



Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Request for Quotation

Proc Folder: 28107

Doc Description: ADDENDUM NO. 1 COMPLETE INSTALLATION OF A CCTV SYSTEM,

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2014-10-24	2014-10-30 13:30:00	CRFQ 0506 WSH1500000003	2

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Burdette Electric, Inc.  
6444 Sissonville Dr  
Sissonville, WV 25320  
304 984-0123

WV CONTRACTOR  
WV034524

10/30/14 01:03:37PM  
West Virginia Purchasing Division

FOR INFORMATION CONTACT THE BUYER

Robert Kilpatrick

(304) 558-0067

robert.p.kilpatrick@wv.gov

Signature X

FEIN #

54-2076336

DATE 10-29-14

All offers subject to all terms and conditions contained in this solicitation

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-269-1210		PROCUREMENT OFFICER - 304-269-1210	
HEALTH AND HUMAN RESOURCES		HEALTH AND HUMAN RESOURCES	
WILLIAM R SHARPE JR HOSPITAL		WILLIAM R SHARPE JR HOSPITAL	
936 SHARPE HOSPITAL RD		936 SHARPE HOSPITAL RD	
WESTON	WV26452	WESTON	WV 26452
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Purchase of parts, installation, and warranty of a CCTV Syst				\$186,250

Comm Code	Manufacturer	Specification	Model #
46171610	HIKVISION	see attached cut sheets	

**Extended Description :**

4.1.1 - 117 ea. Indoor Internet Protocol (IP) Cameras; 4.1.2 - 12 ea. Outdoor Internet Protocol (IP) Cameras; 4.1.3 - 2 ea. Network Video Recorder(s) NVRs; 4.1.4 - 11 ea. Desktop Computer with Monitor Stations; 4.1.5 - sufficient Network Switches to support the appropriate length of cabling; 4.1.6 - 1 lump sum Miscellaneous Materials for providing and installing CCTV to operational status; 4.1.7 All Labor necessary to complete project; 4.1.8 1 ea. One year Warranty on all Materials and Labor for entire CCTV System.

WSH1500000003	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM NO. 1 COMPLETE INSTAL LATION OF A CCTV SYSTEM,	<b>Page 3</b> <b>of 3</b>
---------------	--------------------------------	---	------------------------------

#### ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

STATE OF WEST VIRGINIA  
Purchasing Division**PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

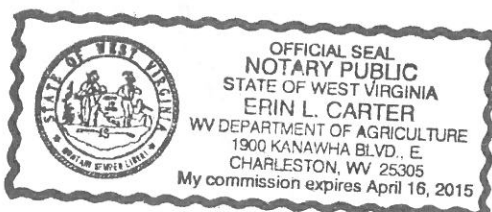
**WITNESS THE FOLLOWING SIGNATURE:**Vendor's Name: Burdette Electric Inc.Authorized Signature: [Signature]Date: 10-29-14State of WVCounty of Kanawha, to-wit:Taken, subscribed, and sworn to before me this 29<sup>th</sup> day of October, 2014My Commission expires April 15, 2015

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 07/01/2012)







State of West Virginia  
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT  
West Virginia Code §21-1D-5

STATE OF WEST VIRGINIA,

COUNTY OF KANAWHA, TO-WIT:

I, Paul R Burdette, after being first duly sworn, depose and state as follows:

1. I am an employee of BURDETTE ELECTRIC, INC.; and,  
(Company Name)
2. I do hereby attest that BURDETTE ELECTRIC, INC.  
(Company Name)

maintains a valid written drug free workplace policy and that such policy is in compliance with **West Virginia Code §21-1D**.

The above statements are sworn to under the penalty of perjury.

By:

Title:

Company Name:

Date:

PAUL R BURDETTE

President

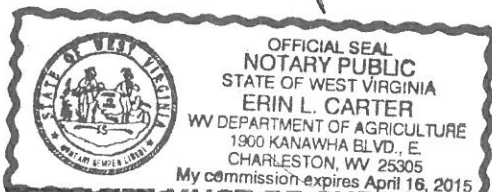
Burdette Electric Inc.

10-29-14

Taken, subscribed and sworn to before me this 29<sup>th</sup> day of October 2014

By Commission expires April 16, 2015

(Seal)



Erin L Carter  
(Notary Public)

**THIS AFFIDAVIT MUST BE SUBMITTED WITH THE BID IN ORDER TO COMPLY WITH WV CODE PROVISIONS. FAILURE TO INCLUDE THE AFFIDAVIT WITH THE BID SHALL RESULT IN DISQUALIFICATION OF THE BID.**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, Burdette Electric, Inc.  
of Sissonville, WV, as Principal, and The Cincinnati Insurance Company  
of Cincinnati, OH, a corporation organized and existing under the laws of the State of  
OH with its principal office in the City of Cincinnati, as Surety, are held and firmly bound unto the State  
of West Virginia, as Obligee, in the penal sum of Five Percent of Amount Bid (\$ 5%) for the payment of which,  
well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the  
Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for  
CCTV System - William Sharpe Hospital - Weston, WV - According to Plans & Specifications

## NOW THEREFORE,

(a) If said bid shall be rejected, or

(b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached  
hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the  
agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in full  
force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event,  
exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no  
way impaired or affected by any extension of the time within which the Obligee may accept such bid, and said Surety does hereby  
waive notice of any such extension.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations  
have caused their corporate seals to be affixed hereunto and these presents to be signed by their proper officers, this  
30th day of October, 2014.

Principal Corporate Seal

Burdette Electric, Inc.

(Name of Principal)

By (Must be President or  
Vice President)Paul R. Burdette President

(Title)

Surety Corporate Seal

The Cincinnati Insurance Company

(Name of Surety)

By: Patricia A. Moye, WV Resident Agent Attorney-in-Fact

IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance. Corporate seals must be affixed,  
and a power of attorney must be attached.

THE CINCINNATI INSURANCE COMPANY

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY, a corporation organized under the laws of the State of Ohio, and having its principal office in the City of Fairfield, Ohio, does hereby constitute and appoint

Allan L. McVey; Gregory T. Gordon; Patricia A. Moyer and/or Kimberly Wilkinson

of Charleston, West Virginia

and deliver on its behalf as Surety, and as its act and deed, any and all bonds, policies, undertakings, or other like instruments, as follows:

Any such obligations in the United States, up to

Fifty Million and No/100 Dollars (\$50,000,000.00).

This appointment is made under and by authority of the following resolution passed by the Board of Directors of said Company at a meeting held in the principal office of the Company, a quorum being present and voting, on the 6<sup>th</sup> day of December, 1958, which resolution is still in effect:

"RESOLVED, that the President or any Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 7<sup>th</sup> day of December, 1973.

"RESOLVED, that the signature of the President or a Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company."

IN WITNESS WHEREOF, THE CINCINNATI INSURANCE COMPANY has caused these presents to be sealed with its corporate seal, duly attested by its Vice President this 10<sup>th</sup> day of May, 2012.



STATE OF OHIO  
COUNTY OF BUTLER

) ss:  
)

THE CINCINNATI INSURANCE COMPANY

*Stacy A. Jett*

Vice President

On this 10<sup>th</sup> day of May, 2012, before me came the above-named Vice President of THE CINCINNATI INSURANCE COMPANY, to me personally known to be the officer described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of said Company and the corporate seal and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporation.



*Mark J. Huller*

MARK J. HULLER, Attorney at Law  
NOTARY PUBLIC - STATE OF OHIO  
My commission has no expiration  
date. Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Secretary of THE CINCINNATI INSURANCE COMPANY, hereby certify that the above is a true and correct copy of the Original Power of Attorney issued by said Company, and do hereby further certify that the said Power of Attorney is still in full force and effect.

GIVEN under my hand and seal of said Company at Fairfield, Ohio.  
this 30th day of October 2014



*Scott R. Boen*

Assistant Secretary

**SOLICITATION NUMBER: CRFQ 0506 WSH1500000003**

**Addendum Number: 1**

---

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- ☐ Modify bid opening date and time
- ☐ Modify specifications of product or service being sought
- ☒ Attachment of vendor questions and responses
- ☒ Attachment of pre-bid sign-in sheet
- ☐ Correction of error
- ☒ Other

**Description of Modification to Solicitation:**

- 1) To provide a copy of the pre-bid meeting sign-in sheet for the above solicitation.
- 2) To provide clarification of technical questions.
- 3) To provide drawings to use as reference to technical questions.
- 4) To provide a copy of the certification and signature page.
- 5) To provide Addendum Acknowledgment form.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

## ATTACHMENT A

WSH15\*3 / WSH15013

Request for Proposal No.

SIGN IN SHEET

PLEASE PRINT

Page 1 of 2

Date: 10/15/14

\* PLEASE BE SURE TO PRINT LEGIBLY - IF POSSIBLE, LEAVE A BUSINESS CARD

FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE & FAX NUMBERS
Company: <u>Advanced Communications</u>	<u>2902 Dudley Ave</u>	PHONE <u>304-428-4097</u>
Rep: <u>Larry J. Casey</u>	<u>Parkersburg WV 26102</u>	TOLL FREE <u>1-800-336-4933</u>
Email Address: <u>lcasey@aricentral.com</u>		FAX <u>304-233-9666</u>
Company: <u>INTERTECH Security</u>	<u>1501 Preble Ave.</u>	PHONE <u>412-480-5117</u>
Rep: <u>Stephen Balcer</u>	<u>Pgh. Pa. 15233</u>	TOLL FREE
Email Address: <u>sbalcer@intertechsecurity.com</u>		FAX <u>412-894-2600</u>
Company: <u>Intersec Security</u>	<u>1501 Perske Ave</u>	PHONE <u>412-246-1220</u>
Rep: <u>Robert Stanek</u>	<u>Pgh Pa 15233</u>	TOLL FREE
Email Address: <u>bstanek@intersecsecurity.com</u>		FAX
Company: <u>Burdette Electric Inc.</u>	<u>6444 Sissonville Drive</u>	PHONE <u>304-421-1005</u>
Rep: <u>Mike Smolder</u>	<u>Sissonville, WV 25321</u>	TOLL FREE
Email Address: <u>pburdette@burdette-electric.com</u>		FAX <u>304-984-0124</u>
Company: <u>Electronic Specialty Company</u>	<u>Po Box 400</u>	PHONE <u>304-766-6277</u>
Rep: <u>Tom Jurwin</u>	<u>1325 Dunbar Ave</u>	TOLL FREE <u>800-642-5500</u>
Email Address: <u>tom@electronic-specialty.com</u>	<u>Dunbar, WV 25064</u>	FAX <u>304-642-6270</u>

WSH15\*3 / WSH15013

**SIGN IN SHEET**

Request for Proposal No.

PLEASE PRINT

Page 2 of 2

Date: 10/15/14

\* PLEASE BE SURE TO PRINT LEGIBLY - IF POSSIBLE, LEAVE A BUSINESS CARD

FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE & FAX NUMBERS
Company: <u>Longs Security Camera Systems LLC</u>	<u>102 39th St SE.</u>	PHONE <u>304-925-0338</u>
Rep: <u>Alan E Long</u>	<u>Charleston WV 25304</u>	TOLL FREE
Email Address: <u>longscctv@suddenlink.net</u>		FAX <u>304-925-0338</u>
Company: <u>Advanced Alarm Technologies</u>	<u>PO Box 4368</u>	PHONE <u>(304) 422-4387</u>
Rep: <u>Robert Hill</u>	<u>Parkersburg, WV 26104</u>	TOLL FREE
Email Address: <u>advancedalarm@suddenlink.net</u>		FAX <u>(304) 422-4387</u>
Company: <u>MASTER SERVICE MTD Atlantic</u>	<u>1945 HARRISON AVE</u>	PHONE <u>(304) 636-8170</u>
Rep: <u>Miles Park</u>	<u>EIKINS WV 26241</u>	TOLL FREE
Email Address: <u>Miles@MASTERSERVICEcorp.com</u>		FAX <u>(304) 636-8206</u>
Company: _____	_____	PHONE _____
Rep: _____	_____	TOLL FREE
Email Address: _____	_____	FAX _____
Company: _____	_____	PHONE _____
Rep: _____	_____	TOLL FREE
Email Address: _____	_____	FAX _____



**WSH15059 / WSH1500000004 Addendum #1**  
**Closed Circuit Television System**

Question #1: Are there unused fiber terminations at all (3) Buildings? Where is the location of these terminations?

Answer #1: Yes there is existing multimode fiber available, and there are unused fiber terminations at all 3 buildings that will be available for use of this contract.

Question #2: How much Recording Time needs to be kept in storage on the system?

Answer #2: 1 month

Question #3: Please provide drawing with location of Network Switches and the Fiber terminations listed in #1.

Answer #3: See attached drawings

Question #4: Will Full Size, Scale Drawing of all areas of the hospital be provided for bidding Purposes?

Answer #4: Yes. See attached drawings

Question #5: Can exiting Telecommunications closets and racks be identified on full size scale drawings?

Answer #5: Not on full size, but see additional attachments

Question #6: Will Contractor/Vender need to provide Additional Telecommunications equipment mounting racks? If so please provide a specification.

Answer #6: Yes, the contractor/vendor will need to provide the equipment mounting racks. The vendor can use any racks in which the equipment they install is compatible.

Question #7: Where are the (11) Desktop Monitor Stations going to be installed? Can these be indicated on a set of full size scale drawings?

Answer #7: The 11 desktop monitor stations will be located at the 9 nurses stations, 1 at the main switchboard, and 1 at the TLF office. This is not available on full size drawings.

Question #8: Will the (11) Desktop work stations need to be tied into the Hospital network or will they be isolated to the CCTV Network Independent of the Hospital Network?



Answer #8: These workstations will be isolated to the CCTV network.

Question #9: What type of Raceway is acceptable in areas where surface raceways must be used?

Answer #9: No preference on the type of raceway. Relevant construction, safety, and fire code should be maintained.

Question #10: What will be required as a proper means of cable supports of cable routed above ceilings?

Answer #10: No preference as long as relevant fire and safety compliance is maintained.

Question #11: Will A Escort be required while working in Patent Areas? If so, Is contractor to include the cost of a escort the bid? If yes, what cost per hour should be associated with this charge?

Answer #11: No

Question #12: Will contractor be required to repair any existing finishes that become damaged during the system installation?

Answer #12: Yes

Question #13: Are Above ceiling spaces considered a Return Air plenum?

Answer #13: Yes

Question #14: Is there a Existing spare fiber cable between the William R. Sharpe Hospital and the Transitional Living Facility? If so. Will this spare fiber be made available for the use of this contract to connect the systems in both facilities together? And what type of Fiber is existing?

Answer #14: See answer #1

Question #15: Are there Additional Material Specifications other than the Request for Quotation Documents associated with this project?

Answer #15: No

Question #16: Is the total storage 50TB, or 50TB per NVR?

Answer #16: Each NVR must have a minimum of 50TB storage.

Question #17: Are there drawings with camera locations available?

Answer #17: See attached.

# Aerohive Planning Report

## Introduction

Thank you for using the Aerohive Planning Tool. This tool is designed to help scope and plan a WiFi Deployment to determine the number of APs required to achieve an intended coverage, AP placement and data rates. This tool calculates the loss in signal strength as it passes through open air and various materials to show predicted coverage.

## RF Prediction with Optional Site Survey

An RF prediction is an estimate of WLAN performance and coverage. It uses intelligent algorithms to examine AP behavior based upon an imported floor plan with assigned building characteristics. The accuracy of an RF prediction is dependent upon the confidence level with which the building's RF characteristics are assigned, and the accuracy of AP placement. It is ideal for typical office environments with uniform wall types. In addition RF itself can be unpredictable, due to the difficulty of characterizing the behavior of RF when interacting with various materials.

Complex environments should be verified with a survey to verify the assumptions used in an RF prediction.

## Assumptions

The guidelines in this document are based on the following conditions and assumptions:

- Client Data Terminal Transmit (Tx) Power:  $\geq 15$  dBm.
- Client Data Terminal Antenna Gain:  $\geq 0$  dBi.
- The map environment type (e.g. Warehouse, Office) relates to an average density which is quantified as a path loss exponent value. It estimates how quickly an RF signal attenuates with distance.
- The indicated wall path-through loss number (e.g. 12dB for a concrete wall) is the attenuation of an RF signal as it travels through the wall under a right angle. For any other angle, the loss will be higher.
- The EIRP (Effective Isotropic Radiated Power) of an AP's radio is determined by the Tx power setting, the antenna gain and cable losses. The antenna gain is an average gain obtained through measurements for the different AP types.
- Data rates are based on receive sensitivity numbers obtained through measurements for the different AP types, and a fade margin which is user configurable.

*Note: These assumptions are typical for available 802.11 client Data Terminals and typical cubicle densities.*

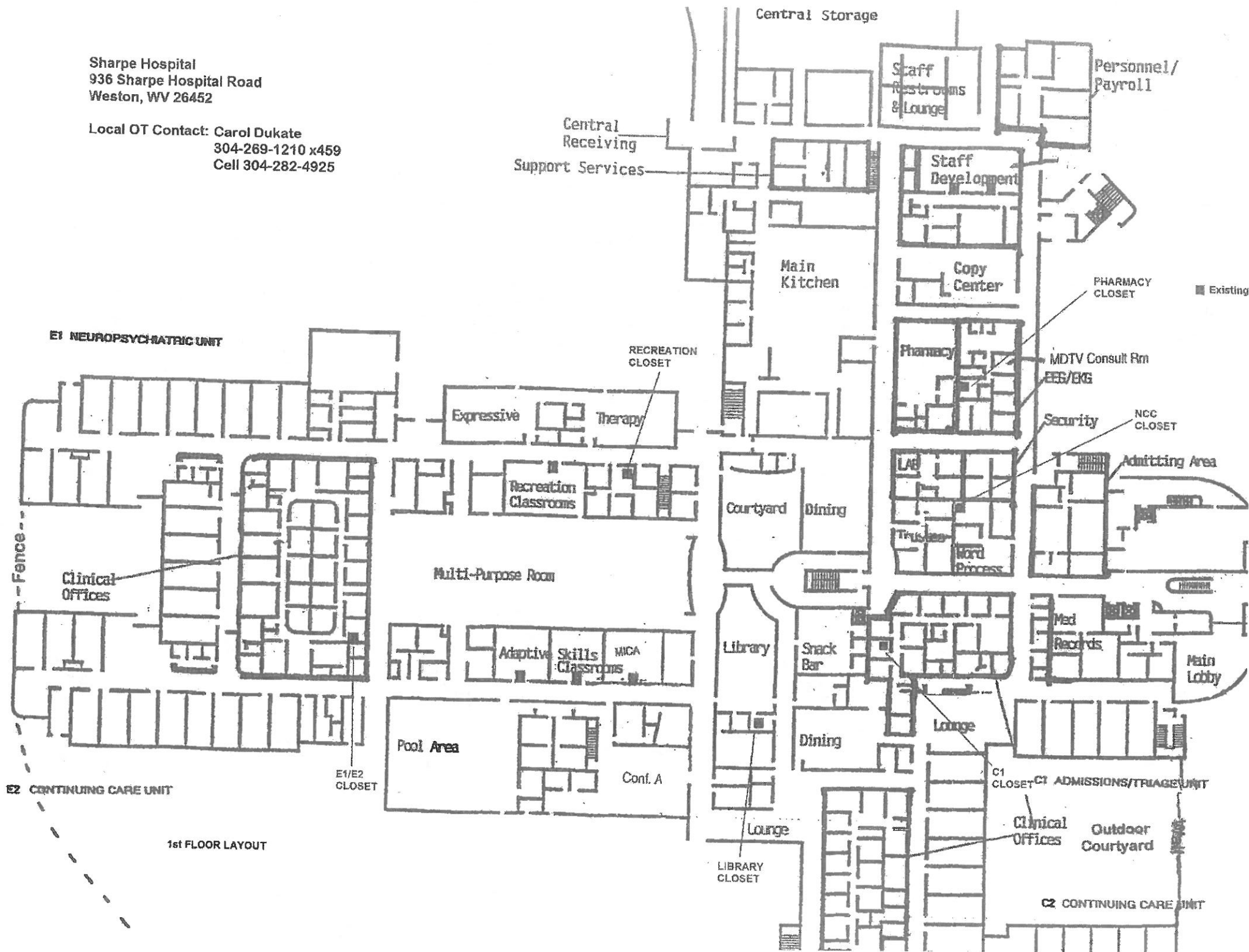


**Device Total For DHHR-Sharpe-SallyPort**

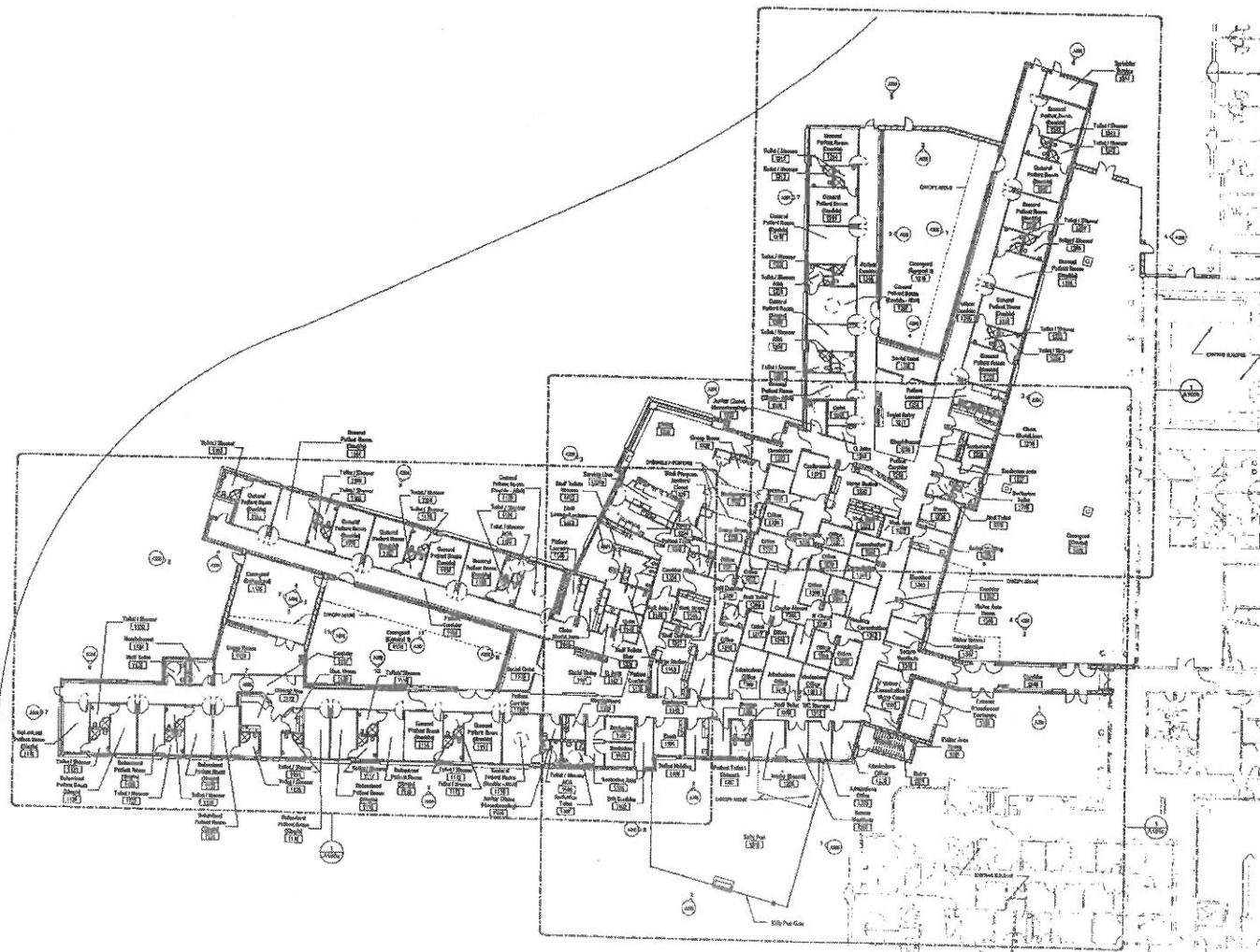
Model	Part number	Total
AP121	AH-AP-121-N-FCC	8

Sharpe Hospital  
936 Sharpe Hospital Road  
Weston, WV 26452

Local OT Contact: Carol Dukate  
304-269-1210 x459  
Cell 304-282-4925







**Floor Plan Key**

- PROJECT AREA
- ADDITION TO EXISTING PROJECT
- EXISTING PROJECT TO REMAIN
- DOOR TO EXISTING
- DOOR TO NEW PROJECT

**IKM**  
architecture  
planning  
interior design  
501 Lancaster  
One PPG Place  
Pittsburgh, PA 15222



**Revisions**

No.	Date	Description

**Date**  
14 November 2012

**Project Title**  
William R. Sharpe  
Hospital  
50 Bed Addition

531 Sharpe Hospital Road  
Winston, WV 26442-0642

**Drawing Title**  
Reference Plan -  
Level 1

**Project Number**  
11-170

**Drawing Number**  
AR100

Reference Plan - Level 1  
1/16" = 1'-0"

11/20/2012 4:48 PM







### CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Burdette Electric Inc  
(Company)

Paul R. Burdette President  
(Authorized Signature) (Representative Name, Title)

304-984-0123 304-984-0124 10-29-14  
(Phone Number) (Fax Number) (Date)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: WSH1500000003**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Burdette Electric Inc.  
Company  
  
Authorized Signature  
10-29-14  
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

**ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)**

1. **CONTRACTOR'S LICENSE:** West Virginia Code § 21-11-2 requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Division of Labor. West Virginia Code § 21-11-11 requires any prospective Vendor to include the contractor's license number on its bid. Failure to include a contractor's license number on the bid shall result in Vendor's bid being disqualified. Vendors should include a contractor's license number in the space provided below.

Contractor's Name:

*Burdette Electric Inc*

Contractor's License No.

*WV 034524*

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a Award Document.

2. **DRUG-FREE WORKPLACE AFFIDAVIT:** W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit at the same time an affidavit that the Vendor has a written plan for a drug-free workplace policy. To comply with this law, Vendor must either complete the enclosed drug-free workplace affidavit and submit the same with its bid or complete a similar affidavit that fulfills all of the requirements of the applicable code. Failure to submit the signed and notarized drug-free workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, with the bid shall result in disqualification of Vendor's bid. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

2.1. **DRUG-FREE WORKPLACE POLICY:** Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article. The awarding public authority shall cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

3. **DRUG FREE WORKPLACE REPORT:** Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the

public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

- (1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;
- (2) The name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- (3) The average number of employees in connection with the construction on the public improvement;
- (4) Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor should utilize the attached Certified Drug Free Workplace Report Coversheet when submitting the report required hereunder. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

4. **AIA DOCUMENTS:** All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the AIA A101-2007 and A201-2007 or the A107-2007 documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein.
5. **SUBCONTRACTOR LIST SUBMISSION:** In accordance with W. Va. Code § 5-22-1, The apparent low bidder on a contract for the construction, alteration, decoration, painting or improvement of a new or existing building or structure valued at more than \$250,000.00 shall submit a list of all subcontractors who will perform more than \$25,000.00 of work on the project including labor and materials. This provision shall not apply to any other construction projects, such as highway, mine reclamation, water or sewer projects. Additionally, if no subcontractors who will perform more than \$25,000.00 of work are to be used to complete the project, it will be noted on the subcontractor list.
  - a. Required Information. The subcontractor list shall contain the following information:
    - i. Bidder's name
    - ii. Name of each subcontractor
    - iii. License numbers as required by W. Va. Code § 21-11-1 et. seq.
    - iv. Notation that no subcontractor will be used to perform more than \$25,000.00 of work, when applicable
  - b. Submission. The completed subcontractor list shall be provided to the Purchasing Division within one business day of the opening of bids for review. Failure to submit the subcontractor

list within one business day after the deadline for submitting bids shall result in disqualification of the bid.

c. Substitution of Subcontractor. Written approval must be obtained from the State Spending Unit before any subcontractor substitution is permitted. Substitutions are not permitted unless:

- i. The subcontractor listed in the original bid has filed for bankruptcy;
- ii. The subcontractor in the original bid has been debarred or suspended; or
- iii. The contractor certifies in writing that the subcontractor listed in the original bill fails, is unable, or refuses to perform his subcontract.

6. **GREEN BUILDINGS MINIMUM ENERGY STANDARDS:** In accordance with § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.



REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Health and Human Resources (WVDHHR), the Bureau of Behavioral Health and Health Facilities (BHBF), and William R. Sharpe, Jr. Hospital to establish a contract for the purchase and complete installation of a closed circuit television (CCTV) system for William R. Sharpe, Jr. Hospital and the Transitional Living Facility located in Weston, WV.
2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **"Contract Services"** means the to provide all labor, material, equipment and related incidentals needed for the provision and complete installation of a closed circuit television system at William R. Sharpe, Jr. Hospital and the Transitional Living Facility.
  - 2.2 **"CRFQ"** means the official request for quotation published by the Purchasing Division.
  - 2.3 **"VSS"** represents Vendor Self Service meaning the item upon which the Vendor should list their proposed price for the contract services.
  - 2.4 **"CCTV"** Close Circuit Television is a TV system in which signals are not publicly distributed but monitored, primarily for surveillance and security purposes.
3. **QUALIFICATIONS:** Vendor shall have the following minimum qualifications:
  - 3.1. The Vendor shall be a registered vendor with the State of West Virginia and shall meet all applicable regulations. The Contractor shall be a firm normally employed in the low voltage and video cabling industry.
  - 3.2. The Vendor must be certified by the manufacturer of the products, adhere to the engineering, installation and testing procedures and utilize the authorized manufacturer components and distribution channels.
  - 3.3. The Vendor shall be certified by the manufacturing company in all aspects of design, installation and testing of the products described herein.
  - 3.4. All certifications (affidavit, list of job locations with location name, addresses, references, certifications, etc.) must be included with the bid.



REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

7. **PAYMENT:** Agency shall pay progress payments in accordance with the phase schedule provided by the Hospital and DHHR/BHMF. Payment will be made at the completion of each phase as that phase of the system is functional and operable for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.
8. **TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.
9. **FACILITIES ACCESS:** Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:
  - 9.1. Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.
  - 9.2. Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.
  - 9.3. Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.
  - 9.4. Anyone performing under this Contract will be subject to Agency's security protocol and procedures.
  - 9.5. Vendor shall inform all staff of Agency's security protocol and procedures.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

4.1.7.2 The vendor will be responsible to coordinate with West Virginia Office of Technology (WVOT) on acquiring network connections as well as any network configuration information such as IP numbers that will be required to connect NVR's to the owner's network.

4.1.7.3 The vendor shall break the facilities into zones and establish the margin lines between the zones.

4.1.7.4 Keep area of construction clean and free from debris during installation.

**4.1.8 One (1) year materials and labor warranty**

4.1.8.1 One year materials and labor warranty on entire CCTV system.

**5. CONTRACT AWARD:**

**5.1 Contract Award:** The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services meeting the required specifications for the lowest overall total cost.

**5.2 Pricing:** Vendor should complete their bid by providing a Unit Price for Commodity Lines on the Request for Quotation. If responding to the Request for Quotation on paper, vendors should also provide a Total Price for each Commodity line by multiplying their bid Unit Price by the listed Quantity for each line. Vendor should provide bids for all commodity lines, as failure to do so may result in Vendor's bid being disqualified.

Vendor should electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document.

(Note: there is no separate, electronic Pricing Pages for this solicitation. Vendors responding on paper should use the printed Request for Quotation document.)

**6. PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

4.1.3.11 The Vendor must provide NVRs that must be able to communicate with non-proprietary cameras (see 4.1.2.5).

4.1.3.12 The Vendor must provide NVRs that must have a minimum of a 50TB storage.

4.1.3.13 The Vendor must provide NVRs viewing software that shall be able to activate video recording by motion detection with a minimum frame rate of fifteen (15) frames per second.

**4.1.4 Eleven (11) Desktop Computer with Monitor Stations**

4.1.4.1 The Vendor must provide desktop computers with monitor stations must be compatible with Windows 7 operating systems. 9 of which will be placed at the nursing stations through the hospital (1 per station), 1 at the main switchboard, 1 at the TLF office.

4.1.4.2 Monitor must be a nineteen (19) inch monitor.

**4.1.5 Network Switches**

4.1.5.1 Network Switches must be 24 port switch with power over Ethernet (PoE), 1 gigabit (10/100/1000). Must provide enough 24 port/PoE network switches to accommodate the appropriate length of cabling involved to have the system functional and operable at maximum performance.

**4.1.6 Networking**

4.1.6.1 The Vendor must provide all miscellaneous materials such as cabling, power supplies, and other technical components to have the CCTV system functional and operable.

4.1.6.2 The closed circuit television system shall not depend on the owner's network unless specifically indicated on plans or specifications.

**4.1.7 Labor**

4.1.7.1 The Vendor must provide all labor, equipment, and related components involved to install the CCTV and have the system functional and operable.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

**4.1.2.10** The Vendor must provide outdoor IP cameras that must have a fixed lens (2.8 – 86 degrees).

**4.1.3 Two (2) Network Video Recorder(s) (NVRs)**

**4.1.3.1** The Vendor must provide NVRs that must be able to accommodate the total of one hundred twenty nine (129) IP cameras.

**4.1.3.2** The Vendor must provide NVRs that must include viewing software.

**4.1.3.3** The Vendor must provide NVRs that must be compatible with Windows 7 operating systems.

**4.1.3.4** The Vendor must provide NVR software that must be capable of restricting viewing access to certain cameras.

**4.1.3.5** The Vendor must provide NVR software that must be capable of restricting controls of the entire system at various workstations.

**4.1.3.6** The Vendor must provide NVRs and software that must be able to communicate with five (5) existing workstations that are connected to the owner's network – Chief Executive Officer's workstation, Assistant Chief Executive Officer's workstation, Chief Financial Officer's workstation, Security Director's workstation, TLF Director's workstation.

**4.1.3.7** The Vendor must program the NVR viewing software to give complete control of all features to the following workstations: Chief Executive Officer's workstation, Assistant Chief Executive Officer's workstation, Chief Financial Officer's workstation, and Security Director's workstation.

**4.1.3.8** The Vendor must program the NVR viewing software to be view only to the following workstations: All nursing stations, TLF Director's workstation, Switchboard workstation.

**4.1.3.9** The Vendor must provide NVRs that must be scalable and hard drive expandable.

**4.1.3.10** The Vendor must provide NVRs that have Enterprise level hard drives only. Enterprise level hard drives will allow the storage of data based on a 24 hour recording cycle, and they are more durable and dependable.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

**4.1.1.10** The Vendor must provide indoor IP cameras that must have a fixed lens (2.8 mm – 86 degrees).

**4.1.2 Twelve (12) Outdoor IP Cameras**

**4.1.2.1** The Vendor must provide outdoor IP cameras that must be a minimum of three (3) megapixels 1280x720.

**4.1.2.2** The Vendor must provide outdoor IP cameras that meet industry standard protocols concerning temperature restrictions. Outdoor camera housing must include a heater and a blower.

**4.1.2.3** The Vendor must provide outdoor casings that meet industry standard protocols concerning the mounting of the cameras.

**4.1.2.4** The Vendor must provide outdoor IP cameras that must be compatible with NVRs.

**4.1.2.5** The Vendor must provide outdoor IP cameras that must be enclosed in tamper resistant casings.

**4.1.2.6** The Vendor must provide outdoor IP cameras that must be compatible with Windows 7 operating systems.

**4.1.2.7** The Vendor must provide outdoor IP cameras that must have multiple protocols such as, but not limited to, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, IPv4/v6, HTTP, HTTPS\*\*, QoS Layer 3 DiffServ, FTP, CIFS/SMB

**4.1.2.8** The Vendor must provide outdoor IP cameras that must have video compression.

**4.1.2.9** The Vendor must provide outdoor IP cameras that must have power over internet.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

**4. MANDATORY REQUIREMENTS:**

**4.1 Mandatory Contract Services Requirements and Deliverables:** Contract Services must meet or exceed the mandatory requirements listed below.

**4.1.1 One Hundred Seventeen (117) Indoor IP Cameras**

- 4.1.1.1 The Vendor must provide indoor IP cameras that must be a minimum of one (1) megapixel 1280x720.
- 4.1.1.2 The Vendor must provide indoor IP cameras that meet industry standard protocols concerning temperature restrictions.
- 4.1.1.3 The Vendor must provide indoor casings that meet industry standard protocols concerning the mounting of the cameras.
- 4.1.1.4 The Vendor must provide indoor IP cameras that must be compatible with NVRs.
- 4.1.1.5 The Vendor must provide indoor IP cameras that must be enclosed tamper resistant casings.
- 4.1.1.6 The Vendor must provide indoor IP cameras that must be compatible with Windows 7 operating systems.
- 4.1.1.7 The Vendor must provide indoor IP cameras that must have multiple protocols such as, but not limited to, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, IPv4/v6, HTTP, HTTPS\*\*, QoS Layer 3 DiffServ, FTP, CIFS/SMB
- 4.1.1.8 The Vendor must provide indoor IP cameras that must have video compression.
- 4.1.1.9 The Vendor must provide indoor IP cameras that must have power over internet.

REQUEST FOR QUOTATION  
CRFQ 0506 WSH1500000003 Closed Circuit Television System

---

**10. VENDOR DEFAULT:**

10.1. The following shall be considered a vendor default under this Contract.

10.1.1. Failure to perform Contract Services in accordance with the requirements contained herein.

10.1.2. Failure to comply with other specifications and requirements contained herein.

10.1.3. Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

10.1.4. Failure to remedy deficient performance upon request.

10.2. The following remedies shall be available to Agency upon default.

10.2.1. Cancellation of the Contract.

10.2.2. Cancellation of one or more release orders issued under this Contract.

10.2.3. Any other remedies available in law or equity.

**11. MISCELLANEOUS:**

11.1. **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: CRAIG CARTER

Telephone Number: (304) 941-9331

Fax Number: (304) 984-0124

Email Address: ccarter@burdette-electric.com



## DS-9664NI-ST

## Embedded NVR

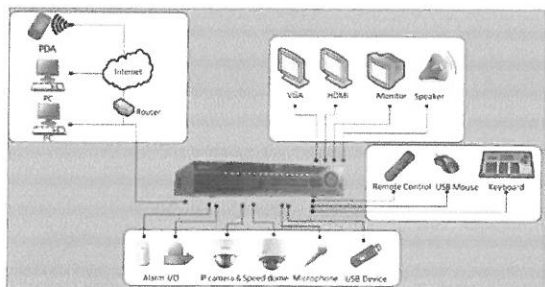


### Key Features

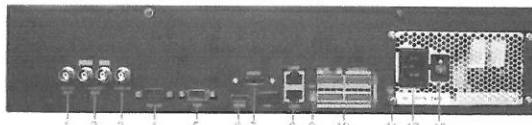
- 64 channel IP camera input
- Third-party network camera supported
- Up to 5 Mega pixel (2560×1920) recording resolution
- Simultaneous HDMI, VGA and CVBS output
- HDMI and VGA output up to 1920 x 1080P resolution
- Dual gigabit network interfaces
- eSATA interface for recording or archiving
- Flip open front panel for easy HDD installation
- 16-ch 4CIF synchronous playback
- JPEG picture capture and playback
- Tag video clip, search and playback by tag
- Compatible with free Hikvision DDNS
- Digital zoom on live view and playback

### Specifications

DS-9664NI-ST	
<b>Video / Audio input</b>	
IP video input	64-ch
Two-way audio	1-ch, BNC (2.0 Vp-p, 1 kΩ)
<b>Video / Audio output</b>	
Recording resolution	5MP / 3MP / 1080P / UXGA / 720P / VGA / 4CIF
CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω) Resolution: 704 × 576 (PAL); 704 × 480 (NTSC)
HDMI output	1-ch, resolution: 1920 × 1080P / 60Hz, 1600 × 1200 / 60Hz, 1280 × 1024 / 60Hz, 1024 × 768 / 60Hz
VGA output	1-ch, resolution: 1920 × 1080P / 60Hz, 1600 × 1200 / 60Hz, 1280 × 1024 / 60Hz, 1024 × 768 / 60Hz
Audio output	2-ch, BNC (Linear, 600 Ω)
Playback resolution	5MP / 3MP / 1080P / UXGA / 720P / VGA / 4CIF
Synchronous playback	16-ch 4CIF
<b>Storage</b>	
SATA	8 SATA interfaces
eSATA	1 eSATA interface
Capacity	Up to 4TB capacity for each disk
<b>External Interface</b>	
Dual network interface	10M / 100M / 1000M self-adaptive Ethernet interface, dual IP, load balancing, network redundancy
Network bandwidth	Up to 160Mbps input, 160Mbps output, up to 128 network streams
Serial interfaces	1 RS-232, 1 RS-485 for PTZ control, 1 RS-485 for keyboard
USB interface	2 x USB2.0
Alarm in	16
Alarm out	4
<b>General</b>	
Power supply	100~240 VAC, 6.3A, 50~60Hz
Consumption	≤45W
Working temperature	-10°C ~ +55°C (14 °F ~ 131 °F)
Working humidity	10% ~ 90%
Chassis	19-inch rack mountable 2U chassis
Dimensions (W x D x H)	445 × 470 × 90 mm (17.52" × 18.5" × 3.54")
Weight	≤ 8 kg (17.64 lb) ( without hard disk or DVD-R/W )



Rear Panel of DS-9664NI-ST



- |                           |   |
|---------------------------|---|
| 1.Video out               | 8.LAN1, LAN2 network interface                  |
| 2.Audio out               | 9.RS-485 termination dip switch                 |
| 3.Line in                 | 10.RS-485 serial interface, keyboard interface, |
| 4.RS-232 serial interface | alarm in, alarm out                             |
| 5.VGA interface           | 11.GND  |
| 6.HDMI interface          | 12.100~240 VAC power input                      |
| 7.eSATA interface         | 13.Power switch                                 |



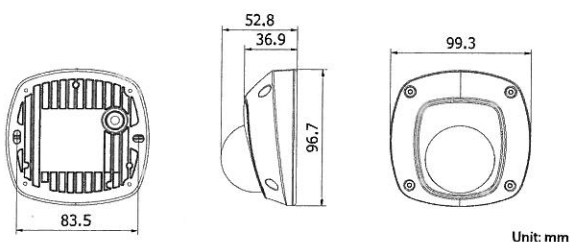
# DS-2CD2512F-I (W)(S) 1.3MP Mini Dome Network Camera



## Key features

- Up to 1.3 megapixel (1280 x 960) resolution
- HD real-time video
- IR LEDs (up to 10m)
- Built-in microphone & speaker
- Support on-board storage (up to 64GB)
- IP66
- -S: Audio, Alarm I/O
- -W: Wi-Fi

## Dimensions



## Accessories

Notes: \* CPM and WML need PC120 cap for installation.  
\* CM corner and PM pole mount are compatible with WML



## Available models

DS-2CD2512F-I, DS-2CD2512F-IWS

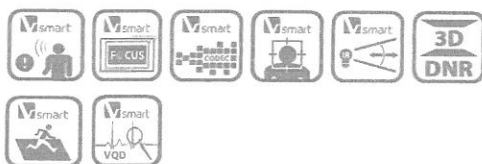
\* -W: Wi-Fi

DS-2CD2512F-I (W)(S)

Camera	
Image sensor	1/3" progressive scan CMOS
Min. illumination	0.028 lux@F2.0, AGC on 0 lux with IR
Shutter time	1/30s ~ 1/100,000s
Lens	4mm@F2.0, angle of view: 73.1° (4mm) (2.8mm, 6mm optional)
Lens mount	M12
Day & night	-I: ICR
Adjustment angle	Pan: ±30°, tilt: 0~75°, rotation: 0~360°
Digital noise reduction	3D DNR
Wide dynamic range	Digital WDR
Backlight compensation	Yes, zone configurable
Compression standard	
Video compression	H.264 / MJPEG
H.264 compression profile	Main profile
Bit rate	32 Kbps ~ 16 Mbps
Audio compression	G.711 / G.726
Audio bit rate	64 Kbps (G.711) / 16 Kbps (G.726)
Image	
Max. image resolution	1280 x 960
Frame rate	60Hz: 30fps (1280 × 960), 30fps (1280 x 720), 30fps (704 x 576), 30fps (640 x 480)
Image settings	Saturation, brightness, contrast adjustable through client software or web browser
Network	
Network storage	NAS
Alarm trigger	Motion detection, tampering alarm, network disconnect, IP address conflict, storage exception, storage error
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
System compatibility	ONVIF, PSIA, CGI
General functionalities	Flickerless, dual stream, heartbeat, mirror, user authentication, video mask, watermark
Interface	
Communication interface	1 RJ45 10M / 100M ethernet port
On-board storage	Built-in Micro SD/SDHC/SDXC card slot, up to 64 GB
Alarm interface	-S: 1/1
Audio interface	-S: 1/1
Wi-Fi parameters (only for -W model)	
Wi-Fi standard	IEEE802.11b/g/n
Frequency range	2.4 GHz ~ 2.4835 GHz
Communication bandwidth	Support 20/40 MHz
Protocols	802.11b: CCK, QPSK, BPSK 802.11g/n: OFDM
Security	64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS
Transmit output power	11b: 17±1.5dBm @ 11Mbps; 11g: 14±1.5dBm @ 54Mbps; 11n: 12.5±1.5dBm
Transfer rate	11b: -90dBm @ 11Mbps (Typical); 11g: -75dBm @ 54Mbps (Typical); 11n: -74dBm (Typical)
Transmission range	Outdoor: up to 200 meters; Indoor: up to 50 meters. * It varies depending on actual working environment.
General	
Operating conditions	-30 °C ~ 60 °C (-22 °F ~ 140 °F), humidity 95% or less (non-condensing)
Power supply	DC12V ± 10%, PoE (802.3af)
Power consumption	Max. 5W
Ingress protection level	IP66
Impact protection	IEC60068-2-75Eh, 50J; EN50102, up to IK08
IR range	Up to 10m
Dimensions (mm)	99.9 x 97.5 x 56.5
Weight	350g

# DS-2CD4332FWD-IZHS

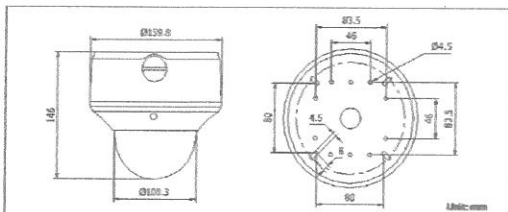
## 3MP WDR Outdoor Dome Network Camera



### Key features

- Up to 2048 x 1536 high resolution
- Full HD1080p video
- Smart Codec
- 120dB WDR, 3D DNR
- Triple streams
- On-board storage, up to 64GB
- Smart Focus: Motorized VF lens (-Z)
- Smart VQD
- Smart Facial Detection
- Intrusion Detection
- Built-in heater(-H)
- Defog
- EIS (Electronic Image Stabilization)

### Dimensions



### Available models

DS-2CD4332FWD-IZHS

\* -Z: Motorized VF lens

\* -S: 1-ch audio I/O, 1-ch alarm I/O and 1-ch RS-485 interface

\* -H: Smart Heater

### DS-2CD4332FWD-IZHS

Camera	
Image sensor	1/3" progressive scan CMOS
Min. illumination	0.14 lux@F1.4, AGC on, 0 lux with IR
Shutter time	1s ~ 1/100,000s
Slow shutter	Yes
Lens	2.8 ~ 12mm @F1.4, angle of view: 91.2° ~ 28.3° (-Z: motorized VF lens)
Lens mount	Φ14
Angle adjustment	Pan: 0° ~ 355°, tilt: 0° ~ 75°, rotation: 0° ~ 355°
Auto iris	DC drive
Day & night	ICR (Auto/Schedule/Alarm Trigger)
Digital noise reduction	3D DNR
Wide dynamic range	120dB WDR
Compression standard	
Video compression	H.264 / MPEG4 / MJPEG
H.264 codec profile	Baseline profile / main profile / high profile
Video bit rate	32 Kbps ~ 16 Mbps
Audio compression	G.711 / G.726 / MP2L2 *only for -S model
Audio bit rate	64Kbps (G.711) / 16Kbps (G.726) *only for -S model
Image	
Max. resolution	2048 x 1536
Frame rate	60 Hz: 20fps (2048 x 1536), 30fps (1920 x 1080), 30fps (1280 x 720)
3rd stream	Independent setting, up to: 60Hz: 20fps (2048 x 1536)
Image settings	Rotate mode, saturation, brightness, contrast, grayscale adjustable through client software or web browser
BLC	Yes, zone configurable
Defog	Yes
EIS	Yes
Picture overlay	128 x 128, BMP 24bit, zone configurable
ROI	Yes, up to 4 configurable areas.
Network	
Network storage	NAS
Alarm trigger	Intrusion detection, Defocus detection, Motion detection, Face detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
Security	User authentication, watermark, IP address filtering, anonymous access, reset
System compatibility	ONVIF, PSIA, CGI
On-board storage	Built-in Micro SD/SDHC/SDXC slot, up to 64 GB
Interface	
Communication interface	1 RJ45 10M / 100M ethernet port
Video Output	1 Vp-p composite output (75 Ω/RCA, for lens adjustment when installation)
On-board storage	Micro SD/SDXC card slot, up to 64GB
General	
Operating conditions	-30°C ~ 60°C (-22°F ~ 140°F), humidity 95% or less (non-condensing) -H: -40°C ~ 60°C (-40°F ~ 140°F), with smart heater on
Power supply	24 VAC ± 10%, PoE (802.3af)
Power consumption	Max. 12W; -Z/-H: Max. 13W
IR range	Up to 30m
Ingress protection	IP66
Impact protection	IEC60068-2-75Eh, 50J; EN50102, up to IK10
Dimensions	Φ 159.8 × 146 mm (Φ 6.29" × 5.75")
Weight	2100 g (4.62 lbs)

### Accessories

Notes: \* CPM and WML need PC160 cap for installation.

\* CM corner and PM pole mount are compatible with WML.



CPM  
(Camera Ceiling Pendant Mount)



WML  
(Long Wall Mount, junction box)



PC160  
(160mm Cap)