



DEPARTMENT OF HEALTH AND HUMAN SERVICES  
DIVISION OF HEALTH SERVICE REGULATION

ROY COOPER  
GOVERNOR

MANDY COHEN, MD, MPH  
SECRETARY

MARK PAYNE  
DIRECTOR

December 21, 2017

Heidi Ambrose  
1144 N. Road Street  
Elizabeth City, North Carolina 27909

**Exempt from Review – Replacement Equipment**

**Record #:** 2460  
**Facility Name:** Sentara Albemarle Regional Medical Center  
**FID #:** 952933  
**Business Name:** Sentara Albemarle Regional Medical Center, LLC  
**Business #:** 54  
**Project Description:** Replace the existing CT scanner at Sentara Kitty Hawk Advanced Imaging Center and move the replacement CT scanner to Sentara Albemarle Regional Medical Center  
**County:** Pasquotank

Dear Ms. Ambrose:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of December 13, 2017, the above referenced proposal is exempt from certificate of need review in accordance with N.C. Gen. Stat. §131E-184(a)(7). Therefore, you may proceed to acquire without a certificate of need the Siemens SOMATOM Definition AS 64-slice CT scanner to replace Siemens SOMATOM Definition AS 64-slice CT scanner. This determination is based on your representations that the existing unit will be sold or otherwise disposed of and will not be used again in the State without first obtaining a certificate of need if one is required.

Moreover, you need to contact the Agency’s Construction, Radiation Protection and Acute and Home Care Licensure and Certification Section to determine if they have any requirements for development of the proposed project.

It should be noted that the 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 office and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Jane Rhoe-Jones  
Project Analyst

Martha J. Frisone  
Chief, Healthcare Planning and  
Certificate of Need Section

cc: Construction Section, DHSR  
Radiation Protection Section, DHSR  
Sharetta Blackwell, Program Assistant, Healthcare Planning, DHSR  
Acute and Home Care Licensure and Certification Section, DHSR

**HEALTHCARE PLANNING AND CERTIFICATE OF NEED SECTION**  
WWW.NCDHHS.GOV

TELEPHONE 919-855-3873

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





Sentara Albemarle Medical Center  
1144 N. Road Street  
Elizabeth City, NC 27909

Tel: 252.335.0531  
www.sentara.com

December 13, 2017

Ms. Martha Frisone, Chief  
Healthcare Planning & Certificate of Need Section  
Division of Health Service Regulation  
2704 Mail Service Center  
Raleigh, NC 27699-2704

**RE: Equipment Replacement and Relocation Exemption for Sentara Albemarle Medical Center**

Dear Ms. Frisone:

Pursuant to N.C.G.S. 131E-184 (a)(7) -Exemptions from Review-of the Certificate of Need Statute, I am writing to inform you of Sentara Albemarle Regional Medical Center, LLC's (SAMC's) plans to replace one existing CT scanner currently located at its diagnostic center, known as Sentara Kitty Hawk, FID # 020173, and relocate it to SAMC's main hospital campus, located at 1144 North Road Street, Elizabeth City, FID # 952933.

Pursuant to N.C.G.S. 131E-184 (a)(7), "the Department shall exempt from certificate of need review a new institutional health service if it receives prior written notice from the entity proposing the new institutional health service, which notice includes an explanation of why the new institutional health service is required, for any of the following: . . . (7) To provide replacement equipment."


N.C.G.S. 131E-176 (22a) states "[r]eplacement equipment' means equipment that costs less than two million dollars (\$2,000,000) and is purchased with the sole purpose of replacing comparable medical equipment currently in use which will be sold or otherwise disposed of when replaced."

The total capital cost of the project is estimated be \$1,566,876, which therefore meets the definition of "replacement equipment" set forth in N.C.G.S. 131E-176(22). Please see Attachment 1 for a proposed capital cost table demonstrating the construction and non-equipment costs, noting that the equipment costs are not included in that attachment. Please see Attachment 2 for equipment quote for the proposed equipment. The table below shows the sum of these costs.

Item	Source	Estimated Cost
Construction Costs and Consulting Fees	Attachment 1	\$817,000
CT Scanner	Attachment 2	\$749,876
<b>Total</b>		<b>\$1,566,876</b>

The replacement equipment will be purchased for the sole purpose of replacing comparable equipment currently in use. "Comparable medical equipment" is defined under 10A NCAC 14C .0303(c) as "equipment which is functionally similar and which is used for the same diagnostic and treatment purposes." Further, replacement equipment is considered comparable to the existing equipment under the following circumstances as outlined under 10A NCAC 14C .0303(d):



- 
1. *it has the same technology as the equipment currently in use, although it may possess expanded capabilities due to technological improvements; and*
  2. *it is functionally similar and is used for the same diagnostic or treatment purposes as the equipment currently in use and is not used to provide a new health service; and*
  3. *the acquisition of the equipment does not result in more than a 10% increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.*

As discussed below, SAMC's proposed new replacement equipment is considered comparable pursuant to 10 NCAC 14C .0303 for the following reasons:

1. The proposed replacement equipment will be used specifically for the provision of performing CT scans, as is the existing equipment. The replacement equipment will perform all procedures currently performed on the existing equipment. Although the replacement equipment possesses some expanded capabilities due to technological improvements, the replacement equipment will perform the same general range of services. Essentially the replacement equipment will have the same functionality as the equipment currently in use.
2. The function of, and services provided by the replacement equipment, will essentially be identical to the existing equipment. SAMC intends to use the replacement equipment for the same procedures which are currently available on the existing equipment. No new health service will be provided as a result of the replacement. Please refer to Attachment 3 for an equipment comparison table demonstrating that the proposed replacement equipment is comparable to the equipment currently in use.
3. The acquisition and operation of the replacement equipment will not result in an increase of more than 10 percent in patient charges or the operational cost per patient of providing the service within the first twelve months after the replacement equipment is acquired.

As noted on Attachment 3, the equipment comparison table, regarding the costs for the original equipment, SAMC has provided the historical costs associated with relocating the existing CT scanner to its current location at Sentara Kitty Hawk, including the value of the equipment at that time. As background information, the equipment was originally located at SAMC (then known as Albemarle Hospital) in 2009, when the hospital was under different management. In 2015, the scanner was relocated to its current location at SKH. Since SAMC was not part of Sentara Healthcare in 2009, the documents identifying the specific costs related to the original acquisition of the CT scanner are not available; however, the costs shown in Attachment 3 are the costs incurred to relocate the scanner in 2015, when the facilities were part of Sentara. In any case, it is known that the equipment was originally purchased as new in 2009, as discussed below, which is the relevant issue to meeting the definition of "replacement equipment." As part of this replacement project, the equipment would be replaced and relocated back to SAMC, where it was originally located.

It is important to note that 10 NCAC 14C .0303 also defines equipment that is "not comparable" under subsection (e). Replacement equipment is not considered comparable if:

1. *the replacement equipment is new or reconditioned, the existing equipment was purchased second-hand, and the replacement equipment is purchased less than three years after the acquisition of the existing equipment; or*
2. *the replacement equipment is new, the existing equipment was reconditioned when purchased, and the replacement equipment is purchased less than three years after the acquisition of the existing equipment; or*

3. *the replacement equipment is capable of performing procedures that could result in the provision of a new health service or type of procedure that has not been provided with the existing equipment; or*
4. *the replacement equipment is purchased and the existing equipment is leased, unless the lease is a capital lease; or*
5. *the replacement equipment is a dedicated PET scanner and the existing equipment is:*
  - A. *a gamma camera with coincidence capability; or*
  - B. *nuclear medicine equipment that was designed, built, or modified to detect only the single photon emitted from nuclear events other than positron annihilation.*

The replacement equipment will be purchased in new condition as was the existing equipment being replaced. As noted above, although the replacement equipment possesses some expanded capabilities due to technological improvements, the replacement equipment will perform the same general range of services as the existing unit. SAMC owns the existing equipment and will own the replacement equipment. Therefore, the replacement equipment does not meet the definition of "not comparable." Further, the existing equipment is currently in operation, and, upon replacement, SAMC will dispose of the equipment by having it removed and returned to the vendor, as documented in the letter included in Attachment 4.

The need for the replacement and relocation is based on two factors. First, SAMC intends to close Sentara Kitty Hawk later this month, at which time it will cease offering ambulatory surgical services as well as diagnostic imaging services, including CT scans. Thus, the equipment needs to be relocated to continue offering services. Second, the existing equipment is outdated and needs to be replaced as part of the relocation. As the Agency is aware, SAMC has filed multiple requests for temporary replacement equipment using Sentara's mobile CT scanner. The use of the mobile CT scanner has been driven by downtime on SAMC's sole existing CT scanner, which as shown on SAMC's 2017 Hospital License Renewal Application, performed over 25,000 HECT scans in FY 2016. The replacement of the existing CT scanner at Sentara Kitty Hawk and its relocation to SAMC will improve the availability of CT services at SAMC while minimizing the need for the use of Sentara's temporary mobile CT service. The replacement and relocation will enable SAMC to enhance its CT services, which are particularly valuable for emergency and inpatients, as well as outpatients, without acquiring additional equipment that it does not already own and operate.

Please let me know if I can provide any additional information to expedite this exemption notification.

Sincerely,



Heidi Ambrose  
Director, Radiology  
Sentara Albemarle Medical Center  
Attachments

## Attachment 1

**PROPOSED CAPITAL COSTS**

**Project Name:** Sentara Albemarle Medical Center Replacement CT Scanner

**Proponent:** Sentara Albemarle Regional Medical Center, LLC

**A. Site Costs**

- (1) Full purchase price of land \$ \_\_\_\_\_  
Acres \_\_\_\_\_ Price per Acre \$ \_\_\_\_\_
- (2) Closing costs \$ \_\_\_\_\_
- (3) Site Inspection and Survey \$ \_\_\_\_\_
- (4) Legal fees and subsoil investigation. \$ \_\_\_\_\_
- (5) Site Preparation Costs
  - Soil Borings \$ \_\_\_\_\_
  - Clearing-Earthwork \$ \_\_\_\_\_
  - Fine Grade For Slab \$ \_\_\_\_\_
  - Roads-Paving \$ \_\_\_\_\_
  - Concrete Sidewalks \$ \_\_\_\_\_
  - Water and Sewer \$ \_\_\_\_\_
  - Footing Excavation \$ \_\_\_\_\_
  - Footing Backfill \$ \_\_\_\_\_
  - Termite Treatment \$ \_\_\_\_\_
  - Other (Specify) \$ \_\_\_\_\_
  - Sub-Total Site Preparation Costs \$ \_\_\_\_\_
- (6) Other (Specify) \$ \_\_\_\_\_
- (7) **Sub-Total Site Costs** \$ \_\_\_\_\_

**B. Construction Contract**

- (8) Cost of Materials
  - General Requirements \$ \_\_\_\_\_
  - Concrete/Masonry \$ \_\_\_\_\_
  - Woods/Doors & Windows/Finishes \$ \_\_\_\_\_
  - Thermal & Moisture Protection \$ \_\_\_\_\_
  - Equipment/Specialty Items \$ \_\_\_\_\_
  - Mechanical/Electrical \$ \_\_\_\_\_
  - Other (Specify) \$ \_\_\_\_\_
  - Sub-Total Cost of Materials \$ \_\_\_\_\_
- (9) Cost of Labor \$ \_\_\_\_\_
- (10) Other (Specify) \$ \_\_\_\_\_
- (11) **Sub-Total Construction Contract** \$ 748,000

**C. Miscellaneous Project Costs**

- (12) Building Purchase \$ \_\_\_\_\_
- (13) Fixed Equipment Purchase/Lease \$ \_\_\_\_\_
- (14) Movable Equipment Purchase/Lease \$ \_\_\_\_\_
- (15) Furniture \$ \_\_\_\_\_
- (16) Landscaping \$ \_\_\_\_\_
- (17) Consultant Fees
  - Architect and Engineering Fees \$ 69,000 \_\_\_\_\_

	Legal Fees	\$ _____	
	Market Analysis	\$ _____	
	Other (Specify)	\$ _____	
	<b>Sub-Total Consultant Fees</b>		<b>\$ 69,000</b> _____
(18)	Financing Costs (e.g. Bond, Loan, etc.)	\$ _____	
(19)	Interest During Construction	\$ _____	
(20)	Other (Specify) _____	\$ _____	
(21)	<b>Sub-Total Miscellaneous</b>		<b>\$ _____</b>
(22)	<b>Total Capital Cost of Project (Sum A-C above)</b>		<b>\$ 817,000</b>

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



\_\_\_\_\_ Date Certified: 12-12-17

(Signature of Licensed Architect or Engineer)

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



\_\_\_\_\_ Date Signed: 12/13/17

(Proponent - Signature of Officer)

(Title of Officer)

## Attachment 2





Siemens Medical Solutions USA, Inc.  
40 Liberty Boulevard, Malvern, PA 19355  
Fax: (866) 309-6967

**SIEMENS REPRESENTATIVE**  
Anthony Quaranta - (410) 960-2592

Customer Number: 0000004323

Date: 11/16/2016

**SENTARA ALBEMARLE MEDICAL CENTER**  
1144 N. ROAD STREET  
ELIZABETH CITY, NC 27909-3386

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.

<u>Table of Contents</u>	<u>Page</u>
SOMATOM Definition AS - New Scalable Configuration (Quote Nr. 1-1K5SMS Rev. 0) .....	3
General Terms and Conditions.....	10
Warranty Information.....	18

**Contract Total: \$749,876**  
*(total does not include any Optional or Alternate components which may be selected)*

Proposal valid until 12/30/2016

Estimated Delivery Date: 07/2017

Estimated delivery date is subject to change based upon factory lead times, acceptance date of this quote, customer site readiness, and other factors. A Siemens representative will contact you regarding the final delivery date.

The Sentara Healthcare/Siemens Master Procurement Agreement #20104449 applies.

This offer is only valid if a firm, non-contingent order is placed with Siemens and a signed POS contract must accompany the equipment order.

This Quotation is specific to SENTARA Albemarle, and contains information which is confidential and proprietary to Siemens, including but not limited to discounts and pricing. The Customer may not distribute or disclose this quotation or any portion hereof to, or discuss any of the information (including pricing) contained herein with, any other customer or consultant, buying group, or other third party.

Accepted and Agreed to by:

**Siemens Medical Solutions USA, Inc.**

**SENTARA ALBEMARLE MEDICAL CENTER**

By (sign): \_\_\_\_\_  
Name: Anthony Quaranta  
Title: Account Executive  
Date: \_\_\_\_\_

By (sign): \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

***By signing below, signor certifies that no modifications or additions have been made to the Quotation.***



**Siemens Medical Solutions USA, Inc.**  
40 Liberty Boulevard, Malvern, PA 19355  
Fax: (866) 309-6967

**SIEMENS REPRESENTATIVE**  
Anthony Quaranta - (410) 960-2592

*Any such modifications or additions will be void.*

By (sign): \_\_\_\_\_

Siemens Medical Solutions USA, Inc.  
 40 Liberty Boulevard, Malvern, PA 19355  
 Fax: (866) 309-6967

**SIEMENS REPRESENTATIVE**  
 Anthony Quaranta - (410) 960-2592

**Quote Nr:** 1-IK5SMS Rev. 0

**Terms of Payment:** 00% Down, 80% Delivery, 20% Installation  
 Free On Board: Destination

**Purchasing Agreement:** VIZIENT SUPPLY LLC

VIZIENT SUPPLY LLC terms and conditions apply to Quote Nr 1-IK5SMS

## SOMATOM Definition AS - New Scalable Configuration

All items listed below are included for this system:

Qty	Part No.	Item Description
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1	14444263	<b>SOMATOM Definition AS (64slice)</b>
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The SOMATOM Definition AS (64-slice configuration) is Siemens' state-of-the-art single source CT that provides the possibility to maximize clinical outcome and to minimize radiation dose. The unique STRATON X-ray source utilizes an electron beam that is accurately and rapidly deflected, creating two precise focal spots alternating 4,608 times per second. This doubles the X-ray projections reaching each detector element. The two overlapping projections result in an oversampling in z-direction. The resulting measurements interleave half a detector slice width, doubling the scan information without a corresponding increase in dose. Siemens' proprietary UFC (Ultra Fast Ceramic) detectors and the corresponding 64-slice detector electronics enable a virtually simultaneous readout of two projections for each detector element - resulting in a full 64-slice acquisition. This sampling scheme is identical to that of a 64 x 0.3 mm allowing for reconstruction of 192 slices using 0.1 mm reconstruction interval increment. The fast rotation time of 0.33 seconds (0.3 s optional) delivers excellent temporal resolution. The SOMATOM Definition AS is set to raise the standard of patient-centric productivity with FAST CARE Technology. With Siemens' FAST - Fully Assisting Scanner Technologies - the SOMATOM Definition AS can simplify typically time consuming and complex procedures during a CT examination: the scanning process gets more intuitive and the results become more reproducible. The CARE technology includes many unique features like CARE kV that sets the ideal voltage for every examination and adjusts the respective scan parameters or industry's first Adaptive Dose Shield that prevents clinically irrelevant over radiation in spiral scanning.

1	14420766	<b>SAFIRE #AWP</b>
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The Sinogram Affirmed Iterative Reconstruction (SAFIRE) enhances spatial resolution, reduces image noise and increases sharpness by introducing multiple iteration steps in the reconstruction process. The resulting superior image quality enables to reduce dose by up to 60%\*.

\*In clinical practice, the use of SAFIRE may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task. The following test method was used to determine a 54 to 60% dose reduction when using the SAFIRE reconstruction software. Noise, CT numbers, homogeneity, low-contrast resolution and high contrast resolution were assessed in a Gammex 438 phantom. Low dose data reconstructed with SAFIRE showed the same image quality compared to full dose data based on this test. Data on file.

1	14444243	<b>iMAR #AWP</b>
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The iMAR metal artifact reduction algorithm combines three successful approaches (beam hardening correction, normalized sinogram inpainting and frequency split). This allows to reduce metal artifacts caused by metal implants such as coils, metal screws and plates, dental fillings or implants.

iMAR is compatible with extended FoV, the extended CT scale as well as the newest dose reduction feature.

Along with the new algorithm comes the simple user interface of iMAR enabling easy reconstruction of clinical images with reduced metal artifacts.

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 40 Liberty Boulevard, Malvern, PA 19355  
 Fax: (866) 309-6967

**SIEMENS REPRESENTATIVE**  
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Qty	Part No.	Item Description
1	14408037	<p><b>HeartView CT</b></p> <p>Scanning technique and program for ECG controlled data acquisition and image reconstruction with SOMATOM. The package comprises:            HeartView CT option on the syngo Acquisition Workplace console for the ECG-controlled acquisition and reconstruction of artifactfree images of the heart.            The ECG signal is supplied by an ECG device integrated in the gantry.            The use of the software of this option is restricted to a single system unit.</p>
1	14408038	<p><b>Cardio BestPhase Plus #AWP</b></p> <p>Cardio BestPhase, a software dedicated to automatically detect the optimal phase for motion-less coronary visualization. The phase is defined in either end-systole, end-diastole or both timepoints and automatically reconstructed.</p>
1	14408215	<p><b>Physiological Monitoring Module</b></p> <p>The Physiological Measurement Module allows to connect a 3 Channel ECG cable for ECG controlled cardiac acquisition.</p>
1	14408040	<p><b>ECG cable IEC2 #D</b></p> <p>ECG cable, IEC2 (AHA/US color coding).</p>
1	14420773	<p><b>FAST CARE Platform</b></p> <p>Siemens' unique FAST CARE platform is set to raise the standard of patient-centric productivity. Utilizing FAST - Fully Assisting Scanner Technologies -, typically time-consuming and complex procedures during the scan process are extremely simplified and automated, not only improving workflow efficiency, but optimizing the overall clinical outcome by creating reproducible results, making diagnosis more reliable and reducing patient burden through streamlined examinations. Siemens' desire for as little radiation exposure as possible lies at the heart of the CARE - Combined Applications to Reduce Exposure - research and development philosophy offering a unique portfolio of dose saving features, many of them being introduced as industry's first.</p>
1	14420771	<p><b>CARE Child</b></p> <p>Dedicated pediatric CT imaging, including 70 kV scan modes and specific CARE Dose4D curves and protocols</p>
1	14433993	<p><b>FAST Planning #AWP</b></p> <p>Direct, organ-based setting of scan and recon ranges for a faster and more standardized workflow</p>
1	14419142	<p><b>Workstream 4D #AWP</b></p> <p>WorkStream 4D further enhances the already superb workflow of the SOMATOM CT system by offering direct generation of sagittal, coronal, oblique or double-oblique reconstructed images directly from CT raw data as part of the CT protocol.</p>
1	14419144	<p><b>DICOM SR Viewer #AWP</b></p> <p>The DICOM SR (structured report) Viewer allows to read reports created with specific applications (e.g. Circulation, Lung Care, Calcium Scoring and Onco) without the application itself being on the respective computer.</p>
1	14408111	<p><b>Extended Field of View #AWP</b></p> <p>Software program with special reconstruction algorithms that allow for visualization of objects using a FOV up to 78 cm (non-diagnostic image quality). License to use software on a single unit.</p>
1	14408152	<p><b>UHR</b></p> <p>UHR mode delivers Ultra High resolution in plane of up to 24lp/cm for high defined imaging of small structures such as inner ear, joints or fractures of the bone</p>
1	14420824	<p><b>Standard IRS</b></p> <p>Reconstruction computer for the preprocessing and reconstruction of the CT raw data. The reconstruction computer contains a cluster of 2 high-performance GPU boards performing the preprocessing and reconstruction of the CT data. The raw data memory is 900 GByte. The peak recon performance is 40 frames/sec.</p>
1	14408032	<p><b>Rear cover incl. gantry panels</b></p> <p>Rear Cover including gantry control panels with control functionality from the backside.</p>

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**SIEMENS REPRESENTATIVE**  
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Qty	Part No.	Item Description
1	14420777	<p><b>Patient Table 2000 mm</b></p> <p>Patient table to support up to 200cm scan range. Motor-driven table height adjustment from min. 49 cm to max. 92 cm, longitudinal movement of the tabletop 200 cm in increments of 0.5 mm, positioning accuracy +/- 0.25 mm from any direction. Horizontal scan range 200 cm. Table height can be controlled alternatively by means of foot switch (2 each on both sides of the patient table). In the case of emergency stop or power failure, the tabletop can also be moved manually in horizontal direction. Max. table load: 227 kg/500 lbs, Table feed speed: 2-200 mm/s, Distance between gantry front and table base 40 cm.</p> <p>Positioning aids: Mattress protector, head-arm support (inclusive cushion), and non-tiltable head holders with positioning cushion set, patient restraining system for head fixation, restraining-strap set with body fixation strap that can be directly connected to the patient table top, headrest, table extension, knee-leg support.</p>
1	14420929	<p><b>Mattress for Patient Table</b></p> <p>For the comfortable positioning of the patient on the CT table.</p>
1	14408101	<p><b>Computer Desk #AWP</b></p> <p>New CT desk to accommodate the control components and color monitor.          Width: 1200 mm,          Depth: 800 mm,          Height: 720 mm.</p>
1	14408102	<p><b>Computer Cabinet #AWP</b></p> <p>New cabinet to accommodate the computer system and UPS. Matched to the design of the control console table.          Width: 800 mm,          Depth: 800 mm,          Height: 720 mm</p>
1	14408023	<p><b>Cooling System Water</b></p> <p>Water heat exchanger for the dissipation of heat loss generated in the gantry to an environmentally friendly cooling water circulation system.          This optimizes system availability independently of the cooling water flow rate and temperature.          System operation temperature 4 - 16 degrees C and 500 - 2500 l/h flow rate.</p>
1	14408027	<p><b>Cooling System Water/Air #split</b></p> <p>Water-to-air heat exchanger for the dissipation (to the air outside) of heat, generated in the gantry.</p>
1	14410140	<p><b>Trafo for Cooling system Water/Air</b></p> <p>The Trafo powers the Cooling System Water/Air</p>
1	14410248	<p><b>Service Switch</b></p> <p>Service switch to shut off the outdoor cooling unit for maintenance or in case of emergency</p>
1	CT_INST_RIED EL_01	<p><b>Riedel Chiller Start-up by SBT</b></p>
1	CT_RECON_19 2	<p><b>AS-64 slice configuration z-Sharp Tech.</b></p> <p>The unique STRATON X-ray source utilizes an electron beam that is accurately and rapidly deflected, creating two precise focal spots alternating 4,608 times per second. This doubles the X-ray projections reaching each detector element. The two overlapping projections result in an oversampling in z-direction. The resulting measurements interleave half a detector slice width, doubling the scan information without a corresponding increase in dose. Siemens' proprietary UFC (Ultra Fast Ceramic) detectors and the corresponding 64-slice detector electronics enable a virtually simultaneous readout of two projections for each detector element - resulting in a full 64-slice acquisition. This sampling scheme is identical to that of a 64 x 0.3 mm allowing for reconstruction of 192 slices using 0.1 mm reconstruction interval increment. z-Sharp Technology, utilizing the STRATON X-ray sources and the UFC detectors, provides scan speed independent visualization of 0.33 mm isotropic voxels and a corresponding elimination of spiral artifacts in the daily clinical routine at any position within the scan field.</p>
1	ADAPT_DOSE _SHIELD	<p><b>Adaptive Dose Shield</b></p> <p>Adaptive Dose Shield for spiral acquisition to eliminate pre- and post-spiral over-radiation.</p>
1	SURE_VIEW	<p><b>SureView</b></p> <p>Provides exceptional image quality at any pitch setting, enabling you to scan faster because you can scan at any pitch without degrading image quality</p>



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 40 Liberty Boulevard, Malvern, PA 19355  
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**SIEMENS REPRESENTATIVE**  
 Anthony Quaranta - (410) 960-2592

Qty	Part No.	Item Description
1	FAST_ADJUST	<p><b>FAST Adjust</b></p> <p>FAST Adjust: assists the user to handle system settings in a fast and easy way by automatically solving of conflicts within user defined limits by one single click on the FAST Adjust button. The limits for scan time and tube current per scan are defined via the Scan Protocol Assistant. FAST Adjust offers an undo functionality to return to previously set values.</p>
1	FAST_SCAN_ASSIST	<p><b>FAST Scan Assistant</b></p> <p>FAST Scan Assistant: An intuitive user interface for solving conflicts by changing the scan time, resp. the pitch and/or the maximum tube current manually.</p>
1	CARE_DOSE4D	<p><b>CARE Dose4D</b></p> <p>CARE Dose4D delivers the highest possible image quality at the lowest possible dose for patients - maximum detail, minimum dose. Adaptive dose modulation for up to 60% dose reduction</p>
1	CARE_KV	<p><b>CARE kV</b></p> <p>CARE kV: First automated, organ-sensitive voltage setting to improve image quality and contrast-to-noise-ratio while optimizing dose and potentially reducing it by up to 60%.</p>
1	CT_LUNGIMAGINGAS64	<p><b>Lung Imaging</b></p> <p>For well over a decade, CT has been recognized and used as the standard of care for lung nodule detection and sizing. This is due to CT's spatial resolution, geometric accuracy, and ability to create various reconstructions and 3D views. The high contrast environment in the chest between the lungs and the nodules makes for a relatively easy detection task for clinicians using CT images. Recent advances in CT technology have allowed these scans to be effectively performed at lower doses, higher resolutions, and faster scan times.</p> <p>The SOMATOM Definition AS64 CT is indicated for use in low dose lung cancer screening for high risk populations*. The AS64 is delivered with two specific scan protocols to provide low dose lung cancer screening exams at approximately 1.5 mGy CTDI for a standard size adult. These default protocols utilize Siemens proprietary dose reducing features such as CARE Dose4D(tm), automatic exposure control technology that modulates and adapts dose for every patient, for high image quality at low dose.</p> <p>*As defined by professional medical societies.</p>
1	CARE_PROFILE	<p><b>CARE Profile</b></p> <p>CARE Profile: Visualization of the dose distribution along the topogram prior to the scan</p>
1	CARE_DASHBOARD	<p><b>CARE Dashboard</b></p> <p>Visualization of activated dose reduction features and technologies for each scan range of an examination to analyze and manage the dose to be applied in the scan</p>
1	UFC_DETECTOR	<p><b>UFC Detector</b></p> <p>Ultra Fast Ceramics (UFC) technology is a unique type of scintillation technology material that quickly and efficiently transforms radiation from the X-ray tube into light signals. Its superb overall quantum efficiency and unique short afterglow enable time-critical X-ray detection at low doses and extremely fast data collection.</p>
1	ACCESS_PROTECT	<p><b>Access Protection</b></p> <p>Scan Protocols are password protected allowing only authorized staff members to access and permanently change protocols</p>
1	DOSE_ALERT	<p><b>Dose Alert</b></p> <p>Dose Alert: As requested by the new release of the standard IEC 60601 3rd edition, the SOMATOM Definition automatically adds up CTDIvol and DLP depending on z-position (scan axis). The Dose Alert window appears, if either of these cumulative values exceeds a user-defined threshold.</p>
1	DOSE_NOTIFICATION	<p><b>Dose Notification</b></p> <p>Dose Notification: As requested by the new release of the standard IEC 60601 3rd edition, the SOMATOM Definition AS provides the ability to set dose reference values (CTDIvol, DLP) for each scan range. If these reference values are exceeded the Dose Notification window informs the user.</p>
1	DICOM_SR	<p><b>DICOM SR Dose Reports</b></p> <p>DICOM structured file allows for the extraction of dose values (CTDIvol, DLP)</p>

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 40 Liberty Boulevard, Malvern, PA 19355  
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Qty	Part No.	Item Description
1	DOSELOGS	<b>DoseLogs</b> Whenever a limit exceeds of the set up reference dose levels (Dose Notification and Dose Alert) automatically a report is created on the system
1	NEMA_XR-29	<b>NEMA_XR-29 Standard</b> This system is in compliance with NEMA XR-29 Standard Attributes on CT Equipment Related to Dose Optimization and Management, also known as Smart Dose.
1	CT_UPS_DEF_AS	<b>Standard UPS for Definition AS</b> The standard partial system uninterruptible power system (UPS) is built directly into the power distribution cabinet (PDC) and supports the critical circuits for table and gantry electronics, console computer, image reconstruction system, and the internal Ethernet switch (to ensure connectivity). This enables safe removal of patient if outage occurs during scanning.  The UPS allows for a safe shutdown of the CT scanner in the event of power interruption. The UPS provides 5-7 minutes of power, during which the user is prompted and guided through the process to perform a safe shutdown of the system. This safe shutdown ensures that no data is lost.
1	CT_PM	<b>CT Project Management</b> 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.
1	CT_BUDG_AD DL_RIG	<b>Budgetary Add'l/Out of Scope Rigging @ \$5,000</b>
1	CT_STD_RIG_I NST	<b>CT Standard Rigging and Installation</b> This quotation includes standard rigging and installation of your CT new system.  Standard rigging into a room with reasonable access, as determined by Siemens Project Management, 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 special rigging requirements (Crane, stairs, etc.) 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.
1	4SPAS014 PSPD250480Y	<b>Low Contrast CT Phantom &amp; Holder</b>
1	3K	<b>Surge Protective Device (SPD)</b>
1	CTSDEF01	<b>CT Slicker</b> Thermoseal seams and flaps deflect fluids, reducing contaminant penetration into the cushion and table. Contaminants are retained on the tabletop or shunted to the floor. Cleanup is faster, more thorough, and contaminant build-up is reduced. Built using heavy, clear, micro matte vinyl, and top grade hook and loop fastening strips (Velcro) to better fit the specified table. Custom vinyl resists tears and minimizes radiologic interference. Latex free. Set includes CT Skirts. Shipped with main cover, a catheter bag holder, and 3 restraining belts unless otherwise noted. Includes warranty from RADSCAN Medical.
1	CT_ADD_24	<b>Additional onsite training 24 hours</b> Up to (24) 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 if applicable. 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.
1	SY_PR_TEAM PLAY	<b>teampay Welcome &amp; Registration Package</b> teampay is a cloud-based network that brings together your imaging modality users, the systems' dose and



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**Qty Part No. Item Description**

utilization data, and the users' expertise to help you improve the delivery of care to your patients. Basic features are provided free of charge. Premium features (benchmarking, non-Siemens devices) are provided on a trial basis for three months at no charge, and may be used thereafter on a subscription fee basis.

To register: <http://teampay.siemens.com/#/institutionRegistration/1>

1 CT\_ADD\_32

**Additional onsite training 32 hours**

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 if applicable. 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.

**System Total: \$749,876**

## Attachment 3

**EQUIPMENT COMPARISON**

	<b>EXISTING EQUIPMENT</b>	<b>REPLACEMENT EQUIPMENT</b>
Type of Equipment (List Each Component)	CT Scanner	CT Scanner
Manufacturer of Equipment	Siemens	Siemens
Tesla Rating for MRIs	NA	NA
Model Number	Somatom Definition AS 64-slice	Somatom Definition AS 64
Serial Number	81009155370	TBD
Provider's Method of Identifying Equipment	System review for patient safety and clinical platform	System review for patient safety and clinical platform
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	NA	NA
Mobile Tractor Serial Number/VIN #	NA	NA
Date of Acquisition of Each Component	5/7/2009	TBD
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Will Hold Title
Specify if Equipment Was/Is New or Used When Acquired	New – Transferred as Used	New
Total Capital Cost of Project (Including Construction, etc.)	\$381,055*	\$1,566,876
Total Cost of Equipment	\$145,000*	\$749,876
Fair Market Value of Equipment	\$145,000*	\$749,876
Net Purchase Price of Equipment	\$145,000*	\$749,876
Locations Where Operated	Sentara Albemarle Medical Center, then Sentara Kitty Hawk	Sentara Albemarle Medical Center
Number Days In Use/To be Used in N.C. Per Year	365	365
Percent of Change in Patient Charges (by Procedure)	<10%	<10%
Percent of Change in Per Procedure Operating Expenses (by Procedure)	<10%	<10%
Type of Procedures Currently Performed on Existing Equipment	CT scans	NA
Type of Procedures New Equipment is Capable of Performing	NA	CT scans

\*Indicates cost to transfer from Sentara Albemarle Medical Center to Sentara Kitty Hawk in 2015; see exemption letter for additional clarification.



## Attachment 4



Sentara Albemarle Medical Center  
1144 N. Road Street  
Elizabeth City, NC 27909

Tel: 252.335.0531  
[www.sentara.com](http://www.sentara.com)

December 13, 2017

Ms. Martha Frisone, Chief  
Healthcare Planning & Certificate of Need Section  
Division of Health Service Regulation  
2704 Mail Service Center  
Raleigh, NC 27699-2704

Dear Ms. Frisone:

Sentara Albemarle Regional Medical Center, LLC (SAMC) currently owns and operates a Siemens Somatom Definition AS 64-slice CT Scanner (SN 81009155370) that, apart from maintenance or other downtime, has been in operation continuously at Sentara Kitty Hawk since it was originally installed. The equipment is still in operation today.

SAMC proposes to replace the existing equipment and relocate it to SAMC's main hospital campus in Elizabeth City. SAMC will dispose of the existing equipment by having it removed from Sentara Kitty Hawk and returned to the vendor. SAMC has no intention to use the existing equipment after its replacement.

Please contact me with any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Coleen Santa Ana', written over a horizontal line.

Coleen Santa Ana, MHA  
President  
Sentara Albemarle Medical Center