provided by an Elevate/Promotional program included in this Quotation (no less than $1000) for each month, or part thereof, that access is denied. In addition, if the purchase and installation of the new equipment covered by this Quotation is not completed, then Seller shall invoice Purchaser for all costs and expenses incurred by Seller in connection with the de-installation and removal of the trade-in equipment, including but not limited to labor, materials, rigging out, and transportation, which costs shall be paid by Purchaser within thirty (30) days of the invoice date.

Purchaser further acknowledges and agrees that (i) the trade-in equipment will be free and clear of all liens and encumbrances including, but not limited to, unpaid leases and loans, and that upon request, it will execute a bill of sale or other documents reasonably satisfactory to Siemens to transfer title and ownership of the equipment to Seller, (ii) it is Purchaser's sole responsibility to delete all protected health information and any other confidential information from the equipment prior to de-installation, without damaging or cannibalizing the equipment or otherwise affecting the operation of the equipment in accordance with its specifications, (iii) the equipment, including all updates, upgrades, modifications, enhancements, revisions, software, S/W disks and manuals, shall be returned to Siemens in good operating condition, reasonable wear and tear excepted, and (iv) to the extent not prohibited by applicable law, Purchaser shall indemnify and hold Seller harmless from and against any and all claims, demands, causes of action, damages, liability, costs and expenses (including reasonable attorney's fees) resulting or arising from Purchaser's failure to comply with item (i) above.

FOR MR SYSTEMS: cryogen levels must be least 75% upon time of de-installation. FOR MOBILE SYSTEMS: system must be road worthy and a state issued title transferring ownership to Seller must be received by Seller prior to the removal of the mobile system. FOR MODALITY TRADE SYSTEMS (non-Ultrasound): The trade-in equipment must be available for inspection within two weeks of the scheduled de-installation date. In addition, Purchaser must provide a clear path for the removal of the trade-in equipment. Any additional costs due to the need to use a larger rig (other than a standard 80 ton rig), as well as any construction activities, street closings, permits, etc., required to de-install/remove the equipment are out-of-scope costs and will be the responsibility of Purchaser.

SIEMENS
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Matthew Behr - (864) 569-4412

MR Warranty Information

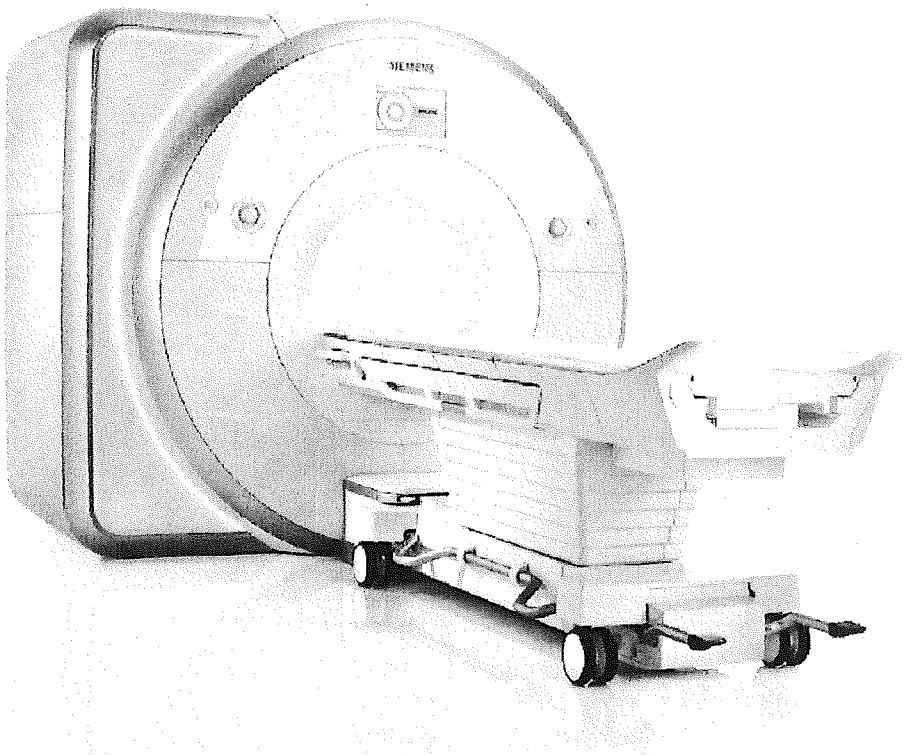
Product (New Systems and "Proven Excellence" Refurbished Systems Only)	Period of Warranty[1]	Coverage
MR System (not including consumables)	12 month	Full Warranty (parts & labor)
Post Warranty (after expiration of system warranty) – Replacement parts only!		
Magnet	12 month	Parts only
Spare Parts	6 month	Parts only
Consumables	Not Covered	

Note: Optional extended warranty coverage can be obtained by purchase of a service agreement.

[1] Period of warranty commences from the date of first use or completion of installation, whichever occurs first. In the event the completion of installation is delayed for reasons beyond Siemens' control, the stated warranty period shall commence 60 days after delivery of equipment.

SIEMENS

MAGNETOM AERA 1.5T
TYPICAL ROOM PLAN



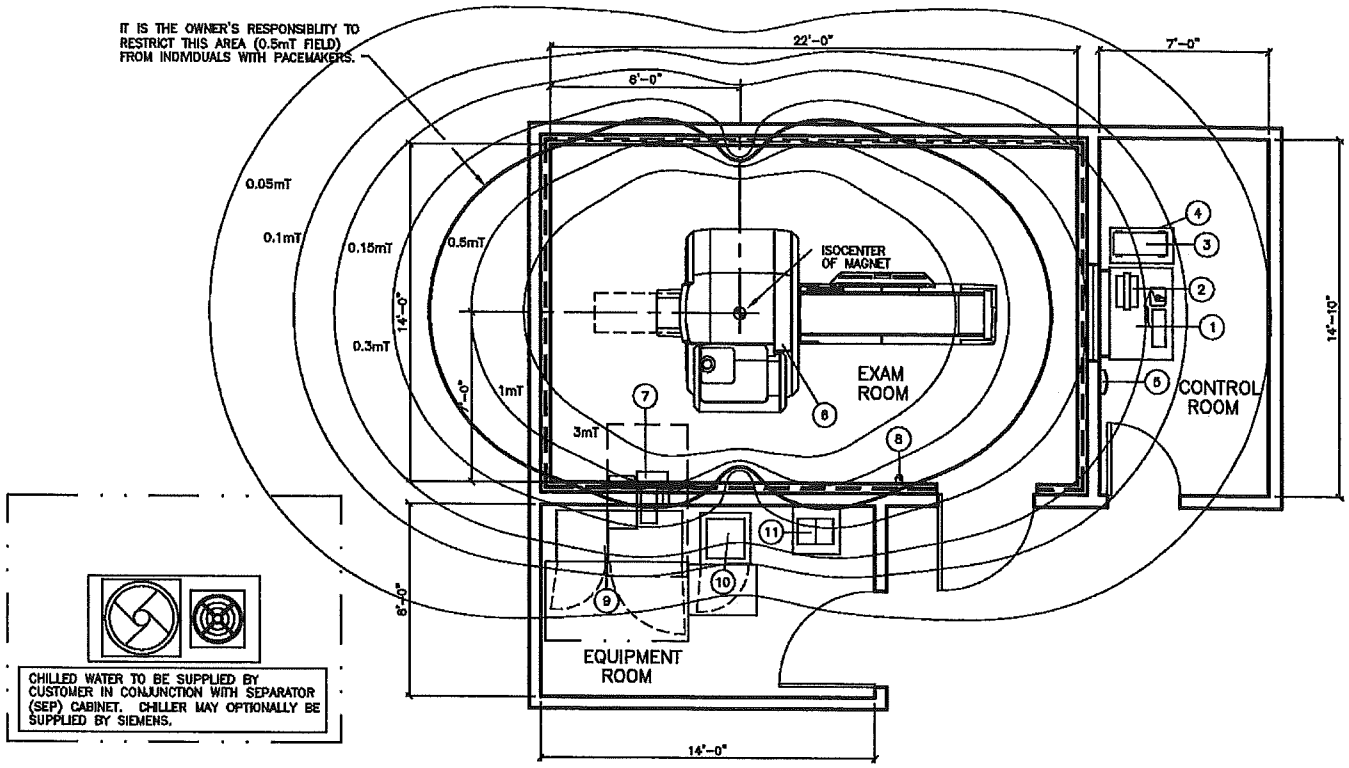
The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer's responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T

TYPICAL ROOM PLAN



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

EQUIPMENT LEGEND

NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES) W	D	H	REMARKS
(1)	MRC OPERATING CONSOLE AND KEYBOARD	MRC	132	---	45 11/16	35 1/4	28 3/8	
(2)	COLOR MONITOR FOR MRC		22	239	18 5/16	16 15/16	4 3/4	ON CONSOLE/COUNTER
(3)	HOST PC MRC	HPC	49	2,389	11	27	18 1/8	
(4)	CONTAINER FOR HOST 500		238	---	19 5/8	31 1/2	28 3/8	
(5)	ALARM BOX	AB	2	---	9	4	9	
(6)	1.5T MAGNET WITH COVERS AND PATIENT TABLE	B	10,093	3,415	91	170	86	
(7)	RF-FILTER PLATE	F1	285	853	46 1/2	21 3/4	21 1/2	
(8)	MAGNET STOP	MS	1	---	3	5	3	
(9)	ELECTRONICS CABINET (GPA/EPC CABINET)	GPA	3,307	13,649	61 1/2	26	77 1/2	
(10)	SEP CABINET	SEP	750	3,415	25 5/8	25 5/8	73 5/8	
(11)	POWERWARE 9130 UPS WITH EBM (OPTION)	UPS	186	1,257*	16 7/8	12 7/8	16 1/4	*1,755 ON BATTERIES

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T

SPECIFICATIONS

POWER REQUIREMENTS

VOLTAGE RANGE: 480 VAC ±10% FOR ALL LINE AND LOAD CONDITIONS.
VOLTAGE BALANCE: 2% MAXIMUM DIFFERENCE BETWEEN PHASES

FREQUENCY:	60 Hz ± 1.0 Hz
LINE IMPEDENCE:	95 mOHMS
STAND BY POWER CONSUMPTION	9.0 kW
TYPICAL POWER CONSUMPTION DURING EXAM	20.1 KW
CONNECTION VALUE (LESS THAN 5 MINUTES)	110 KVA
MOMENTARY POWER	140 KVA
RECOMMENDED TRANSFORMER	150 KVA
MR SYSTEM OVERCURRENT PROTECTION	150 AMPS
RECOMMENDED UPS	160 KVA
UPS SYSTEM OVERCURRENT PROTECTION	250 AMPS
MAX. ALLOWABLE VOLTAGE DROP AT MAX. POWER	6.0%

POWER REQUIREMENTS

DEMAND AND CAPACITY REQUIREMENTS NOTES

1) IF EQUIPMENT UPGRADE IS ANTICIPATED, INSTALLING ELECTRICAL POWER TO MEET THE REQUIREMENTS OF THE HIGHER POWER GRADIENT PACKAGE AT THE TIME OF INITIAL INSTALLATION WILL REDUCE THE COST TO UPGRADE THE ELECTRICAL SYSTEM LATER.

2) RECOMMENDED TRANSFORMER SIZE (SYSTEM WITHOUT UPS) IS BASED ON INDUSTRY STANDARD ISOLATION TRANSFORMER KVA RATINGS. SOURCE IMPEDANCE FEEDING THE MAGNETOM SYSTEM, INCLUDING ANY ISOLATION TRANSFORMERS, MUST MEET EQUIPMENT REQUIREMENTS AS LISTED HERE. SIEMENS RECOMMENDS A TRANSFORMER WITH COPPER WINDINGS, AN ELECTRO-STATIC SHIELD, AND A LOW IMPEDANCE (<3%) TO ENSURE THAT SOURCE IMPEDANCE REQUIREMENTS ARE MET.

3) OVERCURRENT PROTECTION IS SPECIFIED FOR SYSTEMS WITHOUT AN UNINTERRUPTIBLE POWER SUPPLY (UPS). ADDITION OF A UPS REQUIRES A HIGHER CAPACITY MAINS CONNECTION (DEPENDENT UPON UPS MODEL AND SIZE).
MAXIMUM FAULT CURRENT IS DEPENDENT UPON THE IMPEDANCE OF THE FACILITY ELECTRICAL SYSTEM. CUSTOMER'S ARCHITECT OR ELECTRICAL CONTRACTOR TO SPECIFY AIC RATING OF OVERCURRENT PROTECTION BASED ON FACILTY IMPEDANCE CHARACTERISTICS.

4) MOMENTARY POWER IS BASED ON A MAXIMUM RMS VALUE FOR A PERIOD NOT TO EXCEED FIVE (5) SECONDS, AS DEFINED IN NEC 517.2. STAND-BY AND AVERAGE CURRENT ARE SUBSTANTIALLY LOWER.

5) THE CONDUCTOR SIZE SHOULD BE SELECTED TO MEET THE VOLTAGE DROP REQUIREMENTS, TAKING INTO CONSIDERATION THE MAINS CAPACITY, RUN LENGTH, AND ANY ADDITIONAL TRANSFORMERS USED TO OBTAIN THE PROPER EQUIPMENT VOLTAGE LEVEL. NEMA STANDARD XR-9-1989 (R1994,R2000) PROVIDES GENERAL GUIDELINES FOR SIZING CONDUCTORS, TRANSFORMERS, AND ELECTRICAL SYSTEMS FOR MEDICAL IMAGING SYSTEMS.

6) LONG-TIME POWER IS BASED ON THE HIGHEST AVERAGE RMS VALUES FOR A PERIOD EXCEEDING 5 MINUTES DURING CLINICAL SYSTEM OPERATION, AS DEFINED IN NEC 517.2.

7) A CIRCUIT BREAKER WITH A HIGH INRUSH RATING (>8x RATED CURRENT) IS REQUIRED TO PERMIT SWITCH-ON OF THE UPS SYSTEM WITHOUT SPURIOUS TRIPPING. CIRCUIT BREAKERS WITH AN ADJUSTABLE MAGNETIC TRIP (SIEMENS FD6 SERIES OR SIMILAR) ARE HIGHLY RECOMMENDED.

NOISE LEVELS

SYSTEM ROOM	NOISE LEVEL / dB(A)
CONTROL ROOM	<55
EXAMINATION ROOM	86.1 dB(A) – 8 HOUR AVERAGE 108.2 dB(A) MAXIMUM
EQUIPMENT ROOM	<65

IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THAT ALL LOCAL/STATE/OSHA NOISE REGULATIONS ARE ADHERED TO. ADDITIONAL NOISE DATA MAY BE PROVIDED BY SIEMENS PROJECT MANAGER UPON REQUEST.

CEILING HEIGHTS

EXAM ROOM 7'-11" MINIMUM
CONTROL ROOM 6'-11 MINIMUM
EQUIPMENT ROOM 7'-3" MINIMUM

REMOTE SYSTEM DIAGNOSTICS

SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM.

THIS SERVICE REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:
1. (PREFERRED) VPN – WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE.
2. (OPTIONAL) *SRS ROUTER* – CONNECTED TO ANALOG PHONE LINE VIA *ANALOG MODEM*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND A POWER OUTLET. NOTE: = *SUPPLIED BY SIEMENS*

FOR MORE INFORMATION

FOR MORE DETAILED PLANNING REQUIREMENTS FOR THIS SYSTEM, SEE THE TYPICAL FINAL DRAWING SET NUMBER: 10023

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T
SPECIFICATIONS

CHILLED WATER SUPPLY

A CHILLED WATER SUPPLY IS REQUIRED TO THE MRI SYSTEM 24 HOURS A DAY, YEAR ROUND FOR THE COLD HEAD AND GRADIENT SYSTEMS. THIS CAN BE PROVIDED BY A CENTRAL CHILLED WATER SUPPLY OR A SEPARATE STAND ALONE CHILLER THAT MEETS THE STATED REQUIREMENTS. THE CHILLED WATER CAN ALSO BE SUPPLIED BY A DEDICATED KRAUS ECO CHILLER AND INTERFACE PANEL.

WITHOUT THE USE OF A DEDICATED KRAUS CHILLER, A SEP (SYSTEM SEPARATOR CABINET), MUST BE INCLUDED WITH THE SIEMENS ORDER. THE PIPE SIZE BETWEEN THE KRAUS CHILLER AND INTERFACE PANEL, OR BETWEEN THE WATER SUPPLY AND SEP MUST BE 2 INCH UP TO 82 FEET, 2-1/2 INCH UP TO 148 FEET, CONSULT FOR LONGER PIPE. PERMISSIBLE MATERIALS THAT CAN BE USED FOR THE PIPING ARE: STAINLESS STEEL (V2A, V4A), NON-FERROUS METAL (COPPER, BRASS), SYNTHETIC MATERIAL, PLASTICS, BRAZING SOLDER, HARD SOLDER, OR FITTING SOLDER TYPE 3 AND 4. THERE ARE MATERIALS THAT MAY CAUSE DAMAGE TO THE COOLING SYSTEM AND CANNOT BE USED, THESE MATERIALS ARE ALUMINUM, IRON, CARBON STEEL, ZINC, ZINC PLATED STEEL, OR STANDARD STEEL PIPES.

THESE REQUIREMENTS ARE REQUIRED FOR NEW INSTALLATIONS, IF EXISTING WATER PIPES COMPLY WITH SIEMENS WATER SPECIFICATIONS, THEY DO NOT NEED TO BE REPLACED.

NORMAL TAP WATER MUST BE AVAILABLE FOR FILLING THE SECONDARY WATER CIRCUIT. THERE SHALL BE A HOSE BIB LOCATED WITHIN 65' OF THE SEP, IFP, ACC OR THE KRAUS CHILLER.

THE SUPPLY AND RETURN CHILLED WATER PIPES MUST BE LABELED. THE LOCATION OF THE LABELS MUST BE AT ALL CONNECTION AND REFILLING POINTS AND MUST CONTAIN FLOW DIRECTION AND CONTENTS.

ENVIRONMENTAL REQUIREMENTS

1) AIR CONDITIONING IS TO PROVIDE A TEMPERATURE OF 70°F ±5°F IN THE EXAM ROOM, 70°F±10°F IN THE EQUIPMENT & CONTROL AREAS, RELATIVE HUMIDITY OF 40-60% (NON-CONDENSING) IS REQUIRED EXAMINATION ROOM AND 40-80% (NON-CONDENSING) IN ALL OTHER AREAS WHERE SIEMENS EQUIPMENT IS INSTALLED. THESE CONDITIONS ARE TO BE MET AT ALL TIMES; 24 HOURS A DAY, 7 DAYS A WEEK.

2) A DEDICATED AIR CONDITIONING AND HUMIDIFICATION SYSTEM IS RECOMMENDED FOR THE EXAM ROOM. A MINIMUM AIR EXCHANGE RATE OF 6 TIMES PER HOUR FOR THE EXAM ROOM IS REQUIRED. IT IS RECOMMENDED TO INSTALL A FRESH AIR SYSTEM WITH 30%-50% FRESH AIR INTAKE.

AIR SUPPLY AND RETURN ABOVE THE FINISHED CEILING IN THE EXAM ROOM IS RECOMMENDED. EACH ROOM SHOULD HAVE A DEDICATED CONTROL AND SENSOR TO MONITOR AND ADJUST THE AIR.

3) THE HEAT INTO THE EXAM ROOM IS LESS THAN 10,236 BTU/HR. THE HEAT INTO THE EQUIPMENT ROOM IS LESS THAN 3,412 BTU/HR. THIS HEAT DISSIPATION IS FROM THE SIEMENS EQUIPMENT ONLY, AUXILIARY SUPPORT EQUIPMENT (ie UPS) AND LIGHTING MUST BE CONSIDERED FOR TOTAL HEAT LOADS.

4) IT IS IMPORTANT FOR FRESH AIR INTAKE SYSTEMS TO EXHAUST AIR DIRECTLY OUT OF THE BUILDING. THE EXHAUST AIR MUST NOT BE DEFLECTED INTO ANOTHER ROOM. THE MAGNET ROOM EXHAUST AIR SHOULD BE INSTALLED AT LEAST 6'-6" ABOVE FINISHED FLOOR.

5) THE AIR INTAKE OF THE AIR CONDITIONING SYSTEM MUST NOT BE LOCATED IN THE VICINITY OF THE QUENCH VENT EXHAUST.

6) IF THE INPUT DRAWS UPON AIR FROM OUTSIDE THE BUILDING, IT IS RECOMMENDED TO INSTALL AN ON-SITE FILTER TO REMOVE DUST PARTICLES GREATER THAN 10 MICRONS.

7) DO NOT LOCATE ANY HVAC DIFFUSERS ABOVE THE MAGNET. THERE SHALL NOT BE AIR BLOWING DIRECTLY ON THE MAGNET.

CHILLED WATER REQUIREMENTS

WATER REQUIREMENTS TO BE MEASURED AT THE SEP CABINET.

FLOW RATE:	23.78-29.05 GPM
WATER TEMPERATURE:	48°F ±4°F
BTU DISCHARGE TO THE WATER	204,729 BTU/HR
WATER PRESSURE	MAXIMUM 87 PSI
LOSS OF PRESSURE FOR SEP CABINET	14.5 PSI MAXIMUM
CHILLED WATER ACIDITY RANGE	6 pH TO 8 pH
CHILLED WATER HARDNESS	<250 ppm CALCIUM CARBONATE
CHLORINE GAS CONCENTRATION	<200 ppm
FILTRATION	500 µm

FOR INSTALLATION OF A KRAUS KSC 215 CHILLER, IT IS THE RESPONSIBILITY OF THE CUSTOMER/MECHANICAL CONTRACTOR TO PROVIDE A MIXTURE OF WATER WITH 35%-38% ETHYLENE GLYCOL PRIOR TO CHILLER START UP. DO NOT USE PROPYLENE GLYCOL OR AUTOMOTIVE ANTI-FREEZE.

THE AMOUNT OF THE MIXTURE MUST FILL THE CHILLER, MR SYSTEM AND PIPING (SUPPLY AND RETURN), SEE EXAMPLES BELOW.

(1) GALLON OF UNDILLUTED GLYCOL, OR (2) GALLONS OF WATER/GLYCOL MIXTURE MUST REMAIN ON SITE FOR USE AFTER START UP.

MIXTURE VOLUME INCLUDING SUPPLY & RETURN+15 GAL. CHILLER & MR

PIPE DIAMETER	TOTAL LENGTH	MIXTURE VOLUME	GLYCOL NEEDED
2"	100'	31.3 GALLONS	11.9 GALLONS
2"	200'	47.6 GALLONS	18.1 GALLONS
2.5"	100'	40.5 GALLONS	15.4 GALLONS
2.5"	200'	66.0 GALLONS	25.1 GALLONS

MIXTURE VOLUME = 3.14 x (PIPE RADIUS)^2 x PIPE LENGTH + 15 GALLONS.
GLYCOL AMOUNT = 35-38% OF MIXTURE VOLUME.

QUENCH VENT NOTES

LIQUID AND GASSEOUS HELIUM ARE USED IN THE OPERATION OF A SUPERCONDUCTING MRI SYSTEM. THE MECHANICAL CONTRACTOR SHALL PROVIDE A VENT, ACCORDING TO SIEMENS SPECIFICATIONS, TO EXHAUST GASSEOUS HELIUM FROM THE MAGNET TO OUTSIDE THE BUILDING. PLEASE SEE THE SIEMENS TYPICAL DRAWINGS FOR DETAILS.

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T
SPECIFICATIONS

PROTECTING THE ENVIRONMENT

PROTECTING THE IMMEDIATE ENVIRONMENT FROM THE EFFECT OF THE MAGNETIC FIELD REQUIRES CONSIDERATION. INFORMATION STORED ON MAGNETIC DATA CARRIERS SUCH AS DISKS, TAPES, AND CREDIT CARDS MAY BE ERASED IF IN CLOSE PROXIMITY. CAUTION WITH REGARD TO HEART PACEMAKERS MUST BE EXERCISED. MOST PACEMAKER UNITS EMPLOY A REED RELAY WHICH MAY CHANGE OPERATING MODE WHEN EXPOSED TO AN EXTERNAL MAGNETIC FIELD. THEREFORE, PACEMAKER USERS MUST BE KEPT AT A SPECIFIED DISTANCE FROM THE MAGNET WHICH IS DETERMINED BY THE MAGNETIC FIELD STRENGTH.

PROTECTING THE MAGNETIC FIELD

THE SIEMENS MAGNETOM UTILIZES A SUPERCONDUCTIVE MAGNET WITH AN EXTREMELY HOMOGENEOUS FIELD WITHIN THE MAGNET TO PROVIDE DISTORTION-FREE IMAGING. THE PRESENCE OF FERROMAGNETIC MATERIAL WITHIN THE VICINITY OF THE MAGNET CAN ADVERSELY AFFECT THE UNIFORMITY OF THE USEFUL MAGNETIC FIELD. THIS APPLIES TO STATIONARY FERROUS MATERIAL (STRUCTURAL STEEL) WHICH IS TO BE MINIMIZED. STATIONARY STEEL COMPENSATION MAY BE ACHIEVED BY MAGNET POSITIONING AND SELECTIVE USE OF SHIMS. FIELD DISTORTION ENCOUNTERED BY MOVING FERROMAGNETIC OBJECTS IS MORE DIFFICULT TO COMPENSATE AND MAY REQUIRE THE USE OF MAGNETIC SHIELDING.

MAGNETIC FRINGE FIELDS

MAGNETIC FIELDS MAY AFFECT THE FUNCTION OF DEVICES IN THE VICINITY OF THE MAGNET. THESE DEVICES MUST BE OUTSIDE CERTAIN MAGNETIC FIELDS. THE DISTANCES LISTED ARE FROM THE MAGNET ISOCENTER AND DO NOT CONSIDER ANY MAGNETIC ROOM SHIELDING.

X/Y AND Z AXIS	DEVICES
6'-1" / 9'-2" 3.0mT	SMALL MOTORS, WATCHES, CAMERAS, CREDIT CARDS, MAGNETIC DATA CARRIERS (SHORT-TERM EXPOSURE)
7'-3" / 11'-6" 1.0mT	COMPUTERS, MAGNETIC DISK DRIVES, OSCILLOSCOPES, PROCESSORS
8'-3" / 13'-2" 0.5mT	CARDIAC PACEMAKERS, X-RAY TUBES, INSULIN PUMPS, B/W MONITORS, MAGNETIC DATA CARRIERS (LONG-TERM STORAGE)
9'-9" / 16'-1" 0.2mT	SIEMENS CT SCANNERS
10'-4" / 17'-1" 0.15mT	COLOR MONITORS, SIEMENS LINEAR ACCELERATORS
13'-1" / 22'-3" 0.05mT	X-RAY IMAGE INTENSIFIERS, GAMMA CAMERAS, PET/CYCLOTRON, ELECTRON MICROSCOPES, LINEAR ACCELERATORS

THE OWNER/USER IS TO VERIFY THE LOCATION OF THE 0.5mT FIELD AND ENSURE THAT IT IS MAINTAINED AS A RESTRICTED AREA.

MAGNET SITING REQUIREMENTS

IT MUST BE ENSURED THAT THE MAGNET IS LOCATED SO THAT THE STABILITY AND HOMOGENEITY OF THE MAGNETIC FIELD ARE NOT ADVERSELY AFFECTED BY EXTRANEOUS FIELDS AND STATIC OR DYNAMIC FERROMAGNETIC OBJECTS.

X/Y AND Z AXIS	SOURCE OF INTERFERENCE
3'-6"	STEEL REINFORCEMENT RODS IN FLOOR - MAXIMUM 20 LBS/SQ. FT.
18'-1" / 21'-4"	STRETCHERS UP TO 110 LBS.
13'-1"	A/C CHILLERS
19'-9" / 23'-0"	TRANSPORT DEVICES UP TO 440 LBS.
21'-4 / 26'-3"	VEHICLES UP TO 2,000 LBS.
23'-0" / 31'-3"	ELEVATORS, TRUCKS UP TO 10,000 LBS.
39'-4"/26'-2"	AC TRANSFORMERS LESS THAN 100 KVA
41'-0"/32'-9"	AC TRANSFORMERS LESS THAN 250 KVA
42'-7"/39'-4"	AC TRANSFORMERS LESS THAN 650 KVA
45'-11"/49'-3"	AC TRANSFORMERS LESS THAN 1600 KVA
9'-10"/6'-6"	AC CABLES, MOTORS LESS THAN 100 AMPS
22'-11"/9'-10"	AC CABLES, MOTORS LESS THAN 250 AMPS
131'-2"	ELECTRIC RAILWAY SYSTEMS

FOR IRON OBJECTS LOCATED UP TO 45° FROM THE Z AXIS, THE DISTANCES FOR THE Z AXIS MUST BE USED.
REDUCTION IS POSSIBLE WITH STEEL SHIELDING.

MAXIMUM CABLE LENGTH

THERE ARE 3 DIFFERENT LENGTHS OF CABLE THAT ARE AVAILABLE FOR THE MRI SYSTEM DIFFERENTIATED BY MAXIMUM LENGTHS FROM THE MAGNET TO THE FILTER PANEL (INSIDE) AND FROM THE FILTER PANEL TO THE ELECTRONICS (OUTSIDE).

INSIDE	OUTSIDE
20'	4'
20'	32'
20'	39'

THE VERTICAL DISTANCE FOR CABLE TRAVEL FROM THE FILTER PANEL TO THE CABLE TRAY, AND FROM THE CABLE TRAY TO THE MAGNET MUST BE CONSIDERED.

THE MAXIMUM DISTANCE FROM THE ACC CABINET TO THE CONTROL CONSOLE IS 75 FEET.

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T

SPECIFICATIONS

RF SHIELDING

THE EXAMINATION AREA MUST BE SHIELDED TO PROVIDE A REDUCTION OF RADIO FREQUENCY WAVES EMANATING FROM EXTERNAL TRANSMITTERS. THE REQUIRED ATTENUATION IS 90dB IN THE FREQUENCY RANGE OF 15–128 MHz. IF CO–SITING TWO SYSTEMS EACH ROOM SHOULD BE 100 dB. THE RF SHIELD MUST BE TESTED BEFORE AND AFTER MAGNET PLACEMENT IN THE RF ROOM AND AFTER THE SIEMENS RF FILTER PANEL IS INSTALLED.

THE RF–SHIELDING MUST BE INSULATED FROM ALL GROUNDS SUCH THAT THE ONLY GROUND IS THE SINGLE POINT GROUND ON THE OUTSIDE OF THE RF–ROOM WALL. RESISTANCE ≥ 100 OHMS.

ALL ELECTRICAL LINES INTO THE RF ROOM MUST BE ROUTED THROUGH RF FILTERS (PROVIDED BY RF SHIELDING SUPPLIER).
ALL ELECTRICALLY NON–CONDUCTIVE SUPPLY LINES (E.G. FIBER OPTIC CABLES, OR HOSES) INTO THE RF ROOM MUST BE ROUTED THROUGH RF SEALED WAVEGUIDES (PROVIDED BY RF SHIELDING SUPPLIER).

FOR PRESSURE EQUALIZATION PURPOSES THE RF DOOR SHOULD OPEN TO THE OUTSIDE OF THE RF ROOM. AS AN ALTERNATIVE A 24"X24" OPENING IN THE RF ROOM FOR PRESSURE EQUALIZATION IS REQUIRED.

BUILDING VIBRATIONS

VIBRATION OF THE SITE HAS THE ABILITY TO AFFECT THE STABILITY AND HOMOGENEITY OF THE MAGNETIC FIELD. THEREFORE EXTERNAL VIBRATIONS OR SHOCKS AFFECTING THE MAGNET MAY DEGRAGE IMAGE QUALITY. IN THE THREE SPATIAL ORITENTATIONS THE BUILDING MUST NOT EXCEED ACCELERATION OF 0.001m/s or –80dB(g) g=9.81 m/s^2

THE REQUIREMENT FOR a_{max} IS MEASURED AS MAXIMUM RMS VALUE PER FREQUENCY COMPONENT <0.5Hz IN THE FOURIER TRANSFORMATION OF THE RECORDED SIGNAL (SPECTRUM).

THE VIBRATION LEVEL OF CONTINUOUS VIBRATIONS (CAUSED BY AIR CONDITIONER, COMPRESSOR, ETC.) AT THE LOCATION OF THE MAGNET MUST NOT EXCEED THE SPECIFED VALUES.
FOR ALL NON–CONTINOUS TRANSIENT VIBRATIONS THE FIGURES SHOULD BE MULTIPLIED BY 4 (OR 12dB).

CONTACT SIEMENS PROJECT MANAGER FOR MORE DETAILS.

TRANSPORTING REQUIREMENTS

LARGEST ITEM – MAGNET – 9,566 LBS.

MINIMUM MAGNET DIMENSIONS WITH TRANSPORT WHEELS UNDER MAGNET:

7'–7" HIGH X 7'–7" WIDE X 5'–2" DEEP WITHOUT TABLE SUPPORT, 6'–0" DEEP WITH TABLE SUPPORT.

THE ROOF HATCH/DELIVERY OPENING SHOULD BE 4" LARGER.

TO TRANSPORT THE GPA/EPC CABINET (3,307 POUNDS) A MINIMUM ROOM HEIGHT OF 6'–9" IS REQUIRED, 6'–3" WITH WHEELS REMOVED, 6'–1" WITH WHEELS AND MAINS CONNECTION REMOVED.

Signed

Clark Patterson Lee
DESIGN PROFESSIONALS

August 8, 2013
Revised October 29, 2013

Via Email Siemens

Mr. Pat Wikstrom, Plant Operations Manager (pwikstrom@murphymedical.org)
Murphy Medical Center
3990 East US Highway 64 Alternate
Murphy, NC 28906-8707

RE: **MRI EQUIPMENT REPLACEMENT**
Murphy Medical Center
Murphy, North Carolina

Dear Pat:

On behalf of **Clark** Patterson Lee (CPL), we are pleased to submit the following proposal for Architectural/Engineering Design services for the MRI Equipment Replacement (the "Project").

PROJECT UNDERSTANDING

Clark Patterson Lee understands Murphy Medical Center (Client) wishes to contract with CPL to provide Architectural/Engineering design services for the replacement of the existing MRI equipment, which includes the replacement of the existing rooftop chiller.

The scope of work shall include coordination with the ***Siemens MRI site specific drawings***, verifying current RF shielding is sufficient, ***re-working current floor plans to include a "Zone 3," as depicted in the attached floor plan***, and confirming the MRI Room meets all applicable codes and regulations as well as M/E/P engineering for the new MRI, including new rooftop chiller. Our consulting design services shall include: meetings with the Client to develop a complete design concept for the project, and construction documentation for competitive bidding and to secure a building permit.

SCOPE OF SERVICES

Task I – Construction Documentation

Due to the accelerated pace required for this project, CPL will provide construction documentation based upon site specific drawings prepared by an MRI vendor selected by the Client. CPL will provide construction documentation in compliance with the North Carolina State Building Code (2012 edition) and other applicable standards. We will include at a minimum:

1. Code Review / Life Safety Plan
2. Floor Plan / Equipment Plan
3. Reflected Ceiling Plan
4. Mechanical / Plumbing / Electrical Plans & Details
5. Specifications shall be on the drawings

Task II – Bid Phase Services

We will submit the necessary documents to the Local and State authorities having jurisdiction. All permits and approvals for the project will be paid for and secured by others. CPL will answer Requests for Information (RFIs), provide clarifications, and issue addenda as required.

6302 Fairview Road
Suite 102
Charlotte, NC 28210
www.clarkpatterson.com
704.331.9131 TEL
704.331.0402 FAX

Task III – Construction Phase Services

CPL will provide two (2) site visits during construction and one (1) Pre-DHSR inspection with a field report written for each visit. CPL will provide construction administration services consisting of the review of submittals and shop drawings, applications for payment, and close out documentation.

SCHEDULE

The schedule will commence when ***Siemens*** supplies site specific drawings to CPL.

ASSUMPTIONS

Our fee proposal is based upon the following assumptions:

1. No renovation will be required outside of the MRI Room (i.e. to provide for the MRI path of travel).
2. No vibration testing is anticipated for magnets of 1.5T or less.
3. Existing finishes, including millwork, flooring, walls and ceiling, will remain, ***unless disrupted by "Zone 3" scope of work.***
4. Electronic drawings of the existing project site and vendor equipment will be provided to CPL
5. Current RF Shielding is consistent with requirements for the new MRI unit.
6. The new MRI unit does not require any room or RF shielding adjustments to contain the .5 gauss lines or quench vent.
7. Typical front end specifications, with Instructions to Bidders, are sufficient.
8. Construction Administration site visits will be conducted at times appropriate with the construction schedule.

CLIENT RESPONSIBILITIES

The Client shall appoint an "Owner's Representative" to act as the point of contact for CPL. It shall be the responsibility of the client to provide the following:

- Unrestricted access to the project site.
- Reasonable advance notice of scheduled meetings.
- Decisions on critical issues in a timely manner.
- Payment of all invoices in accordance with this agreement.

COMPENSATION

CPL agrees to provide the professional design services listed in the Scope of Services. Our fee proposal is based upon work-effort projections and applicable billing rates for the scope of work anticipated for this project. We propose a fixed fee of ***$23,600.00*** summarized in the following table.

An alternate for providing new exterior windows in the MRI Room is also included in the fee table. The scope will include coordination with RF shielding vendor and structural engineer for any support lentils. If accepted, we propose a fixed fee of $1,500.00 for the work, which would increase the total project cost to $25,100.00.

Description	Fee
Task I – Construction Documentation	***$16,000.00***
Task II – Bid Phase Services	***$1,400.00***
Task III – Construction Phase Services	***$6,200.00***
Total	***$23,600.00***
Alternate (Add exterior windows in MRI Room)	***$1,500.00***
Total (w/Alternate)	***$25,100.00***

We bill monthly for the progress of the work. Normal and customary reimbursable expenses are included in our fee.

ADDITIONAL SERVICES

- Furniture and artwork selection / specification.
- Existing medical / office equipment inventory and /or equipment specifications.
- Interior signage.
- Items not specifically defined in the Scope of Services.

CONCLUSION

This document serves as the Owner – Architect Agreement. If these terms are acceptable, please countersign and return one (1) copy to our office.

We look forward to working with you on the successful completion of this project.

Sincerely,

Clark Patterson Lee

Timothy S. Knapp, AIA, LEED AP
Sr. Vice-President

cc: Mr. Adam Chahulski (achahulski@clarkpatterson.com)

Enclosures: As noted

S/CPL/Proposals/2013/Murphy Medical Center/MRI Equipment Replacement_Revised_2013_10_29

ACCEPTED:

MURPHY MEDICAL CENTER

By: _____

Title: CEO

Dated: 11-5-13

WELLS & WEST

PO Box 129
Murphy, NC 28906
(828) 837-2437
(828) 837-3152 Fax

November 13, 2013

Mr. Pat Wikstrom
Murphy Medical Center
3990 E US 64 Alt.
Murphy, NC 28906

Re: MRI Remodel

Dear Pat,

Wells & West, Inc. proposes to furnish materials and labor to complete the MRI remodel as outlined below:

General Conditions
- Building permit
- Land fill fees
- Temporary facilities

Demolition
- Removable wall
- Chiller
- Selective electrical
- Existing split systems for mechanical room
- Cabinets, ceiling, floor covering, existing ductwork
- Existing RF shielding
- Dust protection walls

Concrete
- Extend chiller pad
- Replace area of floor in exam room

Wood & Plastics
- Install 8' of new casework
- Provide table for equipment room

Thermal / moisture
- Temporary opening closure
- Fire stopping

Doors & Windows
- Install exterior window
- Install Stanley 3 panel bypass door – overall unit 90" clear opening 48-1/2". Unit available in Bronze or clear aluminum. Painted finish add $1,500

Finishes
- New ceilings in exam room and zone 3
- Repair ceilings in mechanical and control rooms
- Install sheet vinyl floor and base in zone 3 and exam room – $17,460 Allowance

Install Sheetrock on new RF walls
Patch walls in all areas
Paint all exposed surfaces

Specialties

Removal of existing system
Setting new system from truck into building
Installation of new RF shielding – $48,000 allowance

Fire protection

Reinstall existing system in exam room
Install one new head in Zone 3 area – standard piping

Plumbing

Modify existing sink for zone 3 wall construction
Reinstall medical gas and recertify
Install Siemens provided chiller and glycol - $10,000 Allowance

HVAC

Install 2 new 1 ton mini-split units for mechanical room
Install new split system for exam room
Reinstall ductwork and provide new diffusers in exam room
New cryogen vent - $5,000 allowance

Electrical

Reinstall lighting, outlets, switches, etc.
Rework e-stop switch
Aluminum ladder tray - $4,000 allowance
Provide new breaker in mechanical room
Provide new breaker in MDP
Provide new 150 amp feeder in existing conduit
Provide wire and terminate in Siemens power cabinet
Provide wire and terminate in Siemens chiller

Notes

Excludes architectural and engineering fees
Includes 10% contingency as outlined below
Vibration testing not included, if required add $4,960

Sub-Total	$190,000
10% Contingency	$19,000
10% O & P	$20,900
Total	$229,900

As on previous projects we would propose a time and materials not exceed type contract. We would anticipate being able to scale back some of the scope of work in the proposal.

We appreciate the opportunity of quoting this project for you. If you have any questions or need additional information please feel free to call.

Sincerely,

Chuck West
Wells & West, Inc.

Insight Imaging
26250 Enterprise Ct., Suite 100
Lake Forest, CA 92630
888.367-4327
www.insighthealth.com

INSIGHT IMAGING

Murphy Medical Center

Paul Brown, Director of Radiology
3990 E. US Hwy 64 Alt
Murphy, NC 28901
(828) 837-8161
pbrown@murphymedical.org

July 18, 2013

Interim Mobile MRI Quote

Equipment	GE 1.5T Excite 11X MRI system in a mobile coach
Term	Approximately 8 weeks. Minimum rental term: 7 days.
Days per week	Seven (7) days a week
Start date	TBD. Projected start date is January 2014.
GE service hours	OEM full service agreement: Monday through Friday 8:00 am to 9:00 pm., excluding holidays
Staff	Qualified technologists shall be provided by the Lessee
Applications	If requested, applications training may be provided for an additional charge of $1,300 per day
Payment terms	Net thirty (30) days from date of invoice
Financial considerations	Rental rate of $950.00 per day, plus a one-time shipping fee of $4,100.00. Rates do not include any applicable sales tax

This quote is contingent upon equipment availability.

Thank you for your interest in Insight Imaging. If you have any questions regarding this quote, please contact:

Dave Seymer
Executive Director of Operations
888-367-4327
dseymer@insighthealth.com

This proposal contains confidential and proprietary information and is intended only for the parties identified in this proposal. This proposal may not be copied or distributed, in whole or part, and its contents may not be revealed in any manner to outside parties without the specific prior written consent of InSight Health Corp.

Insight Imaging
26250 Enterprise Ct., Suite 100
Lake Forest, CA 92630
888.367-4327
www.insighthealth.com

INSIGHT IMAGING

Equipment Description

Murphy Medical Center

July 18, 2013

GE 1.5T Excite 11X MRI System

Equipment Configuration	Actively shielded GE 1.5T superconductive HiSpeed MRI 8 channel system with Vector 400 reconstruction
Software Level	11X
Software Features	ScanTools 11.0, SmartPrep 2000, idrivePro, 3DFRSE, EchoPlus, Functools, IVI, ConnectPro
Coils	Quadrature head coil, neurovascular array coil, torso array coil, extremity coil, flex coil, shoulder array coils (large and small)
Additional Equipment	MedRad dual head power injector
Mobile Coach	48' x 8' x 13.5' self-shielded coach
Coach Manufacturer	Either AK Specialty Vehicles or Ellis & Watts, depending upon availability and customer site requirements
Power Requirements	480 volts, 60 Hz, 85 KV, 200 amp, 3 phase, wye with neutral ground
Power Cord Receptacle	Facility must provide a Russelstoll (DF250FRAB) receptacle

For additional information or a detailed cut sheet, please contact your Insight Sales or Operations team member at (888) 367-4327

This proposal contains confidential and proprietary information and is intended only for the parties identified in this proposal. This proposal may not be copied or distributed, in whole or part, and its contents may not be revealed in any manner to outside parties without the specific prior written consent of InSight Health Corp.

Halatek, Julie F

From: Toni Lovingood [tonil@murphymedical.org]
Sent: Tuesday, December 17, 2013 9:58 AM
To: Halatek, Julie F
Cc: Mike Stevenson; Paul Brown; Pat Wikstrom
Subject: RE: phone conversation

Ms. Halatek,

Thank you for the update and guidance on the phone today. Murphy Medical Center has decided to not have Siemens scrap the Toshiba MRI. It will be sold to a vendor for use outside the state of North Carolina. If you have further questions please contact me at 828 835-7558 or tlovingood@murphymedical.org.

Happy holidays!

Toni Lovingood
COO Murphy Medical Center

From: Halatek, Julie F [mailto:julie.halatek@dhhs.nc.gov]
Sent: Tuesday, December 17, 2013 9:41 AM
To: Toni Lovingood
Subject: phone conversation

Hi Ms. Lovingood,

It was a pleasure speaking with you! If you could please summarize the changes to the replacement request letter that you sent to the CON Section so I can add it to the request, I'd appreciate it. Thanks so much!

Julie Halatek
N.C. Department of Health and Human Services
Project Analyst, CON Section -- Division of Health Service Regulation
809 Ruggles Drive
Raleigh, NC 27603
(Office) 919.855.3873
julie.halatek@dhhs.nc.gov
www.ncdhhs.gov/dhsr

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized State official. Unauthorized disclosure of juvenile, health, legally privileged, or otherwise confidential information, including confidential information relating to an ongoing State procurement effort, is prohibited by law. If you have received this e-mail in error, please notify the sender immediately and delete all records of this e-mail.