North Carolina Department of Health and Human Services
Division of Health Service Regulation
Certificate of Need Section
2704 Mail Service Center • Raleigh, North Carolina 27699-2704
http://www.ncdhhs.gov/dhsr/

Drexdal Pratt, Director

Beverly Eaves Perdue, Governor
Albert A. Delia, Acting Secretary

Craig R. Smith, Section Chief
Phone: (919) 855-3873
Fax: (919) 733-8139

March 29, 2012

Ruth A. Glaser
President
Pender Memorial Hospital
507 E. Fremont Street
Burgaw, NC 28425

RE: Exempt from Review - Replacement Equipment / Pender Memorial Hospital / Replace and Relocate 4 slice CT scanner with a 16 slice CT scanner / Pender County

Dear Ms. Glaser:

In response to your letter of March 27, 2012, 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 Brightspeed Elite 16 Slice CT scanner model # S7916MH to replace the existing Asteion/M/V4F Toshiba CT Scanner serial #221515. This determination is based on your representations that the existing unit will be sold or otherwise disposed of when replaced. 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. In addition, you should contact the Construction Section, DHSR 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,

Gregory F. Yakaboski, Project Analyst

Craig R. Smith

Craig R. Smith, Chief
Certificate of Need Section

cc: Construction Section, DHSR

Pender Memorial Hospital
an affiliate of New Hanover Regional Medical Center

March 27, 2012

Craig Smith, Chief
Greg Yakaboski, Analyst
Certificate of Need Section
Division of Health Service Regulation
N.C. Dept. of Health & Human Services
701 Barbour Drive – Council Building
Raleigh, NC 27602

RE: ***Notice of Exempt Acquisition by Pender Memorial Hospital***

Dear Mr. Smith and Mr. Yakaboski:

Pender Memorial Hospital ("PMH"), proposes to replace and relocate its 4 slice computed tomography (CT) machine. The purpose of this letter is to notify the Division of Health Service Regulation (the "Division") of PMH's plans for this purchase and to explain briefly the reasons for the replacement acquisition. Finally, PMH is requesting confirmation from the Department that the transaction as described below does not constitute a new institutional health service subject to certificate of need ("CON") review.

PMH seeks to replace its 4 slice CT scanner with a 16 slice. The 4 slice was purchased/leased in April of 2004, and its replacement is necessary in order to provide current technology for the care of patients at PMH. Further, the CT will be relocated closer to the Emergency Room, which will improve the safety and privacy of our patients (Exhibit A). We are replacing our existing Toshiba scanner with a GE model. This manufacturer was chosen because of its reputation and reliability.

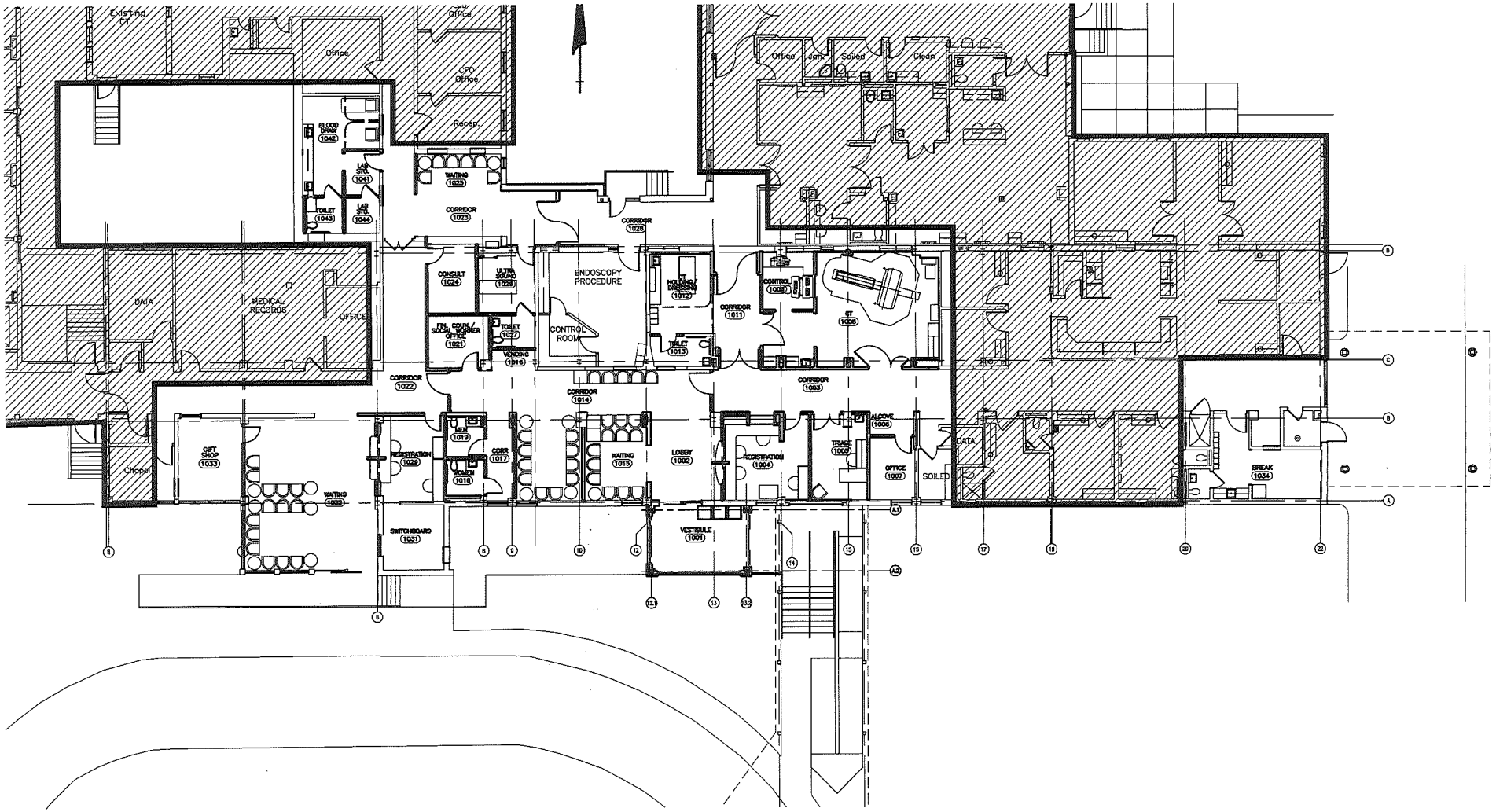
As set forth in the equipment quote attached as Exhibit B, the cost of the equipment is $523,520, inclusive of delivery and installation charges. An equipment comparison of the existing and proposed CT scanners is provided as Exhibit C. Construction costs to prepare space for this equipment, and all other fees to be incurred as part of this installation, amount to $874,980. Accordingly, the total cost of this acquisition is $1,398,500. It is anticipated that construction for this project will begin in early summer of 2012, with the purchase and installation of the new CT equipment towards the early part of 2013. Since the acquisition is a replacement, it does not constitute "major medical equipment" as defined in N.C.G.S. § 131E-176(14o), nor is this equipment otherwise regulated pursuant to N.C.G.S. § 131E-176(16)(f1). The capital cost form for this acquisition is enclosed as Exhibit D.

For the reasons set forth above, Pender Memorial Hospital respectfully requests that the Agency confirm that this acquisition does not require CON review. If you have any questions or require any additional information, please do not hesitate to contact me at (910) 259-5451 x240. I will look forward to hearing from you soon.

Sincerely,

Ruth A. Glaser, FACHE
President

Enclosures



PENDER MEMORIAL HOSPITAL - CT RENOVATIONS

FLOOR PLAN

27 JULY 2011

PROJECT: 2011-02

0 4 8 16

batson associates

Exhibit A

Exhibit B

Quotation Number: P8-C127382 V 1

Pender Memorial Hospital 507 E Fremont St Burgaw NC 28425-5131	Attn: Shelia Harrison Director of Radiology 507 E Fremont St Burgaw NC 28425	Date: 12-02-2011

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"). "Agreement" is defined as this Quotation and the terms and conditions set forth in either (i) the Governing Agreement identified below or (ii) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer;

2) The following documents, as applicable, if attached to this Quotation: i) GE Healthcare Warranty(ies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement. No agreement or understanding, oral or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase order or shipping release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

• Terms of Delivery:	FOB Destination
• Quotation Expiration Date:	12-23-2011
• Billing Terms:	80% delivery / 20% Installation
• Payment Terms:	NET 30
• Governing Agreement:	Novation-DI

Each party has caused this agreement to be signed by an authorized representative on the date set forth below. Please submit purchase orders to GE Healthcare
3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE HEALTHCARE _____

James Benecki Date
Product Sales Specialist
5901 Hollyholm Trace
Wilmington, NC 28409
US
Phone: (615) 390-3634
Fax: (910) 401-1049
Jim.Benecki@ge.com

CUSTOMER

_____
Authorized Customer Date

_____
Print Name and Title

_____
PO #

_____
Desired Equipment First Use Date

_____
GE Healthcare will use reasonable efforts to meet Customer's desired equipment first use date. The actual delivery date will be mutually agreed upon by the parties.

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

____ Cash * ____ Lease ____ HFS Loan

If financing please provide name of finance company below*:

_____

*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.

Quotation Number: P8-C127382 V 1

Qty	Catalog No.	Description
1	S7916MH	The BrightSpeed* Elite with the True In One(TIO) console allows for ASiR * (Adaptive Statistical Iterative Reconstruction) dose reduction technology as an option on BrightSpeed Elite. This system offers a Freedom Workspace with a smaller footprint, allowing 6fps reconstruction speed as a standard and a 16fps option. Key Features: • Exclusive VariSpeed allows full 360 degree rotation in 0.5, 0.6, 0.7, 0.8, 0.9, 1, 2, 3, 4 seconds, ensuring short breath holds, comfortable exams and flexibility. • Routine thin slice scanning, as thin as 0.625mm optimizing lesion detection and facilitating the use of thinner images for sagittal, coronal, oblique, and volume image presentation and review • Efficient compact geometry design delivering optimized performance of the x-ray tube and generator • GE proprietary, non-linear interpolation algorithms, balance slice profile, helical pitch, image noise, and required technique • Image decomposition to: - Retrospective thin images from data sets where thicker images were initially reconstructed - Facilitates more detailed image analysis. - Improves 3D and reformat visualization. • ASiR* (Adaptive Statistical Iterative Reconstruction) dose reduction technology can now be purchased as an option on BrightSpeed Elite. • Dose Check, a tool that helps the user to estimate and check the dose delivered in clinical practice. It is based on the standard XR-25-2010 published by the Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA). • IQ Enhance (IQE) reconstruction reduces helical Artifact Index in thin slice helical scanning. This reduction in artifacts makes it possible to scan at faster helical pitches. # Key Features for Intelligent, versatile and User-Friendly Workflow: Xtream(TM*) FX Workflow Platform built to help you maximize productivity - Delivers 6(16 optional) full fidelity images per second (ips) reconstruction - Up to 10 ips network transfer rates - Direct Multiplanar Reformats (DMPR) that enables the move from 2D review to prospective 3D review of sagittal, coronal and oblique planes automatically - Data Export and Interchange that allow you easily share images with referring physicians and patients • Includes reference protocols and the ability to customize your own for a total of 6840 protocols

Qty	Catalog No,	Description

- Remote tilt from the operator console to increase exam speed.
- Built-in breathing lights with a countdown timer, so the patient does not have to guess how much longer to hold their breath.
- In room start button mounted on gantry with countdown display, facilitates single technologist operation and improved departmental productivity.
- GE software allows you to automate or build every task into the protocols to increase throughput.
- 250,000 uncompressed 512 image files storage capacity, and 9600 scan seconds of scan data storage capacity
- Chest Kernel can let the user perform only one reconstruction (instead of twice-using lung kernel and standard kernel separately) for chest exams, which may speed up the image review process. Filter sharpness is automatically adapted to the lung or mediastinum when the user adjusts window width or window level.
- IQE enables faster anatomical coverage using faster pitch helical scanning at similar Artifact Index level compared to slower

  helical scanning without IQE. This coverage speed is equivalent to that of wider detectors (50 slice equivalent) at same table speed. #

Helical Artifact Index is defined as: ((SD value at ROI1)2 - (SD value at ROI2)2)1/2. Two helical data sets were acquired to compute a Helical Artifact Index. Both helical acquisitions were acquired using kV:120, Gantry Rotation: 0.8S, Slice thickness: 1.25mm, SFOV: Large, DFOV: 32cm, Start/End:S200-I370 and reconstructed using 512 matrix. One data set was acquired at 1.75:1 pitch with table speed of 37.5mm per rotation with IQ Enhance ON at 260mA and the other using 0.562:1 pitch with table speed of 11.25mm per rotation with IQ Enhance OFF at 160mA.

Dose Management Leadership: -Dose Check includes the following functions:

- Notification Value(NV): Dose Check provides the user to set up a notification value for each type of CT procedure. The user will be notified if the estimated dose value of the scan is beyond the NV.
- Alert Value (AV): Dose Check allows the user to set up an alert value for each type of CT procedure. When the estimated dose value of a scan is beyond the alert value, a specific autorization will be required (user name and password) if the user would like to continue the scan without changing the scan parameters.
- Defining Alert Values for Adult and Pediatric with age threshold
- Audit logging and review
- Protocol Change Control

- ASiR * (Adaptive Statistical Iterative Reconstruction) dose reduction technology can now be purchased as an option on BrightSpeed Elite. - Neuro 3D filter provides the user the capability to filter head acquisition data using specially designed and optimized 3D filter - 3D mA modulation

Qty	Catalog No.	Description

acquistions may reduce dose compared with fixed mA acquisitions $ - The short geometry design of the BrightSpeed Elite system enables equivalent imaging flux compared to a system with longer geometry and higher generator power. - DLP (dose length product), and dose efficiency display during scan prescription provides patient dose information to the operator

$ mA modulation is designed to optimize the dose for the user prescribed noise index. Its effect on dose depends on the patient body habitus, and prescribed noise setting.

Clinical Benefits:

- Coronary artery calcification imaging with retrospective and prospective gating-option
- CTA runoffs
- More thin slices faster; routine use of thin slices without compromising diagnostic IQ, coverage or throughput
- Full organ coverage in arterial phase
- IQ Enhance (IQE) reconstruction reduces helical Artifact Index in thin slice helical scanning. This reduction in artifacts makes it possible to scan at faster helical pitches. #
- Multi-phase organ studies
- Multi-planar reformats with isotropic microvoxel imaging
- Fast scanning with outstanding image quality and GE's proprietary cross beam and hyperplane reconstruction algorithms

System components:

- Gantry with advanced slip ring design continuously rotates the generator
- Performix Ultra X-ray tube, Matrix II detector and Volara digital data acquisition system around the patient.
- Aperture: 70 cm
- Maximum SFOV: 50 cm
- Rotational speeds: 360 degrees in 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 2.0, 3.0, and 4.0 Seconds
- Tilt: +/- 30 degrees, speed: 1 degree/second
- Remote tilt from operator's console
- Integrated breathing lights & countdown timer
- Integrated start scan button with countdown timer to indicate when x-ray will turn on

Laser Alignment Lights:

- Defined internal and external scan planes to +/- 1 mm accuracy
- Operate over full range of gantry tilt
- Coronal light remains perpendicular to axial light as gantry tilts making visual readout easy from tableside or the operator console.

Qty	Catalog No.	Description

Table: Cantilever design for access and stability

- Vertical range: 49.0 cm to 99.1 cm
- Vertical scannable range:79.1 cm to 99.1 cm
- Horizontal range: up to 170 cm
- Horizontal scannable range:up to 173cm(axial) and up to 163 cm(helical) and up to 160 cm (Scout)
- Horizontal speed: up to 125mm/sec (150mm/sec at ISD)
- Table automatically re-centers on scan plane with changes in vertical position under Alignment light turned on condition
- Table load capacity:
  - 227kg (500 lbs) +/-0.25mm position repeatability

X-ray Tube: Performix Ultra X-ray tube unit offers an optimized design for exams requiring a large number of scans without tube cooling delays.

- Performix Ultra X-ray tube with 6.3 MHU of storage and capability of 53.2 kW operation provides increased helical performance with greater patient throughput and virtually no tube cooling delays. Advanced technology in the tube includes a metal ceramic frame and high speed bearing for long life at sub-second scanning, a high efficiency motor to accelerate the anode and efficient cooling for high throughput and helical performance.
- Wide range of technique (10mA to 440 mA, in 5 mA increments) gives technologist and physician flexibility to tailor protocols to specific patient needs, while optimizing patient dose, and providing the power needed to perform a broad spectrum examinations.
- Heat storage capacity: 6.3 MHU
- Heat dissipation:
  - Anode (Max) 840 KHU/min
  - Casing (cont) 300 KHU/min
  - Tube unit: 6.9 kW Continuous for 10 min.
- Dual Focus Spots:
  - Small Focal Spot: 0.9 x 0.7 (IEC60336/2005) or 0.7 x 0.6 (IEC60336/1993) Loading Factors: 120kV, 125mA
  - Large Focal Spot: 1 x 1 (IEC60336/2005) or 0.9 x 0.9 (IEC60336/1993) Loading Factors: 120kV, 250mA
- Maximum power: 53.2 kW
- Beam collimated to 56 degree fan angle.

High Voltage Generator: High Frequency on-board generator allows for continuous operation during scan.

- 53.2 kW Output Power

Qty	Catalog No.	Description

- kV: 80, 100, 120, 140 kV
- mA: 10 to 440 mA, 5 mA Increments.
- Maximum mA for Each kV Selection:
  - 400mA @ 80kV
  - 420mA @ 100kV
  - 440mA @ 120kV
  - 380mA @ 140kV

HiLight Matrix II Detector: The HiLight Matrix II detector was designed for high performance imaging. The BrightSpeed Elite allows up to 16 slices per rotation, and up to 32 slices per second. The HiLight Matrix II detector benefits are:

- Increased coverage per rotation with thinner slices routine
- Solid Image Quality from the use of GE's patented HiLight material, a ceramic scintillator specifically engineered for CT applications.
- 16 detector rows, each containing 888 active patient elements, 15 reference elements.
- 4 Modes of Data Output:
  - 16 x 0.625 mm or 1.25mm
  - 8 x 1.25 mm or 2.5 mm

Volara Digital DAS (Data Acquisition System): The Volara digital DAS dramatically reduces noise and improves image quality, especially in low dose exams, large patient, or areas of the anatomy that are difficult to image such as shoulder and hips

- 14,592 available input channels
- 1968Hz maximum sample rate
- Effective analog to digital conversion range greater than 2,000,000:1

TIO Operator Console:

- 6fps comes standard, 16fps is optional
- Freedom Workspace-ergonomically designed Operator console
- This table design enables the efficient use of space while enhancing clinical workflow and technologist comfort. Attributes:
  - Depth reduction
  - Fully adjustable monitor arms
  - Adjustable height
  - Flexible location of OC hardware Benefits:
  - Improve patient visibility
  - Clear path to the patient
  - More comfortable for technologist

Qty	Catalog No.	Description

- Improved ergonomics for technologists
- Sitting or Standing position
- Easy height adjustment Requirements:
- Xtream FX operator console

- Split tabletop allows unrestricted patient viewing while supporting 2 19 inch color LCD monitors. Each work surface can be adjusted to accommodate operator preferences and a wide variety of site requirements
- Xtream* FX, built on the LINUX operating system and delivering fast reconstruction of 6 ips with full fidelity images and fast network transfer rates of up to 16 ips
- The 19 inch color LCD monitors support scan and recon, as well as image display, processing, analysis, and management.
- FW(Std)Size: 1300mm Wide x 620mm Deep x 683-912mm adjustable height 44 kg in weight

Image Networking: Exams can be selected and moved between the BrightSpeed Elite CT Scanner and any imaging system supporting the DICOM 3.0 protocol for network send, receive and pull/query.

- Standard Auto-configuring Ethernet
- Direct Network Connection
- Supports 10/100/1000 BaseT Ethernet
- Supported Protocols
  - DICOM 3.0 Network
  - Advantage Net
  - InSite Point-to-Point
  - TCP/IP (for System Administration)

InSite Broadband includes: Hardware essential for systems to be connected to highspeed internet. Enables customer to access services designed to help: improve quality, enhance performance, increase productivity, reduce costs, reduce downtime, expand imaging capabilities, and increase privacy and security of data transmissions

Applications and Clinical Performance: When selecting a CT scanner to meet your needs the primary concern should be the clinical performance of the system, not specifications. Specifications alone don't tell you how the scanner will perform. To understand true clinical performance of the system, you have to consider how well the scanner delivers three things - image quality, coverage, exam speed - and whether it can deliver all three at once. The BrightSpeed Elite CT Scanner offers a balanced design enabling it to deliver clinical performance.

Image Quality

- Axial Low Contrast Detectability (LCD) Statistical LCD: on 8 Inch CATPHAN Phantom

Qty	Catalog No.	Description

- 5 mm @ 0.3% at 13.3 mGy
- 3 mm @ 0.3% at 37.2 mGy

- Helical Noise -on an AAPM Water Phantom or GE Quality Assurance Phantom = < 0.32% nominal +/- 0.03% at 28.5 mGy
- High Contrast Spatial Resolution - on GE Performance Phantom
  - Standard Algorithm - 8.5 lp/cm @ 0% MTF
  - Hi-res Algorithm - 15.4 lp/cm @ 0% MTF

Coverage: IQ Enhance (IQE) enables reconstruction reduces helical Artifact Index in thin slice helical scanning. This reduction in artifacts makes it possible to scan at faster helical pitches. #

- IQE enables faster anatomical coverage using faster pitch helical scanning at similar Artifact Index level compare to slower helical

  scanning without IQE. This coverage speed is equivalent to that of wider detectors (50 slice equivalent) at same table speed. #
- IQ Enhance (IQE) enables accelerated helical pitch, up to 70% (e.g. 0.562 to 1.75, @16 slice) at the same Artifact Index level #.

Helical Artifact Index is defined as: ((SD value at ROI1)2 - (SD value at ROI2)2)1/2. Two helical data sets were acquired to compute a Helical Artifact Index. Both helical acquisitions were acquired using kV:120, Gantry Rotation: 0.8S, Slice Thickness: 1.25mm, SFOV: Large, DFOV: 32cm, Start/End: S200-I370 and reconstructed using 512 matrix. One data set was acquired at 1.75:1 pitch with table speed of 37.5mm per rotation with IQ Enhance ON at 260mA and the other using 0.562:1 pitch with table speed of 11.25mm per rotation with IQ Enhance OFF at 160mA.

The key to MDCT is coverage, not slices. The key measure of coverage performance is coverage per second:

- Coverage/sec = (Collimation x Pitch) / Rotation Speed

The BrightSpeed Elite with True In One Console provides outstanding performance with flexible collimation modes, extended helical pitches, fast rotation speeds.

Pitches

- 0.562:1, 0.938:1, 1.375:1, and 1.75:1 Helical Pitches for 16 Slice Modes
- 0.625:1, 0.875:1, 1.35:1, and 1.675:1 Helical Pitches for 8 Slice Modes
- Exclusive VariSpeed allows full 360 degree rotation in 0.5, 0.6, 0.7, 0.8, 0.9, 1, 2, 3, 4 seconds, ensuring short breath holds, more comfortable exams and flexibility to customize protocols for unique patients needs with minimal coverage impact

Exam Speed: The BrightSpeed Elite CT Scanner delivers flexible and fast scan speeds by combining 16 slice acquisition, 1.75:1 helical pitch and 0.5 s rotation.Because of these very quick exam speeds, scan speed is no longer what determines the systems throughput of a multi-slice

Qty	Catalog No.	Description

scanner. Other tasks are equally important to determine the real performance of the CT scanner:

- Scan Setup
- Image Reconstruction
- Reformat and 3D Processing
- Networking, Archiving, Filming

Scan Modes: Helical scan mode offers continuous 360 degree scanning with table incrementation and no interscan delay. Axial scan mode allows for up to 16 contiguous axial planes to be acquired simultaneously.

Helical Multi-slice Modes: Helical scanning has been simplified by grouping all critical acquisition parameters within helical pitches optimized for image quality and speed - 0.5625:1, 0.9375:1, 1.375:1, 1.75:1 for 16 slice acquisition. These clinically derived helical scan modes offer a wide range of selections that carefully balance acquisition speed, image thickness, and provide table speeds up to 35 mm per rotation enabling scan speeds that are up to 12 times faster than 4 slice helical scanners.

Prospective Multiple Thickness Reconstruction: For any helical scan modes, the operator can choose to reconstruct images prospectively in any of 7 nominal image thicknesses 0.625, 1.25, 2.5, 3.75, 5, 7.5, and 10 mm. The operator may also prospectively specify additional image sets to be reconstructed. These images can be reconstructed at any of the defined nominal image thicknesses available for a given table speed and scan mode. Direct MPR may also be prospectively specified which quickly enables the move from 2D review to prospective 3D image review of axial, sagittal, coronal and oblique planes automatically.

Helical scan parameters: Scan speeds: 0.5, 0.6, 0.7, 0.8, 0.9 and 1.0 full 360 degree rotational scans

Scan Technique:

- kV: 80, 100, 120, 140 kV
- mA: 10 to 440 mA, 5 mA Increments
- Focal Spot Selection:
  - Small Spot for Up to 24 kW
  - Larger Spot for Greater Than 24 kW
- Max. Helical Scan Time: 120 sec
- Multiple scans can be acquired in one series to produce upto 3000 contiguous helical images
- Minimum Inter-group Delay (IGD): 5 sec
- Scan Fields-of-view:
  - 25 cm for Adult Head
  - 25, 50 cm for Body

Qty	Catalog No.	Description

- 25 cm for Pediatric Head
- 35 cm for cardiac (Small SFOV)

Helical Scan Enhancements: 6 ips (16 optional) reconstruction even while scanning Xtream FX workflow allows, image reconstruction, display, processing and analysis, as well as networking, archival and filming all while scanning.

Anatomical programmer: a ten region anatomical selector allows quick and easy access to user programmable protocols. Separate selector for adult and pediatric exams with greater than 4000 protocol storage available.

- Ten user-defined regions. Each region has reference protocols dispayed with the anatomical selector for fast access to frequently used protocols.
- Protocols include preset scan time, kV, mA, scan mode, image thickness and spacing, table speed, scan FOV, display FOV and center, recon algorithm, and special image acquisition and processing options like DMPR
- Any scan parameters may be edited for each scan or all scans - either before or during an exam. The number of scans may also be easily changed.
- AutoScan: Automates table movement and start of each scan.
- AutoVoice: 3 preset (English) and 17 user defined messages automatically deliver patient breathing instructions, especially useful for multiple helical scanning.
- Trauma Patient: Allows patient scans and image display/analysis without entering patient data before scanning.

Axial Scans: Multi-slice axial acquisitions and short interscan delays significantly reduce potential misregistration between scans by increasing the number of scans in a single breath hold. Reference protocols make the BrightSpeed Elite fast and efficient.

Axial Multi-slice Modes The BrightSpeed Elite CT scanner system acquires axial scans in sets of up to 16 contiguous images in one 360 degree rotation. For each rotation of the gantry the system collects 16 rows of scan data. There are five reconstruction modes available for creating images from the multi-slice axial scan data. Example- 8i Mode:

- Produces 8 Images per Rotation
- Nominal Thickness: 1.25, 2.5 mm Example- 16i Mode:
- Produces 16 Images per Rotation
- Nominal Thickness: 0.625, 1.25 mm

Axial Scan Parameters: Scan Time:

- Same as Helical, plus 2.0, 3.0 and 4.0 sec Full Scans (360 Degree Acquisition)

Scan Techniques:

- Same as Helical Scan Plane Geometry:

Qty	Catalog No.	Description
		• +/- 30 Degree Angulation in .5 mm degree increments • Longitudinal Positioning in 0.01 mm per Slice Increment. Interscan Delay (ISD): • Minimum ISD:Table Moves of 0-10 mm: 1.0 sec • Minimum ISD:Table Moves of > 10 mm: 1.3 sec Intergroup Delay (IGD): • Minimum IGD is the Same as Minimum ISD; Scan-to-scan Cycle: • Minimum Scan-to-scan Cycle of 1.5 sec possible for 0.5 sec Scan Speed with Minimum ISD's. Scan with zero table increment, contiguous image location, or skipped image location. Overlapped axial scans are not possible. Axial Image Reconstruction Reconstruction Algorithms: Soft, Standard, Detail, Bone, Bone Plus, Lung, and Edge and Chest. Axial Image Reconstruction Speed: • 6 (16 optional) image per second Configuration also includes VolumeViewer and ConnectPro on the Operators console. Warranty The published Company warranty in effect on the date of shipment shall apply. The Company reserves the right to make changes. All specifications are subject to change. Regulatory compliance: this product is designed to comply with applicable standards under the Radiation Control for Health and Safety act of 1968. Laser alignment devices contained within this product are appropriately labeled according to requirements of the Center for Devices and Radiological Health. This product is a CE-compliant device and satisfies IEC 60601-1 and applicable collateral and particular standards, including regulations regarding Electro-Magnetic Capability (EMC) and Electro Magnetic Interference (EMI), pursuant to IEC 60601-2:2004. * Trademark of General Electric Company
1	B7877EN	English Keyboard (Black) for CT systems and system labels
1	B7816PS	Standard cable set for H Power systems
1	B7870JC	CT AVA is a Highly Automated Software Post-Processing Package for the CT Operator's Console. It is an Additional Tool for the Analysis of 3D Angiography Data Providing a Number of Display, Measurement and Batch Filming/Archive Features to Study User-Selected Vessels Which Include Stenosis Analysis; Pre/Post Stent Planning Procedures and Directional Vessel Tortuosity Visualization. Clinical Benefits This Package Provides Enhanced Analysis of Vascular Features. • Decreased Operator Dependence: Currently There is Heavy Operator Dependence to Produce True Vessel Cross Sections and Vessel Profiles. This Software Eliminates the Need for the Operator to Manually Identify the Center of the Vessel. Automated Batch Filming

Qty	Catalog No.	Description
		and the Ability to Rotate Around a Vessel, Reduces the Risk of Overlooking Vascular Structures. • Quick AVA - Two click vessel analysis • Measurement Tools: Quantitative Information on User-Selected Vessel Segments, Aids in the Proper Selection of Prosthesis. Distances to Bifurcations or Other Landmarks are Critical for Clinical Decisions. • Increased Value of Reports: A Single Report Provides a Complete 3D Context; Measurements Cross-References and 3D Views, Consistency in the Format and Style of the Reports Also Help Referring Physicians. Productivity Benefits • Decreased Time to First Clinically Relevant Image: Automatic Centerline Detection Provides a Quick 3D Value Understanding of a Selected Vessel. The Anatomy Becomes Visible Once Two Points Identifying the Section of Interest Have Been Defined. • Background Auto-Filming: Replaces Manual Filming. System Requirements • Volume Viewer 3.1 (B7870JA) All Software Purchases are Non-transferable to Other Hardware and are Non-returnable.
1	B7870JD	AutoBone is an exclusive image analysis software package that facilitates segmentation of bony structures from ABDOMINAL and LOWER EXTREMITY CT Angiography data. AutoBone Clinical Benefits: • One-click segmentation of bony structures. • Facilitates vessel feature visualization. Operator Productivity Benefits Include: • Decreased time to first clinically relevant image. • Identification and segmentation of bony structures providing a quick 3D MIP overview of vascular structures. • AutoSelect segmentation tools may be used to refine segmentation by quickly adding or removing data to achieve desired results. • The resulting VR image can be manipulated to view vessels only, or transparent bone can be restored for landmarks. Pre-requisite: Volume Viewer (B7870JA)
1	E8007NG	Medrad Stellant D Dual-Flow Ceiling Mount Injection System with Short Post. Requires E8007NZ Mounting Plate be added to the order....E

Quotation Number: P8-C127382 V 1

Qty	Catalog No.	Description
1	E8007PJ	OCS III MOUNTING PLATE
1	E4502KY	2 Phase 10 KVA Partial UPS for CT Lightspeed and Lightspeed PRO

The 2 Phase 10 KVA Partial System UPS kit has been specifically designed to coordinate with the BrightSpeed, LightSpeed and LightSpeed PRO 16 families of CT scanners. In the event of a power outage, a partial system UPS provides continuous back-up power to the scanner host and control computers, thus assuring no loss of usable scan data. In addition, critical circuits in the gantry and table remain powered which facilitate the safe removal of the patient from the scanner. If power is restored within the battery hold-up time, the operator can continue scanner operations without the need to reboot the system. When longer power outages are anticipated, the UPS provides time for the operator to complete an orderly shutdown of the system software.

FEATURES/BENEFITS

- True double-conversion, online technology provides reliable operation and uninterrupted glitch free power.
- Automatic voltage and frequency selection eases startup, i.e., 50 or 60 Hz compatible
- Integral Static Bypass switch means zero transfer time
- Integral Manual Bypass switch facilitates continued scanner operation while UPS is being serviced
- Single input connect utilized for both UPS input and static switch
- Maintains system electronics and allows critical scanner operations to continue for 10 minutes (typical) after loss of power
- Advanced Battery Management (ABM) software monitors / indicates battery health and doubles battery service life

SPECIFICATIONS

- Dimensions (H x W x D): 32.7" x 12" x 32"
- Weight: 350 lbs.
- Rating: 10 kVA
- Input Voltage Range: 85-144V / ph; 2 Phase
- Output Frequency: 50 or 60 Hz, auto-sensing

COMPATIBILITY

- HiSpeed Advantage-RP, CT/I, Lightspeed QXi, LightSpeed Plus, LightSpeed Ultra, LightSpeed 16, BrightSpeed Systems, LightSpeed Pro 16 and RT Systems, Discovery NM 670 (Nuc)

NOTES:

- Customer is responsible for rigging and arranging for installation with a certified electrician

Qty	Catalog No.	Description
		• ITEM IS NON-RETURNABLE AND NON-REFUNDABLE
1	E4502AB	90 Amp Main Disconnect Panel for CT This 90 amp main disconnect panel for GEHC CT systems provides emergency shut down, undervoltage protection, overcurrent protection, local disconnect for the imaging system. It also reduces installation time and cost by providing a single-point power connection eliminating the need to mount and wire a number of individual components. The standardized design and testing assures high product quality and system reliability, and it is UL and cUL listed for compliance with National Electric Code. Panel can be surface or semi-flush mounted and includes one remote emergency off push button. Customer is responsible for rigging and arranging for installation by a licensed electrician. ITEM IS NON-RETURNABLE and NON NON-REFUNDABLE Warranty Code: Y
1	E8016AZ	Slicker - CT HD750 and VCT w/GT 1700 Table (2 Piece Set) FEATURES/BENEFITS • Two-piece, sealed slicker cushion set has comfort pads enclosed inside the slicker cover and extender cover • Durable, clear PVC plastic cover facilitates faster, more thorough cleanup of blood and fluids • Increase system uptime by protecting table from spills and particulate contaminants • Thermo-sealed seams and flaps prevent contaminate buildup in hard to clean areas COMPATIBILITY • VCT with GT 1700 Table, CT HD750
1	E8016BA	Footswitch Slicker for CT HD750 and VCT Systems The footswitch slicker for CT VCT 2000 and 1700 systems is made of durable, clear PVC plastic that protects the footswitch and facilitates faster, more thorough cleanup of contamination caused by blood and other body fluids. Cover is held securely in place with Velcro...H
1	W0113CT	TiP CT Basic Training 6 Days Onsite 10 Hours TVA TiP Applications CT Basic Training for LightSpeed, LightSpeed VCT and BrightSpeed Systems includes: • 6 onsite days covered in two site • 10 hrs. TVA All elements of the programs are completed within 36 months post installation. Onsite training and TVA are delivered Monday through Friday between 8AM and 5PM. T&L expenses are

Qty	Catalog No.	Description
		included.

Quote Summary:

Total Quote Net Selling Price **$523,520.40**

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)

Equipment Comparison Form

	EXISTING EQUIPMENT	REPLACEMENT EQUIPMENT
Type of Equipment (List Each Component)	Asteion/M/V4F	Brightspeed Elite 16 slice
Manufacturer of Equipment	Toshiba	GE Healthcare
Tesla Rating for MRIs	N/A	N/A
Model Number	See Above	S7916MH
Serial Number	221515	Will provide once received.
Provider's Method of Identifying Equipment	Only CT*	Only CT*
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/VIN #	N/A	N/A
Date of Acquisition of Each Component	4/1/04	2013
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	N/A
Specify if Equipment Was/Is New or Used When Acquired	New	Will be new
Total Capital Cost of Project (Including Construction, etc.)	NA	$1,398,500
Total Cost of Equipment	$474,499	$523,520.40
Fair Market Value of Equipment	NA	$523,520.40
Net Purchase Price of Equipment	NA	$523,520.40
Locations Where Operated	Main Hospital	Main Hospital
Number Days In Use/To be Used in N.C. Per Year	365	365
Percent of Change in Patient Charges (by Procedure)	NA	**
Percent of Change in Per Procedure Operating Expenses (by Procedure)	NA	***
Type of Procedures Currently Performed on Existing Equipment	****	NA
Type of Procedures New Equipment is Capable of Performing	NA	*****

* This CT scanner is the only one at the main hospital and is used for inpatients, emergency center, skilled nursing, and some outpatients.
** Will plan to increase rates by normal budgeted amount – no additional increase will be added due to new equipment.
*** Do not anticipate operating expenses increasing significantly – only by Medical CPI.
****Current equipment can do routine brain, chest, abdomen, pelvis and extremity scans.
*****Replacement equipment can also do pulmonary embolus studies, CT angiography and runoffs and 3D reconstruction.

Exhibit D

PROPOSED CAPITAL COSTS

Project Name: **Pender Memorial Hospital CT Replacement**

Proponent:

A.	**Site Costs**			
(1)	Full purchase price of land		$ N/A	
	Acres _____ Price per Acre	$ N/A		
(2)	Closing costs		$ N/A	
(3)	Site Inspection and Survey		$ N/A	
(4)	Legal fees and subsoil investigation.		$ N/A	
(5)	Site Preparation Costs			
	Soil Borings	$ N/A		
	Clearing-Earthwork	$ N/A		
	Fine Grade For Slab	$ N/A		
	Roads-Paving	$ N/A		
	Concrete Sidewalks	$ 10,000		
	Water and Sewer	$ N/A		
	Footing Excavation	$ 2,500		
	Footing Backfill	$ 500		
	Termite Treatment	$ N/A		
	Other (Specify)	$		
	Sub-Total Site Preparation Costs		$ 13,000	
(6)	Other (Specify)		$	
(7)	**Sub-Total Site Costs**			**$ 13,000**
B.	**Construction Contract**			
(8)	Cost of Materials			
	General Requirements	$ 40,400		
	Concrete/Masonry	$ 14,000		
	Doors & Windows/Finishes	$ 44,000		
	Thermal & Moisture Protection	$ 20,000		
	Equipment/Specialty Items	$ 20,580		
	Mechanical/Electrical	$ 232,000		
	Other (Specify)	$		
	Sub-Total Cost of Materials		$ 370,980	
(9)	Cost of Labor		$ 302,000	
(10)	Other (Specify)		$	
(11)	**Sub-Total Construction Contract**			**$ 698,980**
C.	**Miscellaneous Project Costs**			
(12)	Building Purchase		$ N/A	
(13)	Fixed Equipment Purchase/Lease		$ 523,520	
(14)	Movable Equipment Purchase/Leas		$ N/A	
(15)	Furniture		$ 75,000	
(16)	Landscaping		$ 3,000	
(17)	Consultant Fees			
	Architect and Engineering Fees	$ 80,000		
	Legal Fees	$ 11,000		
	Market Analysis	$ N/A		
	Other (Specify)	$ N/A		
	Sub-Total Consultant Fees		$ 91,000	
(18)	Financing Costs (e.g. Bond, Loan, etc.)		$ 5,000	
(19)	Interest During Construction		$ 15,000	
(20)	Other (Specify)_____		$	
(21)	**Sub-Total Miscellaneous**			$ 686,520
D.	**Total Capital Cost of Project**			**$ 1,398,500**

I certify that, to the best of my knowledge, the above construction related costs of the proposed project named above are complete and correct.

Gordon Terry NC License No. 10348

(Signature of Licensed Architect or Engineer)

I assure that, to the best of my knowledge, the above capital costs for the proposed project are complete and correct and that it is my intent to carry out the proposed project as described.

Ruth G. Glover President 3/26/12

(Proponent - Signature of Officer) (Title of Officer)