



CITY OF ROANOKE, VIRGINIA

REQUEST FOR PROPOSAL
Other than Professional Services

FOR

**DIRECT DIGITAL CONTROL SYSTEMS/
BUILDING AUTOMATION SYSTEMS**

RFP NUMBER 08-10-02

OPENING DATE: January 17, 2008

OPENING TIME 2:00 P.M.

The Request for Proposal and related documents may be obtained during normal business hours from the Purchasing Division located in the Noel C. Taylor Municipal Building, 215 Church Avenue, SW, Room 353, Roanoke, VA 24011, or from the City web site at www.roanokeva.gov under Community...City Departments...Purchasing...
...Current Bid Request.

**THIS PUBLIC BODY DOES NOT DISCRIMINATE
AGAINST FAITH-BASED ORGANIZATIONS**

Date of RFP: December 3, 2007

REQUEST FOR PROPOSAL (RFP)

RFP No. 08-10-02
Issue Date: 10/2/07
Commodity Code: 03113

Title: **DIRECT DIGITAL CONTROL SYSTEMS/BUILDING AUTOMATION SYSTEMS**

Issued By: **City of Roanoke**
Purchasing Division
Noel C. Taylor Municipal Building
215 Church Ave., SW, Room 353
Roanoke, VA 24011-1517
Phone (540) 853-2871
FAX (540) 853-1513
Email: toni.thomas@roanokeva.gov

For: **City of Roanoke**
Facilities Management
Noel C. Taylor Municipal Building
215 Church Ave., SW, Room 353
Roanoke, VA 24011
Phone (540) 853-5472
FAX
Email: john.mcghee@roanokeva.gov

Sealed proposals will be received at or before **2:00 P.M., January 17, 2008** for furnishing the services and/or items described herein. The time of receipt shall be determined by the time clock stamp in the Purchasing office.

All questions must be submitted before 5:00 p.m., January 14, 2008. If necessary, an addendum will be issued in the form of a facsimile and posted to the City web site at www.roanokeva.gov under Community... City Departments ... Purchasing ... Current Bid Requests.

If proposals are mailed, send directly to the Purchasing Division at the address listed above. If hand delivered, deliver to Purchasing Division at Noel C. Taylor Municipal Building, 215 Church Ave., Room 202, Roanoke, VA.

THIS PUBLIC BODY DOES NOT DISCRIMINATE AGAINST FAITH-BASED ORGANIZATIONS.

The City reserves the right to cancel this RFP and/or reject any or all proposals and to waive any informalities in any proposal.

This section is to be completed by the Offeror and this page must be returned with the proposal. In compliance with this request for proposal and subject to all terms and conditions imposed herein, which are hereby incorporated herein by reference, the undersigned offers and agrees to furnish the services and/or items requested in this solicitation if the undersigned is selected as the successful Offeror. No proposal may be withdrawn for a period of sixty (60) days after the opening of the proposal, except as provided in the RFP.

Legal Name and Address of Firm:

_____ Date: _____

_____ By: _____
(Signature in Ink)

_____ Name: _____
(Please Print)

_____ Zip: _____ Title: _____

Phone: _____ FAX: _____

Email: _____ Business License# _____

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DIRECT DIGITAL CONTROL SYSTEMS/
BUILDING AUTOMATION SYSTEMS

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CITY OF ROANOKE, VIRGINIA
REQUEST FOR PROPOSAL FOR

DIRECT DIGITAL CONTROL SYSTEMS/
BUILDING AUTOMATION SYSTEMS
RFP NO. 08-10-02

INTRODUCTION

The City of Roanoke, Virginia, is seeking competitive proposals from qualified Offerors to provide Digital Control Systems for the City HVAC systems in three City of Roanoke locations, in accordance with all terms, conditions and specifications as set out in this Request for Proposal (RFP). The RFP and related documents may be obtained during normal business hours from the Purchasing Division, (540) 853-2871, or from the City web site at www.roanokeva.gov under Community...City Departments...Purchasing...Current Bid Request.

There is a **mandatory** preproposal conference scheduled for **time** on **November 29, 2007** in the Purchasing Conference Room located at 215 Church Ave. Room 202. **Only Offerors in attendance may submit a proposal.**

- A. Successful Offeror shall have a minimum of five (5) years experience working on similar systems.**
- B. Successful Offeror shall employ a minimum of three (3) full time, competent service technicians who can arrive at the designated City location within two hours, from the time a service call is made by the City. Such service technicians assigned to service the resultant control systems shall be qualified to service the equipment type under warranty as well as all associated pneumatic muscles, electric and electronic controls.**

Proposals, to be considered and evaluated, must be sealed and received on or before 2:00 p.m. on **January 17, 2008** in the Purchasing Division, City of Roanoke, Noel C. Taylor Municipal Building, 215 Church Ave., SW, Room 353, Roanoke, VA 24011. Proposals appropriately received will be opened at this time. **Proposals received after 2:00 p.m. will not be accepted or considered.** The time of receipt shall be determined by the time clock stamp in the Purchasing Office, or if it is not working, such time shall be determined by the Purchasing official who is to open the proposals. Faxed or e-mailed proposals are not acceptable.

Each proposal, one (1) labeled original, and five (5) copies, must be appropriately signed by an authorized representative of the Offeror, and must be submitted in a sealed envelope or package. The notation "**Direct Digital Control Systems/Building Automation Systems**" **RFP No. 08-10-02** and the specified opening time and date must be clearly marked on the front of that sealed envelope or package.

The City of Roanoke, Virginia, and its officers, employees or agents will not be responsible for the opening of a proposal envelope or package prior to the scheduled opening if that envelope or package is not appropriately sealed and marked as specified.

The City of Roanoke, Virginia reserves the right to cancel this RFP and/or reject any or all proposals, to waive informalities in any proposal, to award any whole or part of a proposal, and to award to the Offeror whose proposal is, at the sole discretion of the City of Roanoke, determined to be in the best interest of the City.

Project evaluation and award will be accomplished in accordance with this RFP and Sections 23.2-1, et seq., of the Code of the City of Roanoke, Virginia, including the price or value of the benefits offered the City in the proposal. If an award of a contract is made, notification of such award will be posted for public review in the lobby on the second floor of the Noel C. Taylor Municipal Building, 215 Church Ave., SW, Roanoke, VA 24011.

No proposal may be withdrawn for a period of ninety (90) days after the opening of the proposal unless the proposal is the subject of a clerical error as defined in Section 2.2-4330 (A) of the Code of Virginia. The submitter of the proposal must give the City a notice of the request to withdraw within two (2) business days after the conclusion of the opening of the proposals, as set forth in Section 2.2-4330 (A) (i).

Inquires regarding this RFP or procurement procedures should be directed to Toni Thomas, Buyer at (540) 540-853-2871.

This RFP consists of this Introduction, nine (9) numbered sections, and the attachments hereto.

If you download this RFP from the City website and intend to submit a proposal, you must notify Purchasing that you should be added to the list of entities having received a copy of the RFP and want to receive any addenda issued. The City is not responsible for any RFP obtained from any source other than the City, and may not accept proposals from those who download this RFP and fail to notify the City of their intent to submit a proposal. Contact Purchasing by phone at 540.853.2871, by fax at 540.853.1513, or by email at purchasing@roanokeva.gov.

Respectfully,

Sharon T. Gentry C.P.M., VCO, CPPB
Purchasing Manager

City of Roanoke, Virginia
Request for Proposal No. 08-10-02
DIRECT DIGITAL CONTROL SYSTEM/
BUILDING AUTOMATION SYSTEMS

SECTION 1. PURPOSE.

The purpose of this Request for Proposal (RFP) is for the procurement of a Direct Digital Control/Building Automation System (DDC/BAS), to be installed in two City of Roanoke buildings in connection with the City HVAC System. City of Roanoke buildings for this procurement shall include:

Noel C. Taylor Municipal Building North – 215 Campbell Ave SW
Noel C. Taylor Municipal Building South – 215 Church Ave. SW

City of Roanoke Courthouse – 315 Church Ave SW

The City of Roanoke invites any qualified Offeror to respond to this RFP by submitting a proposal for the Direct Digital Control/Building Automation System, consistent with the terms and conditions herein set forth. Final scope of services will be negotiated with the successful Offeror.

SECTION 2. BACKGROUND.

The City Municipal Building South houses all of the mechanical equipment that produces the hot and chilled water for Municipal South and North. Although most of the points of control will be needed for Municipal South, there are points of control that the City wishes for the Municipal North Building. Municipal South houses concentrated points of control both in its penthouse mechanical room and in its first floor mechanical room. The two (2) control locations within Municipal South have a direct link between themselves. The Courthouse has two (2) mechanical rooms; one is in the basement that houses the majority of the mechanical equipment and the other in the penthouse which houses the air handlers and two boilers. The City of Roanoke is seeking a professional and fully accredited Direct Digital Controls Companies to compete in the competitive process for the needed supply of Direct Digital Controls products and the complete turn key installation of the systems in the listed buildings above.

Please be advised that the Direct Digital Controls (DDC) Array contained in this RFP will at some point in the near future be an integral part of an entire Building Automation System (BAS) that will control lighting, door locks, card readers, security cameras, intercoms and fire alarms.

The Direct Digital Control (DDC) System/Systems awarded through this RFP must contain proposed equipment and devices that can be easily integrated into and become part of a total Building Automation System at a later date. The installation procedures used to install the Direct Digital Control (DDC) System/Systems that will be used to control the building or buildings HVAC equipment must upon completion be able to integrate easily with the additional needed equipment and devices used to establish a

total building automation system/systems (BAS) with little or no adverse or monetary impact to the DDC control system/systems already in place.

SECTION 3. INSTRUCTIONS TO OFFERORS.

- A. Proposals must be submitted in accordance with the instructions and requirements contained in this RFP, including the Introduction. Failure to do so may result in the proposal being considered non-responsive and it may be rejected. An Offeror must promptly notify the Purchasing Division of any ambiguity, inconsistency, or error which may be discovered upon examination of the RFP. An Offeror requiring clarification or interpretation of this RFP should contact the Purchasing Manager at (540) 853-2871.
- B. Prospective Offerors, sometimes referred to as providers, operators, contractors, consultants, or vendors, are to address the criteria below at a minimum as part of their submitted proposal. **Each proposal must include a transmittal letter and management overview of the proposal. Proposal must be tabbed, labeling each section to be submitted to City.** Proposals are to include and may be evaluated on the following factors, together with such other factors as will protect and preserve the interests of the City of Roanoke, which may also be considered.
1. Organizational structure of firm and qualifications of management personnel.

Prospective Offerors should submit at a minimum the length of time in the business, corporate experience, strengths in the industry, business philosophy, and a description of the organizational structure of the firm; a description of the organizational structure for the management and operation of the services requested and/or provision of the items referred to in this RFP, including an organizational chart denoting all positions and the number of personnel in each position.
 2. Financial condition of the firm and ability to perform all obligations of any resultant contract.

The sufficiency of the financial resources and the ability of the Offeror to comply with the duties and responsibilities described in this RFP. Each Offeror shall provide a current annual financial report and the previous year's report and a statement regarding any recent or foreseeable mergers or acquisitions.
 3. Each Offeror is to state whether or not any of Offeror's owners, officers, employees, or agents, or their immediate family members, is currently, or has been in the past year, an employee of the City of Roanoke or has any responsibility or authority with the City that might affect the procurement transaction or any claim resulting therefrom. If so, please state the complete name and address of each such person and their connection to the City of Roanoke. Each Offeror is advised that the Ethics in Public Contracting and Conflict of Interests Act of the Virginia Code, as set forth in Section 4 of this RFP, apply to this RFP.

4. Experience in providing the services and/or items requested by this RFP. Successful Offeror shall have a minimum of five (5) years experience working on similar systems.
5. Price.
Prospective Offerors must submit the price such Offeror proposes to charge the City for providing the required services and/or items, including all fees and costs and how they are calculated,
6. The ability, capacity, and skill of the Offeror to provide the services and/or items described in this RFP and in a prompt and timely manner without delay or interference.
7. The character, integrity, reputation, judgment, experience, efficiency and effectiveness of the Offeror.
8. The quality and timeliness of performance of previous contracts or services of the nature described in this RFP.
9. Compliance by the Offeror with laws and ordinances regarding prior contracts, purchases, or services.
10. The conditions, if any, of the proposal.
11. Offeror is to provide complete technical information for the following
 - a) Controller
 - b) Automation network
 - c) User Interface
 - d) Processor
 - e) Memory
 - f) Hardware Real Time Clock
 - g) Communications Ports
 - h) Diagnostics
 - i) Power failure characteristics
 - j) Power failure memory and control sequence during and after power failure
 - k) Digital controller with extension capability
 - l) Controller as stand alone controller
 - m) Controller's ability for future expansion
12. Offeror is to submit with proposal, manufacturer's technical product data for each control device to be furnished, indicating dimensions, capacities, performance characteristics, electrical characteristics, and finishes of materials. Offeror should include installation instructions, start-up instructions, maintenance instructions, and spare parts lists, as they will appear in the O&M Manual (See Division I).

13. Offeror is to submit, with proposal, Shop drawings for each control system, to be provided to City, containing the following information:
 - a) Schematic flow diagrams of the system showing graphic configuration of fans, pumps, coils, dampers, valves, and control devices and sensors with pictorial representation showing location of all components.
 - b) Labeling of each control device with setting or adjustable range of control.
 - c) Indicate all required electrical wiring. Clearly differentiate between portions of wiring that are factory-installed and portions to be field-installed. Label all wiring/pneumatic at both ends of termination.
 - d) Provide details on faces of control panels, including controls, instruments, and labeling.
 - e) Include description of sequence of operation with flow charts and program inputs.
 - f) Include a detailed DDC/BAS points list (See point's matrix on drawings provided in sample contract as Exhibit 1), clearly defining the controls features to be furnished, and point-to-point diagram of circuitry.
 - g) Include complete database defining point names, set points, alarm limits, etc. as they will appear to the City.
 - h) Submit final as built drawing for each system.
 14. Offeror shall provide an estimated number of training hours, classroom and/or onsite, deemed necessary to ensure proper use of DDS/BAS by the City, following successful installation and testing of the system.
 15. Provide a sample standard agreement that City may be expected sign if awarded this contract.
 16. Offer shall submit with proposal Offeror's system start-up and testing procedure once desired system is successfully installed.
 17. Submit with proposal any warranty information to be provided for the desired DDS/BAS.
- C. Each Offeror should provide the names, addresses, and telephone numbers of at least three (3) references in connection with supplying the services or items requested in this RFP, especially from other local government operations similar to those being requested in this RFP by the City. Each reference should include organizational name, official address, contact person, title of contract, and any hardware or software elements in use, number of years in use and phone number.
- D. The proposal should be no more than 20 sheets (printing on back and front is acceptable) in length. Also include any other materials you may want to submit as part of your proposal response.
- E. Responses to this RFP must be in the prescribed format. Responses shall include tabbed sections for each section response requested in this RFP.

- F. The City may request additional information, clarification, or presentations from any of the Offerors after review of the proposals received.
- G. The City has the right to use any or all ideas presented in reply to this RFP, subject only to the limitations regarding proprietary/confidential data of Offeror.
- H. The City is not liable for any costs incurred by any Offeror in connection with this RFP or any response by any Offeror to this RFP. The expenses incurred by Offeror in the preparation, submission, and presentation of the proposal are the sole responsibility of the Offeror and may not be charged to the City.

SECTION 4. MISCELLANEOUS.

- A. Ownership of Material - Ownership of all data, materials, and documentation originated and prepared for the City pursuant to the RFP shall belong exclusively to the City and be subject to public inspection in accordance with the *Virginia Freedom of Information Act*. Trade secrets or proprietary information submitted by the Offeror shall not be subject to public disclosure under the *Freedom of Information Act*, unless otherwise required by law or a court. **However, the Offeror must invoke the protection of Section 2.2-4342(F) of the Code of Virginia, in writing, either before or at the time the data or other material is submitted.** The written notice must SPECIFICALLY identify the data or materials to be protected and state the reason why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices, and/or total proposal prices as proprietary, or trade secrets, is NOT ACCEPTABLE and may result in REJECTION of the proposal.
- B. As this is a RFP, no information regarding the proposal records or the contents of responses will be released except in accordance with Section 2.2-4342 of the Code of Virginia. Once an award has been made, all proposals will be open to public inspection subject to the provisions set forth above.
- C. Any interpretation, correction, or change of the RFP will be made by an addendum. Interpretations, corrections or changes of this RFP made in any other manner will not be binding and Offerors must not rely upon such interpretations, corrections, or changes. The City Purchasing Division or its designee will issue Addenda. Addenda will be faxed or mailed to all who are listed as having received the RFP Package.
- D. No Offeror shall confer on any public employee having official responsibility for a purchasing transaction any payment, loan, subscription, advance, deposit or money, service, or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value is exchanged.
- E. The City may make investigations to determine the ability of the Offeror to perform or supply the services and/or items as described in this RFP. The City reserves the right to reject any proposal if the Offeror fails to satisfy the City that it is qualified to carry out the obligations of the proposed contract.

- F. The successful Offeror must comply with the nondiscrimination provisions of Virginia Code Section 2.2-4311, which are incorporated herein by reference.
- G. The successful Offeror must comply with the drug-free workplace provisions of Virginia Code Section 2.2-4312, which are incorporated herein by reference.
- H. It is the policy of the City of Roanoke to maximize participation by minority and women owned business enterprises in all aspects of City contracting opportunities.
- I. The successful Offeror shall comply with all applicable City, State, and Federal laws, codes, provisions, and regulations.
- J. Providers of any outside services shall be subject to the same conditions and requirements as the successful Offeror in regards to law, code, or regulation compliance. The City reserves the right of approval for any subcontract work, including costs thereof.
- K. Ethics in Public Contracting. The provisions, requirements, and prohibitions as contained in Sections 2.2-4367 through 2.2-4377, of the Virginia Code, pertaining to bidders, offerors, contractors, and subcontractors are applicable to this RFP.
- L. Conflict of Interests Act. The provisions, requirements, and prohibitions as contained in Sections 2.2-3100, et seq., of the Virginia Code are applicable to this RFP.
- M. The procurement provisions of the Code of the City of Roanoke (1979), as amended, Sections 23.2-1, et seq., as well as the City Procurement Manual, apply to this RFP, unless specifically modified herein. The City's Procurement Manual can be reviewed at the Purchasing office.
- N. Insurance Requirements.
Successful Offeror, and any of its subcontractors, shall, at its sole expense, obtain and maintain during the life of the resulting Contract the insurance policies and/or bonds required. Any required insurance policies and/or bonds shall be effective prior to the beginning of any work or other performance by successful Offeror, or any of its subcontractors, under any resultant Contract. The policies and coverages required are those as may be referred to in the sample contract and/or the terms and conditions attached to this RFP.

SECTION 5. PROTESTS.

Any Offeror who wishes to protest or object to any award made or other decisions pursuant to this RFP may do so only in accordance with the provisions of Sections 2.2-4357, 4358, 4359, 4360, 4363, and 4364 of the Code of Virginia, and only if such is provided for in such Code section.

SECTION 6. SERVICES AND/OR ITEMS REQUIRED.

The following are the services and/or items that the successful Offeror will be required to provide to the City and should be addressed in each Offeror's proposal.

- A. **A description and/or listing of the services and/or items that the successful Offeror will be required to provide to the City under this RFP are those that are set forth below and/or referred to in any way in the sample contract, any terms and conditions, and/or any attachments to this RFP.**
- B. **Each Offeror should carefully read and review all such items and should address such items in its proposal. However, the final description of the services and/or items to be provided to the City under this RFP is subject to negotiations with the successful Offeror, and final approval by the City.**
- C. **Offeror, within five (5) business days after the execution date of the resultant Contract, shall post and maintain, for the life of the resultant contract a Materials and Labor Payment Bond (Attachment 5 of Contract) and a Performance Bond (Attachment 6 of Contract).**

SECTION 7. EVALUATION CRITERIA.

Offerors will be evaluated for selection on the basis of those most qualified to meet the requirements of this RFP. Major criteria to be considered in the evaluation may include, but shall not necessarily be limited to the items referred to above and those set forth below:

- A. The background, education and experience of the Offeror in providing similar services or items elsewhere, including the level of experience in working with municipalities and the quality of services performed or items supplied.
- B. Reasonableness/competitiveness of proposed fee and/or benefits to the City, although the City is not bound to select the Offeror who proposes the lowest fees or most benefits for services. The City reserves the right to negotiate fees and/or benefits to the City with the selected Offeror(s).
- C. The Offeror's responsiveness and compliance with the RFP requirements and conditions.
- D. Determination that the selected Offeror has no contractual relationships which would result in a conflict of interest with the City's contract.
- E. The Offeror's ability, capacity, and skill to fully and satisfactorily provide the services and/or items required in this RFP.
- F. The quality of Offeror's performance in comparable and/or similar projects.
- G. Whether the Offeror can provide the services and/or deliver the items in a prompt and timely fashion.

SECTION 8. SELECTION PROCESS.

- A. Pursuant to Section 2.2-4301 (3)(b) of the Code of Virginia, selection shall be made of two or more Offerors, if there be that many, deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation of factors included in this RFP, including price. Negotiations shall be conducted with the Offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Offeror so selected, the City (through the City Manager or City Manager's designee) shall

select the Offeror which, in his/her opinion, has made the best proposal, and may award the contract to that Offeror. The City may cancel this RFP or reject proposals at any time prior to an award, and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous. Should the City determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror.

- B. All proposals submitted in response to this RFP will be reviewed by the Purchasing Division or its designee for responsiveness prior to referral to a selection committee or person. A committee consisting of City personnel and/or others and/or an appropriate individual will then evaluate all responsive proposals, conduct the negotiations, and make recommendations to the City Manager, or the City Manager's designee, as appropriate. The award of a contract, if made, will be made to the Offeror whose proposal best furthers the interest of the City, as determined by the City Manager, or the City Manager's designee. The City reserves the right to reject any and all proposals, to waive any informality or irregularity in the proposals received, and to make the award to the Offeror whose proposal is deemed to be in the best interest of the City.
- C. Oral Presentation: Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the selection committee or person. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. Oral presentations are strictly at the option of the City and may or may not be conducted.

SECTION 9. COOPERATIVE PROCUREMENT.

The procurement of goods and/or services provided for in this Contract is being conducted pursuant to Virginia Code Section 2.2-4304. **Therefore, the Contractor agrees that it will contract with Roanoke County, City of Salem, Town of Vinton, or any other public agency or body in the Western Virginia Area within 60 miles of the City of Roanoke who so desires, to permit those public agencies or bodies to purchase such goods and/or services at contract prices, in accordance with the terms, conditions, and specifications of this procurement.** The Contractor shall deal directly with each public agency or body seeking to obtain any goods and/or services pursuant to this Contract or from this procurement and in accordance with Virginia Code Section 2.2-4304. The City of Roanoke shall not be responsible or liable for any costs, expenses, or any other matters of any type to either the Contractor or the public agency or body seeking to obtain any goods and/or services pursuant to this cooperative procurement provision.

SECTION 10. INFORMATION ON CONTRACT TO BE AWARDED.

The Sample Contract marked as Attachment A to RFP No. 08-10-02 contains terms and conditions that the City plans to include in any contract that may be awarded, but such terms and conditions may be changed, added to, deleted, or modified as may be agreed to between the City and the Offeror during negotiations. However, if an Offeror has any objections to any of the terms or conditions set forth in the Sample Contract or any

changes or additions thereto that the Offeror wants to discuss during negotiations, the Offeror should set forth such objections, changes, or additions in such Offeror's proposal submitted in response to this RFP. Otherwise, submission of a proposal by an Offeror will obligate such Offeror, if it is the successful Offeror, to enter into a contract containing the same or substantially similar terms and conditions as contained in such Sample Contract. Other terms and conditions, if necessary, will be negotiated with the successful Offeror.

END

ATTACHMENT A TO
RFP# 08-10-02
DIRECT DIGITAL CONTROL/
BUILDING AUTOMATION SYSTEM

CITY OF ROANOKE, VIRGINIA
CONTRACT

This Contract is dated _____, 20____, between the City of Roanoke, Virginia, a Virginia municipal corporation, hereinafter referred to as the "City" or "Owner", and _____ hereinafter referred to as the "Contractor, " **{NOTE: Use one of the following if applicable.}** {a _____ corporation.} {an Individual.} {a _____ Partnership.} {a _____ Limited Liability Company.}

WITNESSETH:

WHEREAS, Contractor has been awarded this Contract by the City for furnishing all equipment, materials, goods, labor, and services necessary for the installation of a Direct Digital Control System/Building Automation System and associated work in accordance with this Contract and the documents referred to herein, all such items or services also being referred to hereinafter as the Work or Project.

NOW, THEREFORE, THE CITY AND THE CONTRACTOR AGREE AS FOLLOWS:

SECTION 1. WORK TO BE PERFORMED AND DOCUMENTS.

For and in consideration of the money hereinafter specified to be paid by the City to the Contractor for the Work provided for in this Contract to be performed by the Contractor, the Contractor hereby covenants and agrees with the City to fully perform the services, provide any materials called for, construct, and complete the Work called for by this Contract in a good and workmanlike manner in accordance with this Contract and the documents referred to herein in order to fully and properly complete this Contract within the time stipulated, time being made of the essence for this Contract. It is also agreed by the parties hereto that the documents to this Contract consist of this Contract and the following documents listed below (Contract Documents), all of which are and constitute a part of this Contract as if attached hereto or set out in full herein, viz:

1. Insurance Requirements, Attachment 1
2. Description of Services-Scope of Work, Attachment 2
3. Contractor Response to RFP dated _____, Attachment 3
(to be provided after award)
4. Materials and Labor Bond, Attachment 4
5. Performance Bond, Attachment 5
6. Schematic Drawings, Exhibit 1

The parties agree that if there are any differences between the provisions of the above referenced documents, the provisions of the City documents and this Contract will control over any Contractor supplied documents or information.

SECTION 2. CONTRACT AMOUNT.

The City agrees to pay the Contractor for the Contractor's complete and satisfactory performance of the Work, in the manner and at the time set out in this Contract, **the Contract amount of \$_____**, as provided for in this Contract and that this Contract amount may be increased or decreased by additions and/or reductions in the Work as may be authorized and approved by the City, and the Contract amount may be decreased by the City's assessment of any damages against the Contractor, as may be provided for in this Contract or by law, and the City retains the right of setoff as to any amounts of money the Contractor may owe the City.

SECTION 3. TERM OF CONTRACT.

The term of this Contract will be for _____ from _____, through _____, at which time it will terminate, unless sooner terminated pursuant to the terms of the Contract or by law.

SECTION 4. TIME OF PERFORMANCE.

The Contractor shall commence the Work to be performed under this Contract on **such date as is** established and fixed for such commencement by written notice (which may be initially given verbally in an emergency situation) to proceed given by the City representative to the Contractor, and the Contractor covenants and agrees to fully construct, perform, and complete the Work and/or provide the goods called for by this Contract **within _____ consecutive calendar days after the date of commencement fixed and** established by such notice. The Contractor further agrees that the Work shall be started promptly upon receipt of such notice and shall be prosecuted regularly, diligently, and uninterruptedly at a rate of progress that will ensure full completion thereof in the shortest length of time consistent with the Contract Documents and that Contractor will cooperate and coordinate with the other City contractors or employees doing other work or using the area where Contractor is working.

SECTION 5. PAYMENT.

The City agrees to pay Contractor for the Contractor's complete and satisfactory performance of the Work, in the manner and at the time set out in this Contract, a total lump sum amount of \$_____. The City retains the right to setoff as to any amounts of money Contractor may owe the City. A written progress report may be requested by the City to accompany payment request and, if so, such progress report shall detail the work completed. Also, sufficient documentation of all costs, expenses, materials supplied, and/or hours worked may be requested by the City and, if so, may be required prior to the processing of any such request for payment. Payment will only be made for work actually performed, services actually supplied, and/or materials or goods furnished to the City, all of which need to be approved and accepted by the City prior to such payment, unless otherwise provided for in the Contract documents. Once a payment

request has been received by the City, the City will process such payment request. If there are any objections or problems with the payment request, the City will notify the Contractor of such matters. If the payment request is approved and accepted by the City, payment will be made by the City to the Contractor not more than 30 days after such request has been approved.

SECTION 6. PAYMENTS TO OTHERS BY CONTRACTOR.

The Contractor agrees that Contractor will comply with the requirements of Section 2.2-4354 of the Virginia Code regarding Contractor's payment to other entities and the Contractor will take one of the two actions permitted therein within 7 days after receipt of amounts paid to Contractor by the City. Contractor further agrees that the Contractor shall indemnify and hold the City harmless for any lawful claims resulting from the failure of the Contractor to make prompt payments to all persons supplying the Contractor equipment, labor, tools, or material in connection with the work provided for in the Contract. In the event of such claims, the City may, in the City's sole discretion, after providing written notice to the Contractor, withhold from any payment request or final payment the unpaid sum of money deemed sufficient to pay all appropriate claims and associated costs in connection with the Contract and make such payment, if the City determines it to be appropriate to do so.

SECTION 7. HOLD HARMLESS AND INDEMNITY.

Contractor shall indemnify and hold harmless the City and its officers, agents, and employees against any and all liability, losses, damages, claims, causes of action, suits of any nature, costs, and expenses, including reasonable attorney's fees, resulting from or arising out of Contractor's or its employees, agents, or subcontractors actions, activities, or omissions, negligent or otherwise, on or near City's property or arising in any way out of or resulting from any of the work or items to be provided under this Contract, and this includes, without limitation, any fines or penalties, violations of federal, state, or local laws or regulations, personal injury, wrongful death, or property damage claims or suits. Contractor agrees to and shall protect, indemnify, and hold harmless all the parties referred to above from any and all demands for fees, claims, suits, actions, causes of action, settlement or judgments based on the alleged or actual infringement or violation of any copyright, trademark, patent, invention, article, arrangement, or other apparatus that may be used in the performance of this Contract.

SECTION 8. COMPLIANCE WITH LAWS AND REGULATIONS.

Contractor agrees to and will comply with all applicable federal, state, and local laws, ordinances, and regulations, including all applicable licensing requirements.

SECTION 9. INDEPENDENT CONTRACTOR.

The relationship between Contractor and the City is a contractual relationship. It is not intended in any way to create a legal agency or employment relationship. Contractor shall, at all times, maintain its status as an independent contractor and both parties acknowledge that neither is an agent, partner or employee of the other for any purpose. Contractor shall be responsible for causing all required insurance, workers'

compensation (regardless of number of employees) and unemployment insurance to be provided for all of its employees and subcontractors. Contractor will be responsible for all actions of any of its subcontractors, and that they are properly licensed.

SECTION 10. REPORTS, RECORDS, AND AUDIT.

Contractor agrees to maintain all books, records and other documents relating to this Contract for a period of five (5) years after the end of each fiscal year included in this Contract. The City, its authorized employees, agents, representatives, and/or state auditors shall have full access to and the right to examine, copy, and/or audit any of such materials during such period, upon prior written notice to Contractor.

SECTION 11. INSURANCE REQUIREMENTS.

Contractor and any of its subcontractors involved in this Contract shall maintain the insurance coverages set forth in Attachment 1 to this Contract and provide the proof of such insurance coverage as called for in Attachment 1, including workers' compensation coverage regardless of the number of Contractor's employees. Such insurance coverage shall be obtained at the Contractor's sole expense and maintained during the life of the Contract and shall be effective prior to the beginning of any work or other performance by the Contractor under this Contract. Additional insured endorsements, if required, must be received by the City within 30 days of the execution of this Contract or as otherwise required by the City's Risk Manager.

SECTION 12. DEFAULT.

If Contractor refuses or fails to perform any of the terms of this Contract, including poor services, work or materials, the City may, by written notice to Contractor, terminate this Contract in whole or in part. In addition to any right to terminate, the City may enforce any remedy available at law or in equity in connection with such default, and Contractor shall be liable for any damages to the City resulting from Contractor's default. The City further reserves the right to immediately obtain such work or services from other entities in the event of Contractor's default.

SECTION 13. NONWAIVER.

Contractor agrees that the City's waiver or failure to enforce or require performance of any term or condition of this Contract or the City's waiver of any particular breach of this Contract by the Contractor extends to that instance only. Such waiver or failure is not and shall not be a waiver of any of the terms or conditions of this Contract or a waiver of any other breaches of the Contract by the Contractor and does not bar the City from requiring the Contractor to comply with all the terms and conditions of the Contract and does not bar the City from asserting any and all rights and/or remedies it has or might have against the Contractor under this Contract or by law.

SECTION 14. FORUM SELECTION AND CHOICE OF LAW.

By virtue of entering into this Contract, Contractor submits itself to a court of competent jurisdiction in the City of Roanoke, Virginia, and further agrees that this Contract is

controlled by the laws of the Commonwealth of Virginia and that all claims, disputes, and other matters shall only be decided by such court according to the laws of the Commonwealth of Virginia.

SECTION 15. SEVERABILITY.

If any provision of this Contract, or the application of any provision hereof to a particular entity or circumstance, shall be held to be invalid or unenforceable by a court of competent jurisdiction, the remaining provisions of this Contract shall not be affected and all other terms and conditions of this Contract shall be valid and enforceable to the fullest extent permitted by law.

SECTION 16. NONDISCRIMINATION.

- A. During the performance of this Contract, Contractor agrees as follows:
 - i. Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - ii. Contractor in all solicitations or advertisements for employees placed by or on behalf of Contractor will state that Contractor is an equal opportunity employer.
 - iii. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- B. Contractor will include the provisions of the foregoing Section A (i, ii, and iii) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

SECTION 17. DRUG-FREE WORKPLACE.

- A. During the performance of this Contract, Contractor agrees to (i) provide a drug-free workplace for Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of Contractor that Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- B. For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

SECTION 18. FAITH BASED ORGANIZATIONS.

Pursuant to Virginia Code Section 2.2-4343.1, be advised that the City does not discriminate against faith-based organizations.

SECTION 19. ASSIGNMENT.

Contractor may not assign or transfer this Contract in whole or in part except with the prior written consent of the City, which consent shall not be unreasonably withheld. If consent to assign is given, no such assignment shall in any way release or relieve the Contractor from any of the covenants or undertakings contained in this Contract and the Contractor shall remain liable for the Contract during the entire term thereof.

SECTION 20. CONTRACTUAL DISPUTES.

Contractual claims, whether for money or for other relief, shall be submitted, in writing, no later than sixty (60) days after the earlier of the final payment or termination of the Contract or notice from the City to the Contractor that the City disputes the amount of Contractor's request for final payment. However, written notice of the Contractor's intention to file such claim must be given at the time of the occurrence or beginning of the work upon which the claim is based. Such notice is a condition precedent to the assertion of any such claim by the Contractor. A written decision upon any such claims will be made by the City Manager or the City Manager's designee (hereafter City Manager) within thirty (30) days after submittal of the claim and any practically available additional supporting evidence required by the City Manager. The Contractor may not institute legal action prior to receipt of the City's decision on the claim unless the City Manager fails to render such decision within 120 days from submittal of Contractor's claim. The decision of the City Manager shall be final and conclusive unless the Contractor within six (6) months of the date of the final decision on a claim or from expiration of the 120 day time limit, whichever occurs first, initiates legal action as provided in Section 2.2 - 4364, of the Va. Code. Failure of the City to render a decision within said 120 days shall not result in the Contractor being awarded the relief claimed nor shall it result in any other relief or penalty. The sole result of the City's failure to render a decision within said 120 days shall be Contractor's right to immediately institute legal action. No administrative appeals procedure pursuant to Section 2.2 - 4365 of the Va. Code has been established for contractual claims under this Contract.

SECTION 21. SUCCESSORS AND ASSIGNS.

The terms, conditions, provisions, and undertakings of this Contract shall be binding upon and inure to the benefit of each of the parties hereto and their respective successors and assigns.

SECTION 22. HEADINGS.

The captions and headings in this Contract are for convenience and reference purposes only and shall not affect in any way the meaning and interpretation of this Contract.

SECTION 23. COUNTERPART COPIES.

This Contract may be executed in any number of counterpart copies, each of which shall be deemed an original, but all of which together shall constitute a single instrument.

SECTION 24. AUTHORITY TO SIGN.

The persons who have executed this Contract represent and warrant that they are duly authorized to execute this Contract on behalf of the party for whom they are signing.

SECTION 25. NOTICES.

All notices must be given in writing and shall be validly given if sent by certified mail, return receipt requested, or by a nationally recognized overnight courier, with a receipt, addressed as follows (or any other address that the party to be notified may have designated to the sender by like notice):

To City: City of Roanoke
(Dept) _____
Attn: _____
(Full Address) _____

Facsimile: (540) _____

Copy to: City of Roanoke
Purchasing Division
Attn: Purchasing Manager
Noel C. Taylor Municipal Building Room 353
Roanoke, Virginia 24011

Facsimile: (540) 853.1513

If to Contractor: _____

Facsimile: _____

SECTION 26. PROTECTING PERSONS AND PROPERTY.

The Contractor expressly undertakes both directly and through its subcontractors, to take every reasonable precaution at all times for the protection of all persons and property at the location of the Work or in the vicinity of the Work or that may be affected

by the Contractor's operation in connection with the Work. The Contractor will maintain adequate protection of all Contractor's Work to prevent damage to it and shall protect the City's property from any injury or loss arising in connection with this Contract and to protect adjacent property to prevent any damage to it or loss of use and enjoyment by its owners. Contractor agrees to be responsible for the entire Work and will be liable for all damages to the Work, including, but not limited to, damages to any property of the City or to any property in the vicinity or adjacent to the Work. All damage with respect to the Work caused by vandalism, weather, or any other cause, other than resulting from the sole negligence of the City, shall be the responsibility of the Contractor. Furthermore, any damage to concrete curbs, gutters, sidewalks, or any existing facility, whether owned by the City or others that may occur during the Work shall be repaired or replaced by the Contractor, at Contractor's sole expense, as directed by and to the satisfaction of the City.

SECTION 27. WARRANTY OF MATERIAL AND WORKMANSHIP.

- A. The Contractor warrants that, unless otherwise specified, all material and equipment used in the work under this Contract shall be new, in first class condition, and in accordance with the Contract documents. The Contractor further warrants that all workmanship shall be of the highest quality in accordance with the Contract and shall be performed by persons qualified in their respective trades. This warranty of material and workmanship is separate and independent from and in addition to any of the Contractor's other guarantees or obligations under this Contract, or that may arise by law. Contractor agrees that Contractor shall repair or replace, at Contractor's sole expense, and to the satisfaction of the City, any work, material, equipment, or part of the Work that is found by the City to be defective or not in accordance with the terms of this Contract.
- B. All devices provided by Contractor shall be warranted to be free from defect in workmanship and material for a period of at least one year, from the date of completion of work. Completion of work is defined as the date when installer has obtained two (2) signatures, one from the City's Facilities Superintendent and one from the Facilities HVAC Supervisor. Required signatures indicate that all inspections and operational scenarios have been conducted and the system(s) are operational to the satisfaction of the City's expectation in accordance with the terms and condition of this Contract. Factory warranty service shall be available within 50 miles or one (1) hour drive of the project site at all times during the warranty period.
- C. Emergency Service During Warranty Period – All emergency service will be provided twenty-four (24) hours a day, seven (7) days a week to minimize downtime and inconvenience. This time includes weekends and legal holidays. All major systems must be back on line and operating within eight (8) hours within reason of notification of systems failure.
- D. Contract should provide emergency services to include but not limited to:
 - a. All labor, overtime, travel costs, parts, supplies, and any other expenses incurred and expended on such a call and will be included as part of the warranty.

- b. Capabilities to be on sight within two (2) hours after notification of the emergency situation.
- c. Two (2) local or toll free phone numbers. It is the City's desire that such phones be answered by a person under direct employment of the selected firm, not an answering service. Responder must be trained on HVAC control systems and their options.
- d. If an emergency service call is requested, and inspection does not reveal any defect in the system, and equipment for which the Contractor is responsible, compensation will be made to the Contractor using the regular rates prevailing for such service. Regular rates shall be researched and determined by City.

SECTION 28. SUSPENSION OR TERMINATION OF CONTRACT BY CITY.

- A. The City, at any time, may order Contractor to immediately stop work on this Contract, and/or by seven days written notice may terminate this Contract, with or without cause, in whole or in part, at any time. Upon receipt of such notice, the Contractor shall immediately discontinue all services affected (unless the notice directs otherwise), and deliver to the City all data (including electronic data), drawings, specifications, reports, project deliverables, estimates, summaries, and such other information and materials as may have been accumulated by the Contractor in performing this Contract whether completed or in process (unless otherwise directed by the notice).
 - 1. If the termination or stop work order is due to the failure of the Contractor to fulfill any of its Contract obligations, the City may take over the Work and prosecute the same to completion by contract or otherwise. In such case, the Contractor shall be liable to the City for any damages allowed by law, and upon demand of City shall promptly pay the same to City.
 - 2. Should the Contract be terminated or work is stopped not due in any way to the fault of the Contractor, the Contractor shall only be entitled to compensation for services actually performed and materials actually supplied prior to notice of termination or to stop work and which are approved by the City and any applicable federal or state approving agency. No profit, overhead, or any other costs of any type are allowed after the date of such notice of termination or stop work order.
 - 3. The rights and remedies of the City provided in this Section are in addition to any other rights and remedies provided by law or under this Contract and City may pursue any and all such rights and remedies against Contractor as it deems appropriate.

SECTION 29. ETHICS IN PUBLIC CONTRACTING.

The provisions, requirements, and prohibitions as contained in Sections 2.2-4367 through 2.2-4377, of the Va. Code, pertaining to bidders, offerors, contractors, and subcontractors are applicable to this Contract.

SECTION 30. ENTIRE CONTRACT.

This Contract constitutes the complete understanding between the parties. This Contract may be modified only by written agreement properly executed by the parties.

IN WITNESS WHEREOF, the parties hereto have signed this Contract by their authorized representatives.

WITNESS:

(Full Legal Name of Contractor)

By _____

Printed Name and Title

Printed Name and Title

(SEAL)

CITY OF ROANOKE, VIRGINIA

WITNESS:

Name/Title

By _____
(City Manager or authorized City representative)

Printed Name and Title

Printed Name and Title

Approved as to form:

Appropriation and Funds Required
for this Contract Certified:

City Attorney

Director of Finance

Approved as to Execution:

Account # _____

City Attorney

**ATTACHMENT 1 TO CONTRACT FOR
DIRECT DIGITAL CONTROL SYSTEMS/
BUILDING AUTOMATION SYSTEMS**

Reference: RFP# 08-10-02

CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

Neither the Contractor nor any subcontractor shall commence work under this Contract until the Contractor has obtained all the insurance policies required under this Section and such insurance has been approved by the City.

1. The following **minimum insurance requirements** apply:

a. Workers' Compensation and Employers' Liability:

The Contractor shall obtain and maintain the following limits:

Workers' Compensation: Statutory

Employers' Liability: \$100,000 bodily injury by
accident each occurrence

\$500,000 bodily injury by disease (policy limit)

\$100,000 bodily injury by disease each employee

b. Commercial General Liability:

Coverage is to be written on an "occurrence" basis, \$1,000,000 minimum limit, and such coverage shall include:

- Products/Completed Operations
- Personal Injury and Advertising Injury
- Bodily Injury

c. Automobile Liability:

Limits for vehicles owned, non-owned or hired shall not be less than:

- \$1,000,000 Bodily Injury and Property Damage combined single limit

2. **Proof of Insurance Coverage:** The policies of insurance shall be purchased from a reputable insurer licensed to do business in Virginia and maintained for the life of the Contract by the Contractor. Other insurance requirements include the following:

a. The Contractor shall furnish the City with the required certificates of insurance showing the insurer, type of insurance, policy number, policy term, and limits.

b. The required certificates of insurance shall contain substantially the following statement: "The insurance covered by this certificate shall not be canceled or materially altered except after a thirty (30) day written notice has been received by the Risk Management Officer for the City of Roanoke."

c. The required certificates of insurance shall name the City of Roanoke, its officers, agents, volunteers, and employees as additional insureds except with regard to the workers' compensation and employers' liability coverages which shall contain a waiver of subrogation in favor of the City. Additional insured and waiver endorsements shall be received by Roanoke Risk Management from the insurer within 30 days of beginning of this contract.

**ATTACHMENT 2 TO CONTRACT FOR
DIRECT DIGITAL CONTROL SYSTEMS/
BUILDING AUTOMATION SYSTEMS**

Reference: RFP# 08-10-02

**DESCRIPTION OF SERVICES TO BE PERFORMED BY CONTRACTOR FOR
CONTRACT BETWEEN THE CITY OF ROANOKE AND _____,
INC. DATED _____.**

The following is a description of the work, services and/or materials (Work) to be provided by the Contractor to the City: (Note: the term “Contractor” refers to “Successful Offeror” for the purposes of the RFP in reference).

- A. Contractor will work with the City of Roanoke Facilities Management Department in an effort to obtain Direct Digital Control Systems for two (2) City buildings, which includes:
1. Noel C. Taylor Municipal Building North – 215 Campbell Ave SW
 2. Noel C. Taylor Municipal Building South – 215 Church Ave. SW
 3. City of Roanoke Courthouse – 315 Church Ave SW
- B. Contractor Requirements:
1. Contractor shall provide and install a new nationally known brand, Direct Digital control System/Building Automation System (DDC/BAS). Such systems will provide control of the City’s current HVAC Systems within the two locations. It is the City’s desire that all mechanical system control points of the users interface be on standard PCs that does not require the purchase of any proprietary software from the DDC/BAS manufacturer for use as a building operations terminal. The primary point of interfaces on these PCs will be a standard web browser. Coordination with the Contractor, the City’s Facilities Management Division and IT Department is necessary for the project success.
 2. Contractor shall have a branch facility within a 50 miles radius of the job site supplying complete maintenance and support services needed, twenty-four (24) hours a day, seven (7) day a week.
 3. The DDC/BAS must consist of products from manufacturers regularly engaged in the production of Building Management Systems, and shall be the manufacturer’s latest generational design at the time of work.
 4. All services provided shall be performed by DDC/BAS qualified and factory trained service personnel.
 5. The DDC/BAS shall include a basic graphics package to include chillers, boilers, roof or pad mounted self contained/package units and air handlers.

6. Contractor shall provide electrical products that have been tested, listed and labeled by Underwriters Laboratory (UL) and comply with National electrical Manufacturers Association (NEMA) standards.
7. All electrical installation associated with installation of the DDC/BAS shall comply with the National Electrical Code (NEC) and per applicable state and local codes.
8. All power wiring shall be in Electrical Metallic Tubing (EMT) except for twenty-four (24) volt control wiring.
9. Contractor shall comply with National Fire Protection Agency (NFPA) 90A "Standard of the Installation of Air Conditioning and Ventilating Systems" where applicable to materials, controls and control sequences.
10. Contractor shall provide classroom and onsite training, once the DDC/BAS has been successfully installed, according to the definition of successful installation, and prior to turnover of the DDS/BAS to the City controls personnel to operate the systems.
11. Training provided for the City must enable them to proficiently operate the system; create, modify and delete programming; add, remove and modify physical points for the system; add additional field controllers when required. Training instructors shall be factory-trained and skilled in presenting material. The classroom training shall be "hands-on" using a network of working controllers to represent the installed hardware at City site On-site training shall be conducted on the actual installed DDC/BAS components at City site locations.

C. General Scope

Contractor shall be capable of providing the City with a DDC/BAS which meets the general descriptions as listed below.

1. Contractor shall provide automatic temperature control products as required or indicated, consistent with DDC/BAS systems.
2. DDC/BAS shall use an open architecture and fully support a multi-vendor environment. To accomplish this effectively, it is the City desire that the DDC/BMS systems be limited to a Bacnet type communication protocol standard and posses the ability to integrate with a wide variety of third-party devices and application via additional protocols and through the latest software standards.
3. DDC/BAS shall include all necessary hardware, software, and network communication abilities to provide monitoring, control and alarm functions, to permit unit-by-unit operation. The central computer should provide scheduling, trending, historical storage, and software reset capabilities to the outboard controllers, as well as transfer of monitoring, control and alarm data and messages.

4. Sequence of operation drawings, legends and a detailed plain language description is required in binder form for both locations and for each separate control system within the buildings.
5. DDC/BAS shall be capable of accepting building drawings in Auto Cad format or demonstrate ease of converting from Auto Cad format to format utilized by DDC/BAS systems.
6. Offeror shall provide a graphical computer interface for all buildings outfitted with DDC/BAS systems.
7. Offeror shall provide all software needed to make program changes to the system and to include field controllers. Offeror should also provide pre-programmed access codes.
8. Contractor shall supply three (3) additional Network Controllers. These controllers are intended to be used by the City to add other buildings to the network in the future. Network Controllers should use standard web interface to communicate with system.
9. City shall have software rights, training and ability to provide its own graphics and controls to a future building or a future system without requiring the services of the DDC/BAS provider to supply this information.
10. Any software revisions during this installation period and the following one year warranty, after installation, will be provided and installed and training provided as part of the original awarded price.

D. Completion Scope

Upon successful installation of new DDC/BAS, Contractor shall schedule a thorough and comprehensive inspection with the City personnel who will assume responsibility for the maintenance and repair of DDC/BAS, to inspect all controls, operators, mainframes, electrical integrity, controller and overall operation. System should pass all external and internal inspections in order to be deemed complete by the City.