Introduced———	
Public Hearing —	
Council Action —	
Executive Action	
Effective Date —	

County Council Of Howard County, Maryland

2014 Legislative Session Legislative Day No. 11

Bill No. 52 -2014

Introduced by: The Chairperson at the request of the County Executive

AN ACT pursuant to Section 612 of the Howard County Charter, approving a multi-year Energy Performance Contract between Howard County, Maryland and Energy Systems Group, LLC where Energy Systems Group will develop and implement comprehensive energy efficiency guaranteed savings program at certain County facilities and energy using systems.

Introduced and read first time, 2014. Ordered poste	ed and hearing scheduled.
By order_	Sheila Tolliver, Administrator
	Sheila Tolliver, Administrator
Having been posted and notice of time & place of hearing & title of Bill having time at a public hearing on	g been published according to Charter, the Bill was read for a second
By order _	Sheila Tolliver, Administrator
This Bill was read the third time on, 2014 and Passed, Pass	sed with amendments, Failed
By order	
• · · · · -	Sheila Tolliver, Administrator
Sealed with the County Seal and presented to the County Executive for approve	val thisday of, 2014 at a.m./p.m.
By order _	Sheila Tolliver, Administrator
Approved/Vetoed by the County Executive, 2014	
	Ken Ulman. County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; Underlining indicates material added by amendment

1	WHEREAS, Howard County, Maryland (the "County") has determined where energy
2	cost savings may be realized in County facilities and the County desires to install, construct,
3	maintain and manage certain energy conservation measures; and
4	
5	WHEREAS, Energy Systems Group, a limited liability company, ("ESG") is engaged in
6	the business of providing energy audits, performing the design, construction and installation of
7	equipment, and managing certain performance measures that will result in energy cost savings;
8	and
9	
10	WHEREAS, the energy cost savings may, in-turn, be used to finance the purchase,
11	design and construction of certain cost saving equipment; and
12	
13	WHEREAS, ESG previously performed energy saving services on seven (7) county
14	buildings that produced and exceeded the projected savings; and
15	
16	WHEREAS, an analysis of 68 county buildings projects certain cost savings and the
17	County now wishes to enter into an Energy Performance Contract (the "Agreement"), the form of
18	which is attached as Exhibit A, for ESG to provide project management, energy audit,
19	architectural & engineering services, construction, construction inspection and management,
20	provision of certain equipment, and measurement & verification as well as maintenance services
21	related to all building systems, building automation, security, and fire safety including software
22	installation & updates to the County in order to develop and implement comprehensive energy
23	efficiency and guaranteed savings programs for any of the 68 County-owned or managed assets,
24	as identified in the Agreement; and
25	
26	WHEREAS, the County and ESG wish to enter into the Agreement for a term of 15
27	years that will extend beyond the current fiscal year; and
28	
29	WHEREAS, the Agreement requires the payment by the County of funds from an

appropriation in a later fiscal year and therefore requires County Council approval as a multi-year 1 agreement pursuant to Section 612 of the Howard County Charter. 2 3 4 NOW, THEREFORE, 5 Section 1. Be It Enacted by the County Council of Howard County, Maryland that in 6 7 accordance with Section 612 of the Howard County Charter, it approves the terms of the Energy 8 Performance Contract between Howard County and Energy System Groups, which shall be in 9 substantially the same form as Exhibit A attached to this Act. 10 Section 2. And Be It Further Enacted by the County Council of Howard County, Maryland that 11 12 the County Executive is hereby authorized to execute and deliver the Energy Performance Contract for such term in the name of and on behalf of the County. 13 14 Section 3. And Be It Further Enacted by the County Council of Howard County, Maryland that 15 this Act shall be effective immediately upon its enactment. 16

EXHIBIT A

HOWARD COUNTY, MARYLAND ENERGY PERFORMANCE CONTRACT AGREEMENT NO. PA 24-2015

THIS AGREEMENT ("Agreement/ Contract"), is made this ___day of ____in the year 2014, by and between HOWARD COUNTY, MARYLAND, ("the County") and ENERGY SYSTEMS GROUP, LLC ("Contractor"), 1099 Winterson Road, Suite 110, Linthicum, MD 21090 ("the Contractor").

RECITALS

WHEREAS, this Agreement is being made for the Contractor to provide project management, energy audit, architectural & engineering services, construction, construction inspection and management, provision of certain equipment, and measurement & verification as well as maintenance services related to all building systems, building automation, security, and fire safety including software installation & updates to the County in order to develop and implement comprehensive energy efficiency and guaranteed savings programs for any of the sixty-eight (68) County-owned or managed assets as identified in the Scope of Work; and.

WHEREAS, this Agreement will fulfill the provision that a formal contract should be executed by and between the Contractor and the County evidencing the terms of the award.

NOW THEREFORE, in consideration of the mutual promises and covenants of the parties and payments by the County to the Contractor as agreed to below, the parties agree as follows:

AGREEMENTS

- 1. The Contract is subject to all the conditions, covenants, stipulations, terms and provisions contained in the Contract Documents as described in Paragraph 6 of this Agreement.
- 2. The Contractor covenants and agrees with the County that it will well and faithfully furnish all of the materials, perform all of the work, provide the guarantees and savings and do everything required by the Contract Documents, all of which are made a part hereof and are referred to herein as the "Contract" at and for a sum equal to the aggregate cost of the work, labor, equipment, materials, and supplies done and furnished at the prices and rates respectively named in Attachment A. The Contractor further covenants and agrees that it will well and faithfully comply with and perform each and every obligation imposed upon it by the Contract Documents or the terms of the award.
- 3. The Contractor covenants and agrees that its obligations pursuant to the Contract Documents include but are not limited to the furnishing of all material, labor, equipment, supplies, plant, tools, and all other services, facilities and expenses necessary for the full operational performance and completion of the requirements of the Contract Documents.
- 4. The County agrees that it will pay the Contractor, when due and payable pursuant to the terms of the Contract Documents and the award, the sums set forth in Attachment A.

- 5. The Contractor (if a corporation) hereby certifies that it is a Maryland corporation in good standing or a foreign corporation registered to do business in Maryland with the Maryland State Department of Assessments and Taxation.
- 6. The Contractor and County agree that the following enumerated documents, collectively referred to as Contract Documents, are all essential documents of this Agreement and are incorporated herein and made a part hereof as if fully set forth:
 - a. This Agreement
 - b. All engineering drawings and design documents in supporting Contractor's Phase II Proposal from both ESG and ESG's subcontractors.
 - c. The Contractor's Phase II Proposal Dated May 7, 2014, with Section I Financials, *Energy Performance Contract Cash Flow* (Howard County Government EPC-2 (revised June 16, 2014)) (attached).

d.	Performance Bond	
.	Payment Bond	

f. Guarantee Energy Savings Bond – to be provided upon final completion and acceptance of project by the County

In the event of a conflict between or among provisions of the Contract Documents the more specific term shall control the general and any documents with remaining unresolved conflict shall be controlling in the order in which they are listed above.

7. Time of Completion for Specified Tasks

The tasks identified in the Contractor's Phase II Proposal Dated May 7, 2014, Scope of Work, Section II (the "Phase II Proposal"), shall be commenced upon issuance of a Purchase Order and Notice to Proceed and shall be completed within 18 months of the issuance of the Notice to Proceed. Written Notice to Proceed will be issued after approval of all submittals. It is understood and agreed, that inclusion of Phase II tasks under this Agreement is subject to approval by the Howard County Council of the required funds in the FY2015 Capital budget.

8. Special Provisions

- a. <u>Acknowledgment of Election of County Financing</u>. By executing this Agreement, Contractor acknowledges that the County has elected to finance the energy improvements through a County's Energy Performance Master Lease Purchase Agreement. Contractor further acknowledges that the County's election of tax exempt financing places limitations on the private business use of such funds and the property financed with such funds.
- Management Services. "Management Services" are all monitoring and verification of energy savings (as defined in Section III, Measurement and Verification, of the Phase II Proposal); Preventive Maintenance (PM) and Training (as defined in Sections IV of the Phase II Proposal), and the securing of a Guarantee Energy Savings Bond, defined more

particularly below. Payment for Management Services, consisting of an annual fee invoiced and payable annually, except for PM services which will be invoiced and payable quarterly, shall be based upon the cash flow analysis of the Phase II Proposal and will include M&V, PM, and Guarantee Energy Savings Bond. The County will self-perform maintenance services in those buildings not included in the identified scope of Section IV of the proposal.

- c. <u>Severability of Management Services and Guarantee</u>. The parties agree that the County may terminate the Management Services (and resultant fee) at any time, without violating the terms of the Guarantee, by providing reasonable notice, in writing, to the Contractor and paying for all such services rendered by Contractor before the termination. If the County terminates the Management Services, however, then it acknowledges that Contractor will no longer necessarily have current access to the data it would need to prove the extent of the savings realized by County after the termination.

 Therefore, in the event of any future claim by the County that Contractor has not delivered the guaranteed savings the County and Contractor agree to share information relevant to the claim to the same extent that information would be available in any civil suit. d. <u>Agreement on Guarantee of Annual Savings</u>.
 - The Contractor warrants and guarantees that over the term of the Guarantee the County will realize guaranteed energy savings of \$14,639,550 (Guaranteed Annual Energy Savings cumulatively) and overall savings \$19,810,855, inclusive of the Guaranteed Annual Energy Savings, (Total Program Budgets) as set forth in the Contractor's Phase II Proposal Dated May 7, 2014, with Section I Financials, *Energy Performance Contract Cash Flow* (Howard County Government EPC-2 (revised June 16, 2014)) (attached) and other Phase II Proposal documents.
 - 2) The first year price for Contractor's Guaranteed Energy Savings Bond, guaranteeing the County will realize the savings set forth in the Guaranteed Savings Summary section of Contractor's Phase II Proposal, of \$10,676. The surety for the Guaranteed Energy Savings Bond will be a financial institution approved by the County. This fee is for the first year only as indicated on the Contractor's Phase II Proposal Dated May 7, 2014, with Section I Financials, Energy Performance Contract Cash Flow (Howard County Government EPC-2 (revised June 16, 2014)) (attached). The County may, at its option, elect to renew the Bond from year to year thereafter by giving Contractor written notice of renewal, but the premium charged by the surety for the renewal bond is not included within the financial or cash flow analysis of this project. Any renewal premium would be invoiced and payable The Guaranteed Energy Savings Bond shall be provided annually in advance. within 30 days of the final completion certificate date.

Contractor will provide Measurement and Verification (M&V) services for the first year after all ECMs have been installed and certified as fully functional for a lump sum fee of \$44,482. The County may, at its option, elect to extend the M&V services by providing written notice of extension no later than 30 days after receipt of the M&V report for the most recently concluded year. The renewal M&V fee would be 103% of the prior year's M&V fee and is not included within the financial or cash flow analysis of this project. Once the M&V service is allowed to lapse it can no longer be renewed.

3) Unless otherwise terminated sooner in accordance with the terms of the Contract Documents, this Contract shall remain in force and effect for the period described in the

Phase II Proposal, provided that in any event this Contract shall automatically terminate on the date which is fifteen (15) years from the first date on which County obtains tax- exempt financing to finance the capital portion (design and construction) of this Contract.

- 4) County acknowledges that the Payment and Performance Bonds required hereunder shall expire upon final acceptance of all Energy Conservation Measures required under this Contract, including any applicable two year warranty period, Notwithstanding any provision to the contrary, the Performance Bond shall not extend to, and shall not provide any payments or provide any coverage for, any energy guarantee, guaranteed savings or guarantee of savings of any type. This surety will be provided by an insurance company, which is licensed in the State of Maryland by the Maryland Insurance Commission. The bonds shall be provided prior to issuance of the purchase order.
- The Contractor shall provide the County with a Guaranteed Savings Reconciliation Report County after the one-year anniversary of the Final Completion Certificate and after the end of each subsequent annual Guaranty Period within 120 days after the year's end. The County shall provide the Contractor with access to relevant records relating to such Energy and Operations and Maintenance Costs. The County shall permit access to any energy billing information, maintenance records, drawings, or other data reasonably necessary to generate the said report. Data and calculations utilized by Contractor in the preparation of its Guaranteed Savings Reconciliation Report will be made available to the County, along with such explanations and clarifications as the County may reasonably request.
- 6) Upon receipt of the Reconciliation Report, County shall have forty-five (45) days to review the Guaranteed Savings Reconciliation Report and provide written notice to Contractor of rejection of the Guaranteed Savings Reconciliation Report for that Guaranty Year. Such written notice shall explain, with reasonable particularity, the reasons why the County does not accept the report. If the County fails to provide written notice of rejection within forty-five (45) days of the receipt of the Guaranteed Savings Reconciliation Report, it shall be deemed accepted.
- Whenever either party shall be prevented from or delayed in carrying out any obligation of such party hereunder (other than for the payment of money) by reason of any riot, strike, work stoppage, embargo, quarantine, accident, fire, flood or other similar or dissimilar cause beyond the reasonable control of such party, the performance of such obligation by such party shall be excused to the extent of such prevention or delay, provided that such party immediately begins to take in good faith whatever reasonable steps are available to ameliorate, cure, and mitigate the impact of the difficulties created by the cause beyond the party's control.

8) INTENTIONALLY DELETED

e. Liquidated Damages. The amount of liquidated damages for this contract shall be \$1,000.00 per calendar day if the Time of Completion requirements, stipulated in Section 7.a. above, are not met.

9. <u>County Ownership of Goods</u>

All finished or unfinished work, reports, or goods that are the subject of this Agreement; including any licenses or consents acquired by the Contractor for performance hereunder, shall be and shall remain the property of the County.

10. Ethics

- 10.1 The Contractor certifies that the officer of the corporation who is executing this Agreement has read and understands Attachment C, entitled Howard County Charter and Code References to Ethics, which contains the provisions of Section 901(a) of the Howard County Charter dealing with conflicts of interest and Section 22.204 of the Howard County Code dealing with conflicts of interest.
- 10.2 The Contractor certifies that he/she has (1) not been a party to an agreement to bid a fixed or uniform price; (2) not offered nor will offer any gratuity to any county official or employee; and (3) not violated any of the fair employment provisions of Code Sec. 4.119 Ethics and Fair Employment Practices detailed in Attachment C.

11. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland. As to the Contractor, this Agreement is intended to be a contract under seal and a specialty.

12. <u>Termination</u>

- 12.1 Termination for Convenience: The County may terminate this Agreement, in whole or in part, whenever the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination including unavoidable material or equipment purchase commitments and return or restocking fees incurred as a result of the termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.
- 12.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the Agreement, the County may terminate the Agreement for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of a Contractor to fulfill the contractual obligations shall be considered just cause for termination of the Agreement. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocuring and completing the work.

13. Notice

Any notice required to be delivered shall be deemed to have been received when the notice has been sent by certified mail, return receipt, overnight carrier, or hand delivered to the following address and individual or at such other address and/or such other individual a party may identify in writing to the other

FOR THE COUNTY:

Darla Herbold, CPPO, Purchasing Administrator Howard County, Maryland Office of Purchasing 6751 Columbia Gateway Dr., Suite 501 Columbia, MD 21046

Telephone: (410) 313-6380 Fax: (410) 313-6388

Email: dherbold@howardcountymd.gov

FOR THE CONTRACTOR:

Karen Galindo-White, Account Executive Energy Systems Group, LLC 1099 Winterson Road, Suite 110 Linthicum, MD 21090

Telephone: (443) 690-1750

Email: kgalindo@energysystemsgroup.com

And to:

General Counsel Energy Systems Group, LLC 4655 Rosebud Lane, Newburgh, IN 47630 dshell@energysystemsgroup.com

14. Indemnification

- 14.1 The Contractor shall indemnify and hold harmless the County, its employees, agents and officials from any and all claims, suits, or demands including reasonable attorney fees which may be made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of this Agreement by the Contractor or anyone under agreement with the Contractor to perform duties under this Agreement. The Contractor shall not be responsible for acts of negligence or willful misconduct committed by the County, its employees, agents and officials. As a condition precedent to Contractor's duties under this section, any person seeking indemnification hereunder must provide Contractor with prompt notice of the claim or matter for which indemnity is sought, must allow Contractor to retain counsel, investigate, defend and settle the matter, and must cooperate with Contractor in such efforts. Notwithstanding the above, Contractor shall not agree to any settlement which would increase the County's liability nor settle any third-party claim against the County unless such settlement completely and forever releases the County with respect thereto or unless the County provides written consent to such settlement.
- 14.2 Any property or work to be provided by the Contractor under this Agreement will remain at the Contractor's risk until written acceptance by the County; and the Contractor will replace, at the Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.

15. Reports/Information/Inspections/and Audits

At any time during normal business hours and as often as the County may deem necessary, the
Contractor shall make available to and permit inspection by the County, its employees or agents, all records,
information and documentation of the Contractor related to the subject matter of this Agreement, including,
but not limited to, all contracts, invoices, payroll, and financial audits.

Signatures follow on the next page

IN WITNESS WHEREOF, the parties have executed this Agreement No. PA 24-2015.

WITNESS:	Gregory Collins President HOWARD COUNTY, MARYLAND, a body corporate and politic			
Signature Print Name:				
WITNESS:				
Lonnie R. Robbins Chief Administrative Officer	Ken Ulman County Executive			
	DATE:			
APPROVED FOR LEGAL SUFFICIENCY thisday of, 2014 Margaret Ann Nolan County Solicitor				
Reviewing Attorney	Gregory Collins President HOWARD COUNTY, MARYLAND, a body corporate and politic Ken Ulman County Executive DATE: DEPARTMENT APPROVED:			
Constance A. Tucker Senior Assistant County Solicitor				
APPROVED FOR SUFFICIENCY OF FUNDS:	DEPARTMENT APPROVED:			
Stanley J. Milesky Director of Finance	James M. Irvin Director of Public Works			

ATTACHMENTA

CONTRACT

PRICE

The County shall pay the Contractor as follows, subject to and in accordance with the Contract Documents. For Phase II Construction, payment is specifically made subject to appropriation by the Howard County Council of the required design/construction funds (\$13,606,652) in the FY2015 Capital Budget:

<u>Amount</u>	<u>Description</u>	Terms of Payment
\$13,606,652	Energy Conservation Modifications as specified in the scope of work	Payable Monthly as progress is approved by the County
\$44,482	Measurement & Verification	One Time Payment, one year after final completion
\$10,676	Energy Bond	One Time Payment – payable upon final completion
\$4,073,643	HVAC Controls Maintenance & Software Updates, Mechanical System Maintenance	Quarterly over 15 years, renewable annually at the sole discretion of the County.
\$17,735,453	TOTAL	

ATTACHMENT B

AFFIDAVIT

Contractor				
Address				
I.	. the undersigned.			of the above named
I,(Print Signer's Name)	,	(Prir	nt Office I	
Contractor does declare and affirm this the above named Contractor and I affirm	day of	(Month)	(Year)	, that I hold the aforementioned office in
Contractor or themselves, to obtain in	nd/or employees, have formation that would gi of the Contractor, or the	ive the Contract mselves, to gain	tor an unf	d with anyone for and on behalf of the fair advantage over others, nor have they ritism in the award of the contract herein.
received prior hereto or will receive s emoluments of this contract, job, work receive in the future a service or thing generally, nor has any such officer or e	ounty, whether elected of ubsequent hereto any bear or service for the Count of value, directly or ind employee of the County d or payable to the Cou	ty, and that no of irectly, upon more received or will anty in connecti	y or mate officer or e ore favora I receive,	manner whatsoever, any interest in or has erial, or consideration from the profits or employee has accepted or received or will ble terms than those granted to the public directly or indirectly, any part of any fee, his contract, job, work, or service for the
	officer, director, or partner convicted of bribery, a	attempted briber	y, or cons	ees who are directly involved in obtaining piracy to bribe under the laws of any state,
	AFFII	DAVIT IV		
Howard County have been convicted employment, nor have we engaged in us	within the past 12 m nlawful employment pra	nonths of discretices as set fort	imination th in Secti	ectly involved in obtaining contracts with against any employee or applicant for on 12.200 of the Howard County Code, or 704 of Title VII of the Civil Rights Act of
TTI G	AFFI	DAVIT V		
				of Public Works as a person engaging in ad State Finance and Procurement Article;
		ies in Iran as d	escribed i	in Section 17-702 of the Maryland State
If the person is unable to make the cer activities in Iran.	tification, it will provide	e the County, a	detailed of	description of the Contractor's investment
I do solemnly declare and affirm under the best of my knowledge, information		that the conten	ts of the f	oregoing affidavits are true and correct to
Signature				
Printed Name				
Title				

ATTACHMENT C

HOWARD COUNTY CHARTER AND CODE REFERENCES TO ETHICS

Charter Section 901. Conflict of Interest.

- Prohibitions. No officer or employee of the County, whether elected or appointed, shall in any manner whatsoever be interested in or receive any benefit from the profits or emoluments of any contract, job, work, or service for the County. No such officer or employee shall accept any service or thing of value, directly or indirectly, from any person, firm or corporation having dealings with the County, upon more favorable terms than those granted to the public generally, nor shall he receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable by the County, or by any person in connection with any dealings with the County, or by any person in connection with any dealings with or proceedings before any branch, office, department, board, commission or other agency of the County. No such officer or employee shall directly or indirectly be the broker or agent who procures or receives any compensation in connection with the procurement of any type of bonds for County officers, employees or persons or firms doing business with the County. No such officer or employee shall solicit or accept any compensation or gratuity in the form of money or otherwise for any act or omission in the course of his public work; provided, however, that the head of any department or board of the County may permit an employee to receive a reward publicly offered and paid for, for the accomplishment of a particular task.
- (b) Rules of construction; exceptions by Council. The provisions of this Section shall be broadly construed and strictly enforced for the purpose of preventing officers and employees from securing any pecuniary advantages, however indirect, from their public associations, other than their compensation provided by law.

In order, however, to guard against injustice, the Council may, by resolution, specifically authorize any County officer or employee to own stock in any corporation or to maintain a business in connection with any person, firm or corporation dealing with the County, if, on full public disclosure of all pertinent facts to the County Council by such officer or employee, the Council shall determine that such stock ownership or connection does not violate the public interest.

The County Council may, by ordinance, delegate to the Howard County Ethics Commission the power to make such determinations and to authorize the ownership or connection. Any ordinance which delegates this power shall provide for procedures including a public hearing, and shall establish criteria for determining when the ownership or connection does not violate the public interest.

(c) <u>Penalties</u>. Any officer or employee of the County who willfully violates any of the provisions of this Section shall forfeit his office. If any person shall offer, pay, refund or rebate any part of any fee, commission, or other form of compensation to any officer or employee of the County in connection with any County business or proceeding, he shall, on conviction, be punishable by imprisonment for not less than one or more than six months or a fine of not less than \$100.00 or more than \$1,000.00, or both. Any contract made in violation of this Section may be declared void by the Executive or by resolution of the Council. The penalties in this Section shall be in addition to all other penalties provided by law

Code Section 4.119. Ethics and Fair Employment Practices.

(a) <u>Conflict of Interest</u>. Bidders, vendors, purchasers and county employees involved in the purchasing process shall be governed by the provisions of the Howard County Charter and Howard County law regarding conflict of interest. No vendor shall offer a gratuity to an official or employee of the county. No official or employee shall accept or solicit a gratuity.

(b) Discouragement of Uniform Bidding.

- (1) It is the policy of the county to discourage uniform bidding by every possible means and to endeavor to obtain full and open competition on all purchases and sales.
 - (2) No bidder may be a party with other bidders to an agreement to bid a fixed or uniform price.
- (3) No person may disclose to another bidder, nor may a bidder acquire, prior to the opening of bids, the terms and conditions of a bid submitted by a competitor.

(c) Fair Employment Practices

- (1) Bidders, vendors and purchases may not engage in unlawful employment practices as set forth in Subtitle 2 "human Rights" of Title 12 of the Howard County Code Section 14 of Article 49B of the Annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964 as amended. Should any bidders, vendors or purchasers engage in such unlawful employment practices, they shall be subject to being declared irresponsible or being debarred pursuant to the provisions of this subtitle.
- (2) The Howard County Office of Human Rights shall notify the county purchasing agent when any bidder is found, by a court of competent jurisdiction, to have engaged in any high unlawful employment practices.
- (3) If any bidder has been declared to be an irresponsible bidder for having engaged in an unlawful employment practice and has been debarred from bidding pursuant to this subtitle, the Howard County Office of Human Rights shall review the employment practices of such bidder after the period of debarment has expired to determine if violations have been corrected and shall, within 30 days, file a report with the county purchasing agent informing the agent of such corrections before such bidder can be declared to be a responsible bidder by the County Purchasing agent.

(4) Payment of subcontractors. All contractors shall certify in writing that timely payments have been made to all subcontractors supplying labor and materials in accordance with the contractual arrangements made between the contractor and the subcontractors. No contractor will be paid a second or subsequent progress payment or final payment until such written certification is presented to the county purchasing agent.

Section 22.204. - Prohibited Conduct and Interests.

(a) Participation Prohibitions.

- (1) Except as permitted by Commission regulation or opinion, an official or employee may not participate in:
- (i) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision of the matter, any matter in which, to the knowledge of the official or employee, the official or employee or a qualified relative of the official or employee has an interest.
- (ii) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision with respect to the matter, any matter in which any of the following is a party:
- a. A business entity in which the official or employee has a direct financial interest of which the official or employee may reasonably be expected to know;
- b. A business entity for which the official, employee, or a qualified relative of the official or employee is an officer, director, trustee, partner, or employee;
- c. A business entity with which the official or employee or, to the knowledge of the official or employee, a qualified relative is negotiating or has any arrangement concerning prospective employment;
- d. If the contract reasonably could be expected to result in a conflict between the private interests of the official or employee and the official duties of the official or employee, a business entity that is a party to an existing contract with the official or employee, or which, to the knowledge of the official or employee, is a party to a contract with a qualified relative;
- e. An entity, doing business with the County, in which a direct financial interest is owned by another entity in which the official or employee has a direct financial interest, if the official or employee may be reasonably expected to know of both direct financial interests; or
 - f. A business entity that:
- 1. The official or employee knows is a creditor or obligee of the official or employee or a qualified relative of the official or employee with respect to a thing of economic value; and
- 2. As a creditor or obligee, is in a position to directly and substantially affect the interest of the official or employee or a qualified relative of the official or employee.
- (2) A person who is disqualified from participating under paragraph 1. of this subsection shall disclose the nature and circumstances of the conflict and may participate or act if:
 - (i) The disqualification leaves a body with less than a quorum capable of acting;
 - (ii) The disqualified official or employee is required by law to act; or
 - (iii) The disqualified official or employee is the only person authorized to act.
- (3) The prohibitions of paragraph 1 of this subsection do not apply if participation is allowed by regulation or opinion of the Commission.

(b) Employment and Financial Interest Restrictions.

- (1) Except as permitted by regulation of the commission when the interest is disclosed or when the employment does not create a conflict of interest or appearance of conflict, an official or employee may not:
 - (i) Be employed by or have a financial interest in any entity:
- a. Subject to the authority of the official or employee or the County agency, board, commission with which the official or employee is affiliated; or
- b. That is negotiating or has entered a contract with the agency, board, or commission with which the official or employee is affiliated; or
- (ii) Hold any other employment relationship that would impair the impartiality or independence of judgment of the official or employee.
 - (2) The prohibitions of paragraph (1) of this subsection do not apply to:
- (i) An official or employee who is appointed to a regulatory or licensing authority pursuant to a statutory requirement that persons subject to the jurisdiction of the authority be represented in appointments to the authority;
- (ii) Subject to other provisions of law, a member of a board or commission in regard to a financial interest or employment held at the time of appointment, provided the financial interest or employment is publicly disclosed to the appointing authority and the Commission;
- (iii) An official or employee whose duties are ministerial, if the private employment or financial interest does not create a conflict of interest or the appearance of a conflict of interest, as permitted and in accordance with regulations adopted by the Commission; or
- (iv) Employment or financial interests allowed by regulation of the Commission if the employment does not create a conflict of interest or the appearance of a conflict of interest or the financial interest is disclosed.

(c) Post-Employment Limitations and Restrictions.

(1) A former official or employee may not assist or represent any party other than the County for compensation in a case, contract, or other specific matter involving the County if that matter is one in which the former official or employee significantly participated as an official or employee.

- (2) For a year after the former member leaves office, a former member of the County Council may not assist or represent another party for compensation in a matter that is the subject of legislative action.
- (d) <u>Contingent Compensation</u>. Except in a judicial or quasi-judicial proceeding, an official or employee may not assist or represent a party for contingent compensation in any matter before or involving the County.

(e) Use of Prestige of Office.

- (1) An official or employee may not intentionally use the prestige of office or public position for the private gain of that official or employee or the private gain of another.
- (2) This subsection does not prohibit the performance of usual and customary constituent services by an elected official without additional compensation.

(f) Solicitation and Acceptance of Gifts.

- (1) An official or employee may not solicit any gift.
- (2) An official or employee may not directly solicit or facilitate the solicitation of a gift, on behalf of another person, from an individual regulated lobbyist.
- (3) An official or employee may not knowingly accept a gift, directly or indirectly, from a person that the official or employee knows or has the reason to know:
- (i) Is doing business with or seeking to do business with the County office, agency, board or commission with which the official or employee is affiliated;
- (ii) Has financial interests that may be substantially and materially affected, in a manner distinguishable from the public generally, by the performance or nonperformance of the official duties of the official or employee;
 - (iii) Is engaged in an activity regulated or controlled by the official's or employee's governmental unit; or
 - (iv) Is a lobbyist with respect to matters within the jurisdiction of the official or employee.
 - (4) (i) Subsection (4)(ii) does not apply to a gift:
- a. That would tend to impair the impartiality and the independence of judgment of the official

or employee receiving the gift;

- b. Of significant value that would give the appearance of impairing the impartiality and independence of judgment of the official or employee; or
- c. Of significant value that the recipient official or employee believes or has reason to believe is designed to impair the impartiality and independence of judgment of the official or employee.
 - (ii) Notwithstanding paragraph (3) of this subsection, an official or employee may accept the following:
 - a. Meals and beverages consumed in the presence of the donor or sponsoring entity;
 - b. Ceremonial gifts or awards that have insignificant monetary value;
 - c. Unsolicited gifts of nominal value that do not exceed \$20.00 in cost or trivial items of

informational value;

- d. Reasonable expenses for food, travel, lodging, and scheduled entertainment of the official or the employee at a meeting which is given in return for the participation of the official or employee in a panel or speaking engagement at the meeting:
- e. Gifts of tickets or free admission extended to an elected official to attend a charitable, cultural, or political event, if the purpose of this gift or admission is a courtesy or ceremony extended to the elected official's office;
- f. A specific gift or class of gifts that the Commission exempts from the operation of this subsection upon a finding, in writing, that acceptance of the gift or class of gifts would not be detrimental to the impartial conduct of the business of the County and that the gift is purely personal and private in nature;
- g. Gifts from a person related to the official or employee by blood or marriage, or any other individual who is a member of the household of the official or employee; or
- h. Honoraria for speaking to or participating in a meeting, provided that the offering of the honorarium is not related, in any way, to the official's or employee's official position.
- (g) <u>Disclosure of Confidential Information</u>. Other than in the discharge of official duties, an official or employee may not disclose or use confidential information, that the official or employee acquired by reason of the official's or employee's public position and that is not available to the public, for the economic benefit of the official or employee or that of another person.

(h) Participation in Procurement.

- (1) An individual or a person that employs an individual who assists a County, agency or unit in the drafting of specifications, an invitation for bids, or a request for proposals for a procurement, may not submit a bid or proposal for that procurement, or assist or represent another person, directly or indirectly, who is submitting a bid or proposal for the procurement.
- (2) The Commission may establish exemptions from the requirements of this section for providing descriptive literature, sole source procurements, and written comments solicited by the procuring agency.

ATTACHMENT D

PROJECT WORK REQUIREMENTS

TABLE OF CONTENTS

I.	DEFINITIONS	. 18
П.	GENERAL CONDITIONS	. 20
III.	SCOPE OF WORK	. 55
IV.	PERFORMANCE MEASURE AND VERIFICATION	. 62

I. DEFINITIONS

In this Agreement, the following terms have the meanings indicated:

- A. "Approved Equal" means those supplies or services, or compatible items of construction whose quality, design, or performance characteristics are functionally equal or superior to an item specified.
- B. "Change Order" means a written order signed by the responsible Project Manager, directing a Contractor to make changes which the changes clause of a contract authorizes the Project Manager to order with or without the consent of the Contractor.
- C. "Code" means the Annotated Code of Maryland.
- D. "COMAR" means the Code of Maryland Regulations.
- E. "Consulting engineer" means the County's designed representative for design and engineering oversight.
- F. "Contract/ Agreement" means the written agreement executed between the County and the Contractor, covering the performance of the work and furnishing of labor, services, equipment, and materials, by which the Contractor is bound to perform the Work and furnish the labor, services, equipment and materials, and by which the County is obligated to compensate them, therefore at the mutually established and accepted rate or price. The Contract shall include the Technical Proposal, and amendments/addenda thereto, plans and specifications developed by the Contractor, Contract forms and bonds, notice to proceed, and any written change orders and supplemental agreements that are required to complete the construction of the Work in an acceptable manner, including authorized extensions thereof. (Said documents are sometimes referred to as the "contract documents.")
- G. "Contractor" means the person or organization having direct contractual relation with the County for the execution of the "Work." If the Contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.
- H. "Contract Documents" means Contractor's Technical Proposal, construction drawings and specifications, other documents that may be referenced in the written contract, and the written contract.
- I. "Contract Price" means the amount payable to the Contractor under the Contract terms.
- J. "Contract Time" means the number of calendar days shown in the contract documents indicating the time allowed for the completion of the work contemplated in the Contract.
- K. "Critical Path Method (CPM)" means a scheduling/management tool showing a network or work elements or activities for a construction project.
- L. "Day" means calendar day unless otherwise designated.
- M. "Employee" means all employees of Howard County, Maryland whether classified, unclassified, or employed under a personal services contract of employment. It does not include independent contractors.
- N. "Notice to Proceed" means a written notice to the Contractor of the date on or before which they shall begin the prosecution of the Work to be done under the Contract.
- O. "Owner" means Howard County, Maryland or that Agency of the County administrating the contract.
- P. "Payback Period" means the amount of time, in years, that the County will need to pay for the cost of the project, including all planning, engineering, design, construction, start-up, training, on-going maintenance, and interest for the length of the loan period.
- Q. "Payment Bond" means the security in the form approved by the County and executed by the Contractor and its surety.

- R. "Performance Bond" means the security in the form approved by the County and executed by the Contractor and the surety, guaranteeing complete performance of the Contract.
- S. "Plans and Specifications" mean the official construction drawings and Specifications developed by the Contractor and approved by the County.
- T. "Project Manager" means that person designated by the County Executive to make decisions with respect to the procurement of the work.
- U. "Energy" means electricity, fuel, chilled water, steam and water, purchased or generated onsite.
- V. "Operations Costs" means costs of personnel labor, maintenance materials and contract services, directly associated with operating and maintaining building lighting, HVAC and other energy consuming systems.
- W. "Cost Avoidance" means the difference between current and baseline cost, baseline cost being what current cost would have been had no energy efficiency measures been implemented. Baseline cost also reflects variation in weather severity, occupancy, equipment loads, operating patterns, and energy rates.
- X. "Repair" means to restore after injury, deterioration, or wear, to mend, to renovate by such means as appropriate and to supply such materials and labor as necessary to render the item to be repaired sound, solid, true, plumb, square, even, smooth, in compliance with contract or warranty, and fully serviceable; and upon completion of such repair, unless otherwise Stated to be in such conditions as to present a first-class finished work, or in instances where the repaired item serves as a base for additional finish, the repaired work must be such as to permit a first-class finish to be applied without extra cost to the County. When the word "repair" is used in connection with machinery or mechanical equipment it shall mean, in addition to the above, rendering the equipment completely serviceable and efficient and ready for normal use for which it was intended originally.
- Y. "County" means Howard County, Maryland, which includes its agencies, departments, units, and its officials and employees when acting within the scope of their authority and in the course of their official duties.
- Z. "Subcontractor" means only those having a direct contract with the Contractor. It includes one who furnishes material worked to a special design according to the plans and specifications for the "Work." It excludes one who merely finishes material not so worked. It also includes those supplying architectural, engineering, or other design services to the Contractor.
- AA. "Surety" means the corporate body bound for the full and complete performance of the contract by the Contractor or for the payment by the Contractor to the subcontractors and suppliers.
- AB. "Work" means the furnishing of all labor, materials, equipment, services, utilities, Architectural/Engineering and other design services, financing, cost savings guarantee, maintenance, training, and other incidentals necessary to the successful completion of the project and the carrying out of all the duties and obligations imposed upon the Contractor by the Contract.
- AC. "Written Notice" means notice in writing if delivered in person to the individual or to the member of the firm or to an office of the corporation to whom it is intended, or delivered by registered mail, or other means permitted by law, including email, to the last business address. For purposes of written notice required to be delivered or served on the County, its agency(ies), department{s), employee(s), or officer(s), delivery by electronic means, including email and facsimile, shall not be considered "written notice."
- AD. "County's Approval" means it is approved in writing by a county agency "ECM" means Energy Conservation Measures.
- AE. "CONTRACTOR" means Energy Systems Group.
- AF. Final Completion Certificate shall be issued the date all of the ECMs or Measures comprising the Project (as defined in the Agreement) have been delivered, installed, and accepted by the County.

II. GENERAL CONDITIONS

1. INTENTIONALLY DELETED

2. LAWSAND REGULATIONS

All applicable Federal, State and County laws, municipal ordinances, and the rules and regulations of all governmental authorities having jurisdiction over the performance of the work shall apply to the Contract throughout, and they will be deemed to be included in the contract the same as though therein written out in full.

3. NATURE OF THIS CONTRACT

- A. This contract is not a "construction" contract, nor is it a contract for architectural or engineering services, even if, in the course of performance, the Contractor or its subcontractors and/or subconsultants may perform some construction or architectural/engineering services. This contract is an "energy performance contract" as defined in Section 11-101(h) of the County Finance and Procurement Article of the Annotated Code of Maryland. The County is not responsible for and make no warranty of the accuracy of any information contained in the RFP respecting the County's facilities and the County is not responsible for:
 - 1) Subsurface or latent physical conditions at the site differing materially from those indicated in the RFP or otherwise indicated by the County; or
 - 2) Unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work provided for in the contract.
- B. Contractor acknowledges that the contract which will result from this procurement:
 - 1) Is not a contract for "construction" as defined in County Finance and Procurement Article ("SF") Section 11-101(e) of the Code or as defined in COMAR 21.01.02.01 b(23);
 - 2) Is not a contract for "architectural services" as defined in SF Section 11-1- 1(b) of the Code or as defined in COMAR 21.01.02.018(6);

- 3) Is not a contract for "engineering services" as defined in SF Section 11-1- 1(b) of the Code or as defined in COMAR 21.01.02.018(37); is not a contract for "maintenance" as defined in COMAR 21.01.028(53); and
- 4) Is not a contract for "services" as defined in SF Section 11-101(s) of the Code or in COMAR 21.01.02.01 b(79). The parties agree that the contract is one undefined in conditions, design, build, maintain, finance, and guarantee cost savings, as provided in the RFP. Therefore, none of the provisions required by law to be included in contracts for "architectural services," "construction," "engineering services," "maintenance," or "services" are applicable to this contract and shall not be implied or incorporated into this contract except to the extent that they are made applicable by express provisions of the contract documents.

4. PUBLICINFORMATIONACT

Contractor should give specific attention to the identification of those portions of their proposals which they deem to be confidential, proprietary information or trade secrets, and provide any justification of why such materials, upon request, should not be disclosed by the Owner under the Maryland Public Information Act, County Government Article, Title 10, Subtitle 6, Annotated Code of Maryland.

5. EQUAL BUSINESS OPPORTUNITY (EBO) REQUIREMENTS

Howard County Code Section 4.122 established an Equal Business Opportunity program to foster overall equity and fairness to all citizens in relation to business enterprises conducting business with the County.

If a contract is \$50,000 or more, the Prime Contractor shall make a good faith effort to comply with the Howard County Equal Business Opportunity (EBO) program's 10% subcontracting goal. The Prime Contractor shall make a good faith effort to obtain minority subcontractor participation even if the Prime Contractor has the capability to complete the work with its own workforce. This is also applicable to Prime Contractors that are minority-owned firms. After contract award, changes in subcontractors require the written approval of the EBO Coordinator.

Possible areas of obtaining subcontracting participation include, but are not limited to, flagging services, hauling, copying and printing, and the purchase of materials used in performing the contract. Contractors may use minority, women or disabled business enterprises certified by Howard County, Maryland; the Maryland Department of Transportation; the City of Baltimore, Maryland; or another certifying entity in order to satisfy the 10% subcontracting goal. The website addresses for lists of minority businesses are:

Howard County - Equal Business Opportunity List of Firms A-Z

http://www.mdot.state.md.us/MBE Program/index.html

Contractors failing to achieve the Equal Business Opportunity Program goal following a good faith effort to obtain participation must complete the Equal Business Opportunity Program Request for Subcontracting Waiver and provide documentation of its good faith attempts to obtain EBO participation. The County will determine if the efforts made satisfy a good faith attempt. A waiver will only be considered in rare contracts after a determination that the Contractor has made a good faith effort and thoroughly documented the efforts.

Prime Contractors that are awarded County contracts shall maintain adequate records of EBO participation on County contracts. The County may require that prime contractors report whether or not they met the proposed EBO subcontracting goal, so that the County can track compliance of EBO participation on County contracts.

6. PERFORMANCE AND PAYMENT BONDS

The Contractor shall, provide performance and payment bonds from a Surety company authorized to do business in the State of Maryland, properly executed in favor of the County, each bond to be in an amount not less than 100% of the amount of the sum of the Net ECM cost. Attorneys-in-fact who sign bid bond, payment bond, and performance bond must file with each bond a certified and effectively dated copy of the power of attorney.

7. OWNER'S RESPONSIBILITIES

- A. The Owner will furnish information and description of the physical characteristics and capacity of equipment to be affected by this project.
- B. Information or services under the Owner's control will be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.
- C. The Owner will confirm all verbal instructions to the Contractor in writing.
- D. The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Work by Owner or by separate Contractors, payments and completion, and insurance.
- E. Nothing in this Section shall make the County responsible to the Contractor for information furnished by the County.

8. CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall supervise and direct all phases of the work, using its best skill and attention. The Contractor shall be solely responsible for all feasibility studies, design and construction means methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the contract, including measurements and verification.
- B. The Contractor shall be responsible to the County for the acts and omissions of its employees, subcontractors, and their agents and employees, and other persons performing any of the work.
- C. The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the contract documents, and as required to maintain building operations, and shall not unreasonably encumber the site with any materials or equipment.

D. Cutting and Patching of Work:

- 1) The Contractor shall be responsible for all cutting, fitting, or patching that may be required to complete the Work or to make its several parts fit together properly.
- The Contractor shall not damage or endanger any portion of the work or the Work of the Owner or any separate Contractor by cutting, patching, or otherwise altering any Work, or by excavation. The Contractor shall not cut or otherwise alter the Work of the Owner or any separate Contractor except with the written consent of the Owner and of such separate Contractor. The Contractor shall not unreasonably withhold from the Owner or any separate Contractor his consent to cutting or otherwise altering the Work.
- E. The Contractor shall perform all Work in accordance with the lines, grades, typical cross sections, dimensions, and other data required by the contract documents or as modified by written orders, including the furnishing of all materials, services, implements, machinery, equipment, tools, supplies, transportation, labor, and all other items necessary for the satisfactory prosecution and completion of the project in full compliance with the requirements of the contract documents.
- F. Indemnification: To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the County and its agents and employees from and against all claims, damages, losses and expenses, including but not limited to, attorney's fees arising out of or resulting from the performance of the work, provided that any such claim, damage, loss, or expense:
 - is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from; and
 - is caused in whole or in part by any negligent act or omission or breach of contract of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable,

regardless of whether or not it is caused in part by a party indemnified hereunder.

Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

- In any and all claims against the County or any of its agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.
- The obligations of the Contractor under this paragraph shall include the liability of its Architects, Engineers, agents, employees, subcontractors at any tier and their employees, agents and subcontractors arising out of (a) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (b) the giving of or the failure to give directions or instruction by any of the above, or the performance of any of the work required under the Contract.
- G. <u>Hazardous Substances</u>: Notwithstanding anything herein to the contrary, Contractor will not be responsible for the containment, abatement, removal, treatment or handling in any way of hazardous substances encountered on the job site, unless such responsibility is expressly included within the Scope of Work or the hazardous substance was caused by Contractor, its employees, agents and/or contractors or subcontractors. Hazardous substances includes any hazardous, toxic or dangerous waste, substances, chemicals, contaminants or pollutants, including for example asbestos, mold and lead paint, whose use or disposal are subject to regulation or law.

9. DRAWINGS AND SPECIFICATIONS

- A. <u>Drawings</u>: The Contractor shall do no Work without approved contract drawings, specifications, and/or instructions. For an approved project, drawings shall be provided by the Contractor as required in Section IV- Scope of Work. Drawings shall in general be drawn to scale with major equipment and location dimensions clearly indicated, and symbols used shall indicate materials and structural and mechanical requirements. When symbols are used, those parts of the drawings are of necessity diagrammatic; and it is not possible to indicate all connections, fitting, fastenings, etc., which are required to be furnished for the proper execution of the Work. Diagrammatic indications of piping, ductwork, conduit and similar items in the Work are subject to field adjustment in order to obtain proper grading, fitting, passage over, under or past obstructions, to avoid exposure in finished rooms and unsightly and obstructing conditions. The Contractor shall make these adjustments, at no increased cost to the County.
 - 1) <u>Copies Furnished:</u> The Contractor shall furnish the County five (5)_copies of the drawings and specifications.

- 2) Copies at the Site: The Contractor shall keep in the job site office a complete set of all drawings, specifications, shop drawings, schedules, etc., in good order and available to the County. Additionally, one set of all contract drawings shall be maintained as/built drawings. As-built drawings shall be marked upon by the Contractor in the field on a regular basis to record all changes in the Work as they occur, and the exact location of all exposed and concealed pipe runs, valves, plugged outlets, cleanouts, and other control points including electrical conduits and ducts, in such manner as will provide a complete, accurate "as-built" record. The location of pipes or control points concealed underground, under concrete, in chases or above hung ceilings shall be dimensioned. "As-built" drawings, both hard copy and on CD, shall be delivered to the County, as a condition precedent to final acceptance of Work.
- 3) <u>Ownership:</u> All documents remain the property of the County. They must not be used on other Work. They shall be returned to the County upon its completion.
- B. <u>Large Scale Detail Drawings:</u> The Contractor shall furnish, when the County directs, additional instructions, in the form of large scale developments of the drawings used for bidding, or to amplify the specifications for the proper execution of the Work. These shall be true developments of the bidding documents and reasonably inferable there from. The Work shall be executed in conformity therewith.
- C. <u>Dimensions:</u> The Contractor shall carefully check all dimensions prior to execution of the particular Work. Dimensions for items to be fitted into construction conditions at the job will be taken at the job and will be the responsibility of the Contractor. No extra will be allowed by reason of Work requiring adjustments in order to accommodate the particular item of equipment.
- D. <u>Specifications:</u> Proper CSI formatted construction specifications shall be produced and submitted for the County's approval.

10. SHOP DRAWINGS AND SUBMITTALS

- A. After checking and verifying all field measurements and after complying with applicable procedures specified in the contract documents, the Contractor shall submit to the County for review and approval, in accordance with the Contractor's schedule, shop drawings or other submittals which will bear a stamp or specific written indication that the Contractor has satisfied their responsibility under the contract documents with respect to the review of such submissions. The data on the shop drawing will be completed with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable the County to review the information as required. These drawings shall be prepared in conformity with the best practice and standards for the trade concerned. Due regard shall be given to speed and economy of fabrication and erection.
- B. All shop drawings must show the name of the project and the Department contract number.

- C. <u>Size of Drawings:</u> All shop drawings and details submitted to the County for approval shall be printed on sheets of the same size as the contract drawings specified in the Department of General Services Procedures Manual for Professional Services (latest edition). When a standard of a fabricator is of such size to print more than one drawing on a sheet of the size of the required drawings, this is acceptable. Sheets large than the required drawing size will not be accepted except when specifically permitted by the Department of General Services. Shop details supplied on a sheet of letter size (8-%-in. by 11-in.) are acceptable for schedules and small details.
- D. <u>Items for Which Shop Drawings Will Be Required:</u> Shop drawings shall be required for all items which are specifically fabricated for the work or when the assembly of several items is required for a working unit. Shop drawings are required for all reinforcing and structural steel, specially made or cut masonry units, miscellaneous metal work, specially made millwork, plaster molds, or moldings, marble and slate, special rough hardware and all heating, ventilating, piping, plumbing and electrical items requiring special fabrication or detailed connections including refrigeration, elevators, dumb waiters, laboratory equipment, ducts, etc.
- E. <u>Copies Required:</u> Contractor shall supply eight (8) copies, one (1) copy for the County's consulting engineer's file and two (2) copies for the Department, five (5) copies shall be returned to the Contractor after review.
- F. <u>Examination and Approval:</u> The County will examine and return shop drawings with reasonable promptness, noting desired corrections, or accepting or rejecting them. The Contractor shall assume a minimum review time of two (3) weeks when submitting items for the County's approval.
- G. <u>Field Dimensions and Conditions:</u> The County is not responsible for the check of dimensions or existing conditions in the field. This is the sole responsibility of the Contractor. No consideration will be given to change orders due to existing field conditions.
- H. <u>Resubmission:</u> When the County notes desired corrections, or rejects the drawings, the Contractor shall resubmit the drawings with corrective changes.
- I. <u>Contractor's Responsibility:</u> Unless the Contractor has, in writing, notified the County to the contrary at the time of the submission, the County may assume that shop drawings and submittals are in conformity with the contract documents and do not involve any change in the Contract price or any change which will alter the space within the structure or alter the nature of the building from that contemplated by the contract documents.
- J. <u>County's Notations:</u> Should the Contractor consider any rejection or County's notation on the shop drawings to cause a change in the cost of the work from that required by the contract documents, then the Contractor shall desist from further action relative to the item he questions and shall notify the County, in writing, within five days of the additional or Less cost involved. No Work shall be executed until the entire matter is clarified and the Contractor is ordered by the County to proceed. Failure of the Contractor to serve written notice as above required shall constitute a waiver of any claim in relation thereto. Similarly, should the County's notation or

change involve Jess Work than is covered by the contract documents, the Contractor shall allow the County an equitable credit resulting from the change in the Work.

11. COST AND PRICE CERTIFICATIONS

The price under this contract and any change order or modification hereunder, including profit or fee, shall be adjusted to exclude any significant price increases occurring because the Contractor furnished cost or price information which, as of the date agreed upon between the parties, was inaccurate, incomplete, or not current."

12. INTENT OF THE CONTRACT DOCUMENTS

It is the intent of the contract documents to require the Contractor to perform all of the work necessary to complete the project.

13. ORDER OF PRECEDENCE AMONG CONTRACT DOCUMENTS

- A. In the event of a conflict between provisions of the contract documents, the conflict shall be resolved in favor of the County in accordance with the Contractor's undertaking to be responsible for all design, investigation, site conditions, construction, financing, and maintenance, as provided in the scope of work, and in accordance with the Contractor's express agreement that Contractor shall be entitled to no payment, reimbursement, damages, costs, expenses or compensation for any reason or cause except from cost savings.
- B. In the event of a conflict between contract provisions which cannot be resolved under Subsection A above, the provisions of the following documents shall take precedence in this order:
 - 1) the Contract form signed by the parties;
 - 2) the approved drawings and specifications; and
 - 3) Contractor's Phase II Proposal for the specific project.

14. CONDITIONS AFFECTING THE WORK

The Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work and the general and local conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve the Contractor from responsibility for successfully performing the work without additional expense to the County. The Contractor agrees not to place any credence in any understanding or representation concerning conditions made by any County employee or agents prior to the execution of this Contract, unless such understanding or representations are expressly stated in the Contract.

15. CHANGES IN THE WORK

- A. The Project Manager may, at any time, without notice to the sureties, if any, by written order designated or indicted to be a change order, make any change in the work within the general scope of the Contract.
- B. Any other written order or an oral order (which terms as used in this paragraph shall include direction, instruction, interpretation or determination from the Project Manager) which causes any such change, shall be treated as a change order under this clause, provided that the Contractor gives the Procurement Officer written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a change order.
- C. Except as herein provided, no order, statement, or conduct of the Project Manager shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.
- D. Subject to paragraph "C" above, if any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this Contract, whether or not changed by any order, an equitable adjustment shall be made and the Contract modified in writing accordingly; provided, however, that except for claims based on defective specifications, no claim for any change of method or manner of performance of the work shall be allowed for any costs incurred more than 20 days before the Contractor gives written notice as therein required; and further provided that the County shall have no liability to Contractor except from guaranteed cost savings.
- E. If the Contractor intends to assert a claim for an equitable adjustment under this clause, it shall, within 30 days after receipt of a written change order in the drawings and specifications or the furnishing of written notice of change of method or manner of performance of the work, submit to the Project Manager a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the County. The statement of claim hereunder may be included in the notice of change in the method or manner of performance of the work.
- F. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment (100%) under this Contract.

16. MODIFICATION OF CONTRACT PRICE (Phase II Only)

When changes in the work require modification of the Contract Price by change order, which modification shall be accomplished as follows: Any modifications to Phase II work or price must be approved by Project Manager, within the limits of their authority.

A. No modification to the contract price shall be allowed unless the Owner requests additional services, and this work is approved by the Project Manager and/or DPW. Under no circumstances shall the contract price be increased due to field conditions different than assumed by the Contractor, or additional design required due to errors or omissions of Contractor and/or architectural/engineering sub- consultants.

- B. For all changes in the work to be performed by a subcontractor, the Contractor shall furnish the subcontractor's fully-itemized breakdown of quantities, prices, man-hours and hourly rates which shall bear the original signature of a representative of the subcontractor authorized to act for the subcontractor. The Contractor shall furnish a detailed explanation and justification for the proposed change. If requested by the Owner, the Contractor shall submit proposals from suppliers or other supporting data required to substantiate costs.
- C. Modification of the Contractor Price, when required, shall be determined as follows {Phase II only}:
 - 1) When unit prices are stated in the Contract, by application of such unit prices.
 - 2) A lump sum price, if agreed upon by both the County and Contractor. Payment to the Contractor shall be added to the project financed capital cost amount (unless capital funding is available). The revised capital cost amount will not be paid to the Contractor until the construction is 100% completed and accepted by the County.
 - 3) If job conditions, or the extent of a nature of the change, warrant it, or if the County and the Contractor fail to agree upon a lump sum price or the application of unit prices to determine the cost of any proposed change, the work may be done at the County's option on the basis of a Force Account as hereinafter stated under Paragraph 64. Under these conditions, the County shall have the right to issue an order for the Work to be performed and the Contractor shall proceed as directed under the provisions of Paragraph 24 and 64.
 - 4) If the change involves only a credit, the Contract Price will be reduced by the amount it would have cost the Contractor if the work omitted had not been eliminated; including overhead and profit, however, the Contractor and the subcontractor will be allowed to retain a sum not in excess of three percent (3%) for handling.
 - 5) If the change involves both a credit and a debit, both sums shall be shown and the two sums balanced to determine the adjusted total cost or credit. No allowance to the Contractor shall be made or allowed for loss of anticipated profits on account of any changes of the work.
 - 6) Unless otherwise specified, the allowable mark-up for combined overhead and profit for work performed by the Contractor with their own forces will be based upon the monetary value of the work in accordance with the following schedule (excluding items included in overhead and profit):

<u>VALUE OF WORK</u> <u>COMBINED OVERHEAD AND PROFIT</u>

0-\$25,000 15%

Over \$25,000 Negotiated but not more than 15%

- 7) For work performed by a subcontractor with its own forces, the percentages for combined overhead and profit for a subcontractor will be as stated in subparagraph (6) above. On work partly or solely performed by a subcontractor, the Contractor will be allowed five percent (5%) of the total cost of the subcontractor's labor, materials overhead and profit, including taxes and insurance on labor required by statute. On all changes in the work defined in this RFP, no Contractor or subcontractor will be allowed any expenses, overhead or profit for employment of another Contractor to perform work for them.
- 8) The cost of foremen and superintendents may be added only when the change order makes necessary the hiring of additional supervisory personnel or makes their employment for time additional to that required by the basic Contract.
- 9) The Contractor shall be allowed the actual cost for rental of machine power tools or special equipment, including fuel and lubricants which are necessary to execute the work required on the change, but no percentages shall be added to this cost. The rental rate is to be agreed upon by the County and the Contractor; the rate shall relate generally to the latest as filed by the Associated Equipment Distributors.
- 10) If the Contractor and the County cannot agree as to the extent the contract time shall be increased for extra work or the extent the Contract time shall be reduced for Work omitted by the County, the increase or decrease, as the case may be, shall be determined by the Project Manager. Any disagreement with this decision may be appealed by the Contractor under the Disputes Clause.
- Notwithstanding any provisions in the contract documents, the County shall not be liable to the Contractor, for any Phase II work, except from guaranteed cost savings.
- D. The allowable percentages of cost for overhead and profit are deemed to include, but not be limited to, the following:

Job supervision (project manager, construction foreman/supervisor) and field office expense required by the Contract, expenses for timekeepers, clerks and watchmen, cost of correspondence of any kind, and insurance not specifically mentioned herein, all expenses in connection with the maintenance and operation of the field office, use of small tools or equipment to job location, and incidental job burdens. No percentage allowances will be made for maintenance or operation of Contractor's regularly-established principal office, branch office or similar facilities.

17. UNAUTHORIZED WORK

The Contractor shall **not** be paid for any work not authorized in writing by the County.

18. CONFORMITY WITH CONTRACT REQUIREMENTS

- A. All work performed and all materials furnished shall be in conformity with the Contract requirements.
- B. In the event the Owner finds the materials or the finished product in which the materials are used for the work performed are not in complete conformity with the Contract requirements and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.
- C. In the event the Owner finds the materials or the finished product in which the materials are used are not in complete conformity with the Contract requirements, but have resulted in a satisfactory product, the Owner shall then make a determination if the work shall be accepted. In this event, the Owner will document the basis of acceptance by a Change Order which will provide for an appropriate adjustment in the Contract price. Contractor is at risk for non-compliant work. Retroactive Change Orders are not acceptable.

19. ADJACENT WORK

- A. The County shall have the right, at any time, to contract for and/or perform work on, near, over or under the work covered by this Contract. In addition, other work may be performed under the jurisdiction of another County agency. The Contractor shall cooperate fully with such other Contractors and carefully fit their own work to such other work as may be directed by the Project Manager.
- B. The Contractor agrees that in event of dispute as to cooperation or coordination with adjacent Contractors the County will act as referee and decisions made by the County will be binding. The Contractor agrees to make no claims against the County for any inconvenience, delay or loss experienced because of the presence and operations of other Contractors. County will be fully cooperative with all Contractors to resolve the matter.

20. CONTROL BY THE CONTRACTOR

The Contractor shall constantly maintain efficient professional supervision of the work, using current project/construction management procedures. They shall carefully study and compare all drawings, specifications, and other instructions and check them against conditions existing or being constructed on the project. Contractor shall immediately report to the County any error, inconsistency or omission which he may discover. The Contractor's project manager shall be on site at all times during the construction period, unless otherwise directed by the Using Agency.

21. COOPERATION WITH UTILITIES

A. It is understood and agreed that the Contractor has considered in its proposal all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for normal delays, inconvenience, or damage sustained by them due to any interference from the said utility appurtenances, the operation of moving them, or the making of new connections thereto, if required for installation and operation of the

Contractor's equipment.

- B. The Contractor shall have responsibility for notifying all affected utility companies prior to performing any work on their utilities and shall cooperate with them in achieving the desired results. All damage to utility facilities caused by the Contractor's operations shall be the responsibility of the Contractor.
- C. At points where the Contractor's operations are adjacent to properties of railway, telegraph, telephone, water and power companies, or are adjacent to other property, damage to which might result in expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made by the Contractor. Contractor is responsible to notify the Miss Utility, prior to start of work.
- D. The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work may be reduced to a minimum and that services rendered by those parties will not be unnecessarily interrupted.
- E. In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

22. AUTHORITY AND DUTIES OF COUNTY INSPECTORS

- A. County inspectors and other County personnel will be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The inspector is not authorized to revoke, alter, or waive any requirements of the Contract, or to approve or accept any portion of the complete project. The inspectors are authorized to call to the attention of the Contractor any failure of the work or materials to conform to the Contract. The inspectors are authorized to reject materials or suspend the work until any questions at issue can be referred to and decided by the Project Manager. Inspectors will perform their duties at such times and in such manner as will not unnecessarily impede progress on the Contract.
- B. The inspector will in no case act as foreman or perform other duties for the Contractor, or interfere with the management of the work by the latter.
- C. Any advice which the inspector may give the Contractor shall not be construed as binding the County in any way, or releasing the Contractor from fulfilling all the terms of the Contract. The duty of the inspector on the project is to observe the progress of the work and to report any deviations from the requirements of the contract documents; however, should the inspector fail to report any such deviation from the Contract requirements, this does not release the Contractor from fulfilling all of the terms of the Contract. Actions of the inspectors are for the

benefit of the County only.

D. Where there is disagreement between the Contractor and the inspector, the inspector will advise the Project Manager who will prepare and deliver in writing to the Contractor, by mail or otherwise, a written order suspending the work and explaining the reason for such shutdown. As soon as the inspector is advised of the delivery of the shutdown order, the inspector will immediately leave the site of the work and any work performed during the inspector's absence will not be accepted or paid for and may be required to be removed and disposed of at the Contractor's expense.

23. INSPECTION OF THE WORK

- A. All work, including the fabrication and source of supply, is subject to observation by the Department, and those agencies required by law to inspect specific items. The County is not responsible for the actions of county, municipal, or other local officials.
- B. The Contractor shall provide facilities for access and inspection as required by the County.
- C. If the specifications, the Department's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the County timely notice of its readiness for inspection, and if the inspection is by another authority, the date fixed for such inspection. Inspections by the County shall be made promptly and where practicable at the source of supply. Any work covered without approval of the Department must, if required by the Consulting Engineer or the Department, be uncovered for examination at the Contractor's expense.

24. REMOVAL OF DEFECTIVE WORK

- A. All work and materials which do not conform to the requirements of the Contract will be considered unacceptable.
- B. Any unacceptable or defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause, found to exist shall be removed and replaced by work and materials which shall conform to the Contract requirements or shall be remedied otherwise in an acceptable manner authorized by the Project Manager.
- C. Upon failure on the part of the Contractor to comply promptly with any order of the County, made under the provisions of this Section, the County will have the authority to cause defective or unacceptable work to be removed and replaced and unauthorized work to be removed and to cause the costs to be deducted from any monies due or to become due the Contractor under this Contract.

25. MAINTENANCE OF WORK DURING CONSTRUCTION

- A. The Contractor shall maintain the work during construction and until acceptance. This maintenance shall be continuous and effective, prosecuted with adequate equipment and forces to the end that all parts of the work be kept in satisfactory condition at all times and protected from damage of any kind from external sources.
- B. All cost of maintenance work during construction and before final acceptance shall be included in the price proposal and the Contractor will not be paid any additional amount for such work.
- C. In the event that the Contractor's work is halted by the County for failure to comply with the provisions of the Contract, the Contractor shall maintain the entire project as provided herein as may be necessary during the period of suspended work or until the Contractor has been declared in default.

26. FAILURE TO MAINTAIN ENTIRE PROJECT

Failure on the part of the Contractor, at any time, to adequately maintain installed equipment shall result in the County notifying the Contractor to comply with the required maintenance provisions of the Contract. In the event that the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the County will immediately proceed with adequate forces and equipment to maintain the project, and the entire cost of this maintenance will be deducted from funds due the Contractor.

27. COUNTY'S RIGHT TO DO WORK

If the Contractor should neglect to execute the Work properly or fail to perform any provision of this Contract, the County may make good such deficiencies and may deduct the cost thereof from the funds then or thereafter due the Contractor.

28. MATERIALS- GENERAL

- A. All materials shall meet all quality requirements of the Contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the County in writing of the sources from which they propose to obtain all materials requiring approval, testing, inspection, or certification prior to incorporation into the work as soon as possible after receipt of notification of award of the Contract.
- B. Materials include all manufactured products and processed and unprocessed natural substances required for completion of the Contract. The Contractor, in accepting the Contract, is assumed to be thoroughly familiar with the materials required and their limitation as to use, and

requirements for connection, setting, maintenance, and operation. Whenever an article, material or equipment is specified and a fastening, furring, connection (including utility connections), access hole, fishing closure piece, bed or accessory is normally considered essential to its installation in good quality construction, such shall be included as if fully specified. Nothing in this RFP shall be interpreted as authorizing any work in any manner contrary to applicable laws, codes, or regulations.

- C. <u>Approval.</u> All materials submitted in the Contractor's specifications and as required in this RFP are subject to the County's approval as to conformity with the type, quality, design, color, etc. No work for which approval is necessary shall be completed until written approval is given by the County. Approval of a subcontractor or supplier as such does not constitute approval of a material which is other than that included in the specifications.
- D. <u>New Materials.</u> Unless otherwise specified, all materials shall be new. Old materials must not be used as substitutes for new, regardless of condition or repair, unless approved in writing by the Project Manager.
- E. Quality. Unless otherwise specified, all materials shall be of the best quality of the respective kinds.
- F. <u>Samples.</u> The Contractor shall furnish for approval all samples as directed. The materials used shall be the same as the approved samples.
- G. <u>Proof of Quality.</u> The Contractor shall, if requested, furnish satisfactory evidence as to the kind and quality of materials either before or after installation. The Contractor shall pay for any tests or inspections called for in the specifications and such tests as may be deemed necessary for "substitutions," as set forth in these General Conditions.
- H. <u>Century Compliant.</u> The Contractor warrants that the products (computers, controls, software, etc.) provided or systems developed under this Contract are "Century Compliant" meaning that the product:
 - Is able to process date data accurately, including date data century recognition, calculations that accommodate same century and multi-century formulas and date values (including leap year factors), and date data interface values that reflect the century, when used either in a stand-alone configuration or in combination with other "Century Compliant" products used by the County.
 - 2) Will not abnormally terminate its function or provide or cause invalid or incorrect results due incompatibility with the calendar year.

In addition to any other warranties applicable to this Contract or any remedies otherwise available to the County, the Contractor agreed to promptly repair or replace any product furnished under this contract that is not "Century Compliant," provided the County gives notice within a

reasonable time following discovery of such failure.

- I. <u>Standard Specifications.</u> When no specification is cited and the quality, processing, composition or method of installation of a thing is only generally referred to, then:
 - 1) For items not otherwise specified below, the latest edition of the applicable American Society for Testing and Materials specification is the applicable specification.
 - 2) For items generally considered as plumbing and those items requiring plumbing connections, the applicable portions of the latest edition of the Building Officials and Code Administrators code are the applicable specification.
 - 3) For items generally considered as heating, refrigerating, air-conditioning, or ventilating, the applicable portions of the latest four editions of the ASH RAE Handbook published by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., are the applicable specification.
 - 4) For items generally considered as site work, the applicable portions of the County, State and Federal regulations will apply.
 - 5) For items generally considered as electrical, the applicable provisions of the latest edition of the National Electrical code are the applicable specification.
 - 6) For items generally considered as fire protection, the applicable portion of the latest edition of the National Fire Protection Association Code is the applicable specification.

29. STORAGE AND HANDLING OF MATERIALS

- A. Materials shall be so stored as to assure the preservation of their quality and acceptability for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. Approved portions of the project site may be used for storage purposes and for the placing of the Contractor's plant and equipment; such storage areas must be restored to their original condition by the Contractor at his expense.
 - All mechanical and/or electrical equipment delivered to the job site shall be stored on pedestals, above ground and under roof or other approved covering. All enclosures for equipment shall be weatherproof. Any motors, which are not totally enclosed, and dry type transformers that are involved in the work, shall be stored in a heated area with a minimum temperature of fifty degrees Fahrenheit (50"F).
 - All valves shall be stored under roof on wood pedestals, aboveground. All insulation shall be stored under roof or in trailers, adequately protected from the weather. The Contractor shall follow all written instructions and recommendations of the manufacturer on oiling, protection and maintenance of equipment during storage. It shall be the Contractor's complete responsibility for the storage and care of the equipment and materials. Material not properly stored prior to installation shall not be

considered for payment.

- 3) Materials shall be handled in such a manner as to preserve their quality and acceptability for the work.
- 4) Contractor shall confine his tools and equipment and the storage of materials to the area delineated in the contract documents as to the "Limit of Contract."
- 5) Contractor shall not load or permit any part of a structure to be loaded with a weight that will endanger the safety of the structure or any part thereof.
- B. <u>Explosives.</u> Explosives shall not be used on projects covered under this contract.

C. Paints.

- 1) Oil base paints and inflammable liquids shall not be stored in large quantities on the project. Containers shall be limited to five gallon size. Any liquid with a flash point of Jess than one hundred (100) degrees F shall be contained in safety cans, UL approved. Liquid with a higher flash point shall be stored in rigid cans.
- 2) Oily rags, waste, etc., must be removed from the work site at the close of each working day.

30. SUBSTITUTIONS

- A. Should the Contractor desire to substitute another material for one or more specified by name in the RFP or the approved specifications, the Contractor shall apply in writing, for such permission and state the credit or extra involved by the use of such material. The County will not consider the substitution of any material different in type of construction methods unless such substitution affects a benefit to the County.
- B. The Contractor shall not submit for approval materials other than those specified without a written statement that such a substitution is proposed. Approval of a "substitute material" by the County when the Contractor has not designated such materials as a "substitute," shall not be binding on the County nor release Contractor from any obligations of his Contract, unless the County approves such "substitution" in writing expressly acknowledging the substitution.

31. APPROVED EQUALS

The terms "Or Equal," "Equal," "Approved Equal," where used, are used as synonyms. They are implied in reference to all named manufacturers and specifications unless otherwise stated. Only materials fully equal in all details will be considered. The County is the final judge of the equality. The County does not represent or warrant under any circumstances, including by use of the words "or equal," that there exists an equal to any item specified.

32. CONTRACTOR'S OPTIONS

When several products or manufacturers are named in the specifications and approved by the County for the same purpose or use, then the Contractor may select any of those so named. However, all of the units required for, and used in, the project must be the same in material and manufacture.

33. TESTS

- A. If the contract documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the work to be inspected, tested, or approved, the Contractor shall give the County timely notice of its readiness so the County may observe such inspection, testing, or approval. The Contractor shall bear all costs of such inspections, tests, or approvals.
- B. If the County determines that any work requires special inspection, testing, or approval which the contract documents do not include, the County will instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in A., above. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the contract documents, the Contractor shall bear all costs thereof, including compensation for the County's additional services made necessary by such failure; otherwise the County shall bear such costs, and an equitable adjustment will be made in the Contract price.
- C. Required certificates of inspection, testing or approval shall be obtained by the Contractor and promptly delivered by them to the County. The work shall not be considered 100% complete until such certifications are in the possession of the County.

34. BUY AMERICAN STEEL

Contractor shall comply with the requirements of Title 17, Subtitle 3 of the State Finance and Procurement Article of the Annotated Code of Maryland.

35. LAWS TO BE OBSERVED

The Contractor hereby represents and warrants that:

- A. It is qualified to do business in the State of Maryland and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- B. It is not in arrears with respect to the payment of any monies due and owing to the County, or any department or agency thereof, including but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;

- C. It shall comply with all federal, State, and County laws, regulations, and ordinances applicable to its activities and obligations under this Contract; and
- D. It shall obtain, at its expense, all licenses, permits, insurance, and government approvals, if any, necessary to the performance of its obligations under this Contract.

In addition, if the Contractor observes that the drawings and specifications are at variance with any law, they shall promptly notify the County, and make any necessary changes to the drawings and specifications to bring them into compliance with the law at no extra cost to the County. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the County, it shall bear all costs arising there from.

36. PERMITS AND LICENSES

Contractor will file with the appropriate local authorities, drawings and specifications, and any pertinent data reasonably proper for their information. The Contractor will be required to pay all necessary fees to local authorities for inspection or for the privilege or right to execute the work as called for in the contract documents and Contractor shall include the cost of said fees in its bid.

37. PATENTED DEVICES, MATERIALS AND PROCESSES

- A. The Contractor shall pay for all royalties and license fees. They shall defend all suits or claims for infringement of any patent rights and shall save the County harmless from loss on account thereof.
- B. When a particular process or the product of a particular manufacturer or manufacturers is specified or proposed to be used that may be an infringement of a patent, the Contractor will at his option: (1) procure for the County the right to use the applicable process or product; (2) replace the process or product with a non- infringing process or product complying with the specifications; or (3) modify the process or product so it become non-infringing and performs in a similar manner to the original item.

38. LAND, AIR AND WATER POLLUTION

- A. If requested or required, the Contractor must submit evidence to the Department that the governing Federal, State, and County, air pollution criteria will be, and were, met. This evidence and related documents will be retained by the Department for on-site examination.
- B. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Project Manager, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor required by the County as one of the terms of this Contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor required by the terms of this Contract, such suspension, delay, or

interruption shall be considered as if ordered by the Project Manager in the administration of this Contract under the terms of the "Suspension of Work" clause of this Contract. The period of such suspension, delay, or interruption shall be considered reasonable, and an adjustment shall be made for any increase in the cost of performance of this Contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

C. The term "environmental litigation," as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the County has not duly considered, either substantively or procedurally, the effect of the work on the environment.

39. CONSTRUCTION INSURANCE REQUIREMENTS

- A. Insurance During Construction
 - The Contractor and his subcontractors shall purchase and maintain comprehensive third-party legal liability insurance and other such insurance as is appropriate for the work to be performed on the project. Further, the Contractor shall be responsible of the maintenance of this insurance whether the work is performed directly by the Contractor, by any subcontractor, by any person employed by the Contractor or any subcontractor, or by anyone for whose acts the Contractor may be liable. This insurance shall include protection for:
 - (a) Claims arising from Worker's Compensation statutes or similar employee benefit acts, or third-party legal liability claims arising from bodily injury, sickness and disease, or death of Contractor's employees. The minimum limits of such coverage shall be as required by law.
 - (b) Third-party legal liability claims against the Contractor arising from the operations of the Contractor, subcontractors, and supplies with such protection extended to provide comprehensive coverage, including personal injury, completed operations, explosion and collapse hazard, and underground hazard. The minimum combined limit for personal injury and property damage liability shall be \$1,000,000 per occurrence and \$2,000,000 in the aggregate, unless higher limits are stated elsewhere in the contract documents.
 - (c) Third-party legal liability claims arising from bodily injury and/or damage to property of others from the ownership, maintenance or use of any motor vehicle, both on-site and offsite. The minimum combined limit for personal injury and property damage liability shall be: \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
 - 2) The Contractor shall purchase and maintain property insurance (Builder's Risk) covering the project, including improvements to real property and goods and materials on the site to be incorporated into the project. Such property insurance shall be for the full insurable value of the property covered and shall be written on an "All Risk" basis covering physical loss and damage including theft, vandalism and malicious mischief, collapse, water damage, and such other perils as may be applicable to the project. Such insurance shall include the interest of the Owner, the General Contractor, and all subcontractors as their interest may appear.

- B. General: All insurance required shall be purchased and maintained with a company or companies lawfully authorized to do business in the County of Maryland. Such insurance shall be for limits of liability as specified for the project or legally required, whichever is greater. All required insurance policies shall be endorsed to provide thirty (30) days prior written notice by certified mail, or any material change, cancellation, or non-renewal to Howard County DPW, Bureau of Facilities, 9250 Bendix Road, Columbia, MD 21045
- C. All required insurance shall be maintained until the County has fully accepted the work required under the Contract. Failure to obtain or to maintain the required insurance or to submit the required proof of insurance shall be grounds for termination of the Contract for default.

40. ASSIGNMENTS

The Contractor shall not assign the Contract and shall not assign any monies due or to become due to him hereunder, without the previous written consent of the County.

41. SEPARATE CONTRACTS

- A. The County reserves the right to let other contracts in connection with this work.

 The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs.
- B. If any part of the Contractor's work depends on proper execution or results upon the work of any other Contractor, the Contractor shall inspect and promptly report to the County any defects in such work that render it unsuitable for such proper execution and results. Their failure to so inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work, except as to the defects which may develop in the other Contractor's work after the execution of his work.
- C. To ensure the proper execution of his subsequent work, the Contractor shall measure work already in place and shall at once report to the Project Manager any discrepancy between the executed work and the drawings.

42. RELATIONSHIP OF CONTRACTOR TO PUBLIC OFFICIALS AND EMPLOYEES

A. In carrying out any of the provisions of the Contract, or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Project Manager or other authorized representatives of the County, it being understood that in all such matters they act solely as agents and representatives of the County.

- B. The County may terminate the right of the Contractor to proceed under this Contract if it is found by the Project Manager that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the County with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract; the facts upon which the Project Manager makes such findings may be reviewed in any competent court.
- C. In the event this Contract is terminated as provided in paragraph B hereof, the County shall be entitled (1) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor, and (2) in addition to any other damages to which is may be entitled by law, to exemplary damages in an amount (as determined by the Project Manager) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.
- D. The rights and remedies of the County provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.
- E. Non hiring of County employees- No official or employee of the County whose duties as such official or employee include matters relating to or affecting the subject matter of this contract, shall during the pendency and term of this contract and while serving as an official or employee of the County become or be an employee of the contractor or any entity that is subcontractor to this contract.

43. NO WAIVER OF LEGAL RIGHTS

- A. The County shall not be precluded or stopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefore, from showing the true amount and character of the work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate or certificate is untrue or is incorrectly made, or from showing that the work or materials do not in fact conform to the requirements of the Contract. The County shall not be precluded or stopped, notwithstanding any such measurement, estimate, or certificate and payment from recovering from the Contractor or his sureties, or both, such damage as it may sustain by reason of his failure to comply with the terms of the Contract. Neither the acceptance by the County, or any representative of the County, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the County shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages.
- B. The waiver by the County of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach or any other consideration contingent on the making of this agreement.

44. ASSIGNMENT OF ANTI-TRUST CLAIMS

The Contractor sells, transfers, and assigns to the County of Maryland all rights, title and interest of and in and to any causes of action arising at any time before the date of this assignment or during the

performance of this Contract under the anti-trust Laws of the United states, including Section 1 of the Sherman Act, and the Antitrust Law of Maryland relating to the purchase by him or the County of Maryland of any products from any supplier or source whatever that is incorporated in the structure built under the terms of this agreement. The Contractor hereby certifies that the *above* causes of action are lawfully owned and that no previous assignment of same has been made nor has the same heretofore been attached or pledged in any manner whatsoever.

45. FEDERAL PARTICIPATION

When the United States Government pays all or any portion of the cost of a project, the work shall be subject to the inspection of the appropriate Federal agency. Such inspection shall in no sense make the Federal government a party to this Contract, and will not interfere, in any way, with the rights of either party hereunder.

46. ENTIRE AGREEMENT

The Contract constitutes the entire agreement between the parties hereto and other communications between the parties prior to the execution of the Contract, whether written or oral, with reference to the subject matter of the Contract, are superseded by the agreements contained herein. The Contract may not be modified, amended, changed or altered except by written instrument executed by the parties hereto and approved by the Project Manager.

47. NOTICE TO PROCEED

After the Contract has been executed, the County will issue to the Contractor a "Notice to Proceed" and this notice will stipulate that date on or before which the Contractor is expected to begin work. Any preliminary work started, or materials ordered, before receipt of the "Notice to Proceed," shall be at the risk of the Contractor.

48. PROSECUTION OF THE WORK; DELAYS AND EXTENSION OF TIME

- It is imperative that the Contractor complete the work within the time limits specified and agreed to in the contract.
- B. The date of commencement of the work is the date established in a Notice to Proceed signed by the Project Manager.
- C. The Contractor agrees to prosecute the work continuously and diligently and no charges or claims shall be made by it for any delays or hindrances from any cause whatsoever during the progress of any portion of the work specified in this Contract. Time extensions will be granted only for excusable delays that arise from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the

public enemy, acts of the County in either its sovereign or contractual capacity, acts of another Contractor in the performance of a contract with the County, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or the subcontractors or suppliers.

49. PUBLIC CONVENIENCE AND SAFETY

The Contractor at all times shall conduct the work in such a manner as to create the least practicable obstruction to all forms of traffic. The convenience of the general public, tenants, and of the residents along and/or adjacent to the improvement shall be respected. Material stored upon the project shall be placed so as to cause a minimum of obstruction to the public. Sprinkling shall be performed at the direction of the Project Manager. The Contractor shall, unless otherwise specified, provide and maintain in passable condition such temporary access, roads and bridges as may be necessary to accommodate traffic diverted from the project under construction, or using the project under construction and shall provide and maintain in a safe condition temporary approaches to, and crossings of, the project. Existing facilities planned to be removed, but which might be of service to the public during construction are not to be disturbed until other and adequate provisions are made. Fire hydrants on or adjacent to the project shall be kept accessible to fire apparatus at all times, and no material or obstruction shall be placed within 15 feet of any such hydrant. Work closed down for the winter or at any other times shall be left entirely accessible at all points to fire apparatus. All footways, gutters, sewer inlets and portions of the project under construction shall not be obstructed more than is absolutely necessary.

50. BARRICADES AND WARNING SIGNS

The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other control devices, and shall take all necessary precautions for the protection of the work and safety of the agency and its employees.

51. PRESERVATION, PROTECTION, AND RESTORATION OF PROPERTY

- A. The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the County property from all injury or loss arising in connection with this Contract. He shall repair and indemnify against any such damage, injury or loss, except such as may be directly due to errors in the contract documents or caused by agents or employees of the County. He shall adequately protect adjacent property as provided by law and the contract documents.
- B. The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public and shall post danger signs warning against the hazards created by such features of construction as protruding nails, hod hoists, well holes, elevator hatchways, scaffolding, window openings, stairways, and falling materials.

52. PROGRESS SCHEDULE AND TIME

- A. Preparation of Work Schedule. The Contractor shall prepare a Critical Path Method (CPM) schedule setting forth his dates for completing various portions of the work. Included among the tasks set forth on the schedule shall be the critical design completion dates, submittal dates (to the County), and dates for return of the approved submittals. The schedule shall be reviewed by the County for approval of the time within which the County must evaluate the Contractor's submittals. The County's approval of the Contractor's schedule does not constitute an approval of the entire schedule; it merely constitutes an approval of that portion of the schedule that relates to the County's review of submittals. Contractor shall assume a turnaround time of 3 weeks for submittal review by the County.
- B. <u>Preparation of Critical Path Method Schedules.</u> The Contractor shall submit a CPM to DGS before the Notice to Proceed is issued. The CPM will be updated at least monthly, or more often if dictated by circumstances, to reflect changes and variances in the progress of the project.

53. SUSPENSION OF THE WORK

- A. The Project Manager may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work for a period of time as he may determine to be appropriate for the convenience of the County.
- B. If the performance of all or any part of the work is for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Project Manager in the administration of the Contract, or by his failure to act within the time specified in this Contract (or if no time is specified, within a reasonable time), the Contract period may be extended for a reasonable amount of time.
- C. No request for an extension under this clause will be allowed:
 - 1) for any costs incurred more than 20 days before the Contractor shall have notified the Project Manager in writing of the act or failure to act involved {but this requirement shall not apply as to a claim, resulting from a suspension order), and
 - 2) unless the request is asserted in writing no more than 20 days after the termination of a suspension, delay, or interruption, but not later than the date of final payment under the Contract.

54. COUNTY'S RIGHT TO TERMINATE FOR ITS CONVENIENCE

The performance of work under this Contract may be terminated by the County in accordance with this clause in whole, or from time to time in part, whenever the County shall determine that such termination is in the best interest of the County. The County will pay reasonable costs associated with this contract that the Contractor has incurred up to the date of termination and all reasonable costs associated with

termination of the Contract. However, the Contractor shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination.

55. TERMINATION FOR DEFAULT

If the Contractor fails to fulfill its obligations under this Contract properly and on time, or otherwise violates any provision of the Contract, the County may terminate the Contract by written notice to the Contractor. The notice will specify the acts or omissions relied upon as cause for termination. All finished or unfinished work provided by the Contractor will, at the County's option, become the County's property. The County will pay the Contractor fair and equitable compensation for satisfactory performance prior to receipt of Notice of Termination, less the amount of damages caused by Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor shall remain liable after termination and the County can affirmatively collect damages

56. PARTIAL ACCEPTANCE

- A. If during the construction of work the County desires to occupy any portion of the project, the County will have the right, at its sole option and discretion, to occupy and use those portions of the project which is, in the opinion of the Project Manager, can be used for their intended purpose; provided that the conditions of occupancy and use are established and the responsibilities of the Contractor and the County for maintenance, heat, light, utilities, and insurance are mutually agreed to by the Contractor and the County.
- B. Partial occupancy shall in no way relieve the Contractor of his responsibilities under the Contract.

57. FAILURE TO COMPLETE ON TIME/LIQUIDATED DAMAGES

- A. Time is an essential element of the Contract and it is important that the work be vigorously prosecuted until completion.
- B. For each day that any work shall remain uncompleted beyond the time(s) specified elsewhere in the Contract, the Contractor shall be liable for liquidated damages in the amount(s) specified in the contract, provided, however, that due account shall be taken of any adjustment of specified completion time(s) for completion of work as granted by approved change orders.
- C. The County will deduct and retain out of the monies due to or become due to the Contractor hereunder the amount of liquidated damages, and in case the amounts due the Contractor are less than the amount of such damages, the Contractor shall be liable to the County for the difference.

58. SUBSTANTIAL COMPLETION AND FINAL INSPECTION

- A. When the installation is substantially completed, the Contractor shall notify the Project Manager that the work will be ready for final inspection and test on a definite date. Sufficient notice shall be given to permit the Project Manager to schedule the final inspection with the County's consulting engineer.
- B. On the basis of the inspection if the Project Manager and consulting engineer determine that the work is substantially complete and the project can be occupied or used for its intended purpose, the Project Manager will establish the date of substantial completion and will County the responsibilities of the County and the Contractor for maintenance, heat, utilities, and insurance.
- C. The Project Manager will fix the time within which the Contractor shall complete any remaining items of work which will be indicated on a list (punch list) prepared by the County. If the Contractor fails to complete the remaining items so listed in the time stipulated, the County will have the undisputed right to complete the work and deduct any cost incurred from any monies related under the Contract.

59. CLEANING-UP

The Contractor shall at all times keep the construction area, including storage areas used by them, free from accumulations of waste material or rubbish and prior to completion of the work remove any rubbish from the premises and all tools, scaffolding, equipment, and materials not the property of the County. Upon completion of the construction, the Contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the Project Manager.

60. GUARANTEES

The Contractor guarantees for the life of the Contract, commencing on the date fixed by the parties: (normally at Master Lease Program Loan Takedown, unless otherwise noted).

- A. That the work contains no faulty or imperfect material or equipment or any imperfect, careless, or unskilled workmanship.
- B. That all mechanical and electrical equipment, machines, devices, etc., shall be adequate for the use to which they are intended, have been installed in accordance with specificational applicable codes and manufacturers recommendations, and shall operate with ordinary care and attention in a satisfactory and efficient manner.
- C. That the Contractor will re-execute, correct, repair, or remove and replace with proper work, without cost to the County, any work found not to be as guaranteed by this Section. The Contractor shall also make good all damages caused to other work or materials in the process of complying with this Section.

- D. That the entire work shall be water-tight and leak-proof.
- E. That the actual adjusted cost avoidance for the life of the Contract will be no less than the guaranteed savings as defined in the Contract.

61. NOTICE TO COUNTY FOR LABOR DISPUTES

- A. Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto to the Project Manager.
- B. The Contractor agrees to insert the substance of this clause, including this Paragraph B., in any subcontract hereunder as to which a labor dispute may delay the timely performance of this Contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify his next higher tier subcontractor, or the prime Contractor, as the case may be, of all relevant information with respect to such dispute.

62. SCOPE OF PAYMENT

- A. The County agrees to pay the Contractor on the following basis as compensation for the Contractor's services:
 - Total ECM capital cost, as quoted in the Contractor's, Phase II Proposal, including engineering feasibility study, preparation of comprehensive energy plan, design, construction documents, construction, training and start-up. This amount is to be payable to the Contractor upon acceptance by the County at 100% completion of the construction phase of the project, and subject to the loan takedown schedule set by the County's Guaranteed Energy Performance Lease Line of Credit. The date the Contractor is paid constitutes the start of the guarantee period. The cost or contract value of any ECMs not operating to the expected performance levels will be the responsibility of the Contractor.
 - 2) Yearly maintenance/service costs as quoted in the Contractor's Phase II Proposal, for the duration of the contract, and payable by the Owner.
- B. The County's total yearly cost for the replacement of the project capital cost including interest and yearly maintenance costs, cost of M & V, cost of guarantee, and cost of Project manager shall not be greater than the guaranteed energy and energy related savings for the duration of the contract.
 - 1) The recommendations contained in the engineering feasibility study (Phase I) fail to meet the County's objectives for the project (as outlined in Section I and Section III of this

- RFP), or is deemed unreasonable, unworkable, or cost excessive by the County, the County will have no obligation to pay the fee associated with the study.
- 2) Should the recommendations, including capital cost, yearly maintenance cost, and guaranteed savings, meet or exceed the County's objectives as determined by the County, and the County elects to proceed with Phase II of the project, the cost of the study shall be included in the Contractor's ECM capital cost, and financed by the County, either through the Contractor or privately. In either case, the payment to the Contractor shall be the same as noted in A1 and A2 above.

63. CONTRACTOR

- A. After completion of project phases noted above, and upon demand, the Contractor shall certify to the County in writing that, in accordance with contractual arrangements, suppliers and subcontractors:
 - 1. have been paid from the proceeds of the financing arranged by the Contractor or the County, and
 - 2. no liens have been filed or are pending against the installed equipment.
- B. The County may withhold payment under this Contract if it determines that any part of the contract, including completion of punch list items, has not been completed satisfactorily. A letter notifying the Contractor of the outstanding work will be submitted by the County. Neither payment made to the Contractor nor partial or entire use of the work by the County shall be an acceptance of any work or materials not in accordance with this Contract.
- C. The County has the right to withhold from payments due to the Contractor any amounts the County claims to be owed the County by the Contractor.
- D. In applying for all payments, the Contractor shall submit in addition to the above a certificate that he has paid:
 - 1) all labor to date;
 - 2) all vendors and material suppliers in full for all items received;
 - 3) all subcontractors in full, less the retained amount; and
 - 4) all insurance premiums.

64. FORCE ACCOUNT WORK

- A. When the Contractor is required to perform work as a result of additions or changes to the Contract for which there are no applicable unit prices in the Contract, the Department and Contractor shall attempt to agree to a price for the performance of such work. If an agreement cannot be reached, the Department may require the Contractor to do such work on a force account basis to be compensated in accordance with the following:
 - Labor. For all labor, including design services, and for foremen in direct charge of the specific operations, the Contractor shall receive the actual wages for each and every hour that said persons are actually engaged in such work. The Contractor shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits,

when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

- 2) <u>Materials</u>. For materials accepted by the County and used, the Contractor shall receive the actual cost of such materials delivered on the work, including transportation paid by him (exclusive of machinery rentals as hereinafter set forth).
- Equipment. For any machinery or special equipment (other than small tools, whether rented or owned), the Contractor shall receive the rates agreed upon in writing before such work is begun, or the Contractor shall receive those rates which may be specified elsewhere in the Contract. For purpose of definition, equipment with a new cost of \$500 or less will be considered small tools.
- 4) <u>Materials and Supplies Not Incorporated in the Work</u>. For materials and supplies expended in the performance of the work (excluding those required for rented equipment) and approved by the County, the Contractor shall receive the actual cost of such materials and supplies used.
- Bond, Insurance, and Tax. For bond premiums, property damage, liability, and workmen's compensation insurance premiums, unemployment insurance contributions and social security taxes on the force account work, the Contractor and County shall determine an equitable percent to be applied against the labor cost (premium pay and fringes excluded).
- 6) <u>Subcontractors.</u> For work done solely by a subcontractor, the subcontractor's cost shall be determined as stipulated in Subparagraphs (1. through 5.), above. The allowable percentages for combined overhead and profit for the subcontractor shall be as stipulated hereinafter under Subparagraph 8. The Contractor shall be entitled to an allowance of five percent (5%) of the subcontractor's total cost of doing the work.
- 7) <u>Superintendence.</u> No additional allowance shall be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- 8) <u>Contractor's Overhead and Profit.</u> The Contractor will be paid overhead and profit for work performed by his own forces as a percentage thereof, at the following scale:

<u>VALUE OF WORK</u> <u>COMBINED OVERHEAD AND PROFIT</u>

\$0-25,000 15% Over 25,000 Negotiated; maximum of 15%

- B. <u>Compensation.</u> The compensation as set forth above shall be received by the Contractor as payment in full for the work done on a force account basis in accordance with all other provisions in the Contract respecting payment. At the end of each day, the Contractor's representative and the Project Manager shall compare records of the cost of work as ordered on a force account basis.
- C. <u>Statements.</u> No payment will be made for work performed on a force account basis until the Contractor furnishes the Project Manager duplicate itemized statements of the cost of such force

account work detailed as to the following:

- Name, classification, date, daily hours, total hours, rate, and extension for such laborer, foreman.
- Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- 3) Quantities of materials, prices, and extensions.
- 4) Transportation of materials.
- 5) Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- Payments of items under Subparagraphs 3. and 4. above, shall be accompanied by original receipted invoices for materials used and transportation changes. If, however, the materials used in the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the original invoices, the statement shall contain or be accompanied by an affidavit of the Contractor which shall certify that such materials were taken from his stock, that the quantity claimed was actually used and that the price and transportation of the material as claimed represent actual cost.

65. DEDUCTIONS FOR UNCORRECTED WORK (Phase II only)

If the County deems it inexpedient to correct work injured or done not in accordance with the Contract, an equitable deduction from the payment shall be made thereof.

66. CORRECTION OF WORK NOT IN ACCORDANCE WITH THE CONTRACT (Phase II only)

- A. The Contractor shall promptly remove from the premises all materials condemned by the County as failing to conform to the Contract, whether incorporated in the Work or not. The Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the County and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.
- B. If the Contractor does not remove such condemned work and materials within a reasonable time, the County may remove them and may store the materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal, the County may, sell such materials and shall account for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

67. RETENTION OF RECORDS

- A. The Contractor shall retain and maintain all records and documents relating to this Contract for three years after final payment by the County hereunder or any applicable statute of limitations, whichever is longer, and shall make them available for inspection and audit by authorized representatives of the County, including the Project Manager or designee, at all reasonable times.
- B. The Contractor further agrees to include in all their subcontracts hereunder a provision to the effect that the subcontractor agrees that the County or any of its duly authorized representatives shall, until the expiration of three years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract.

68. EMPLOYEES AND CONSULTANTS

- A. <u>Qualification of Employees</u>: Only personnel thoroughly trained and skilled in the task assigned them may be employed on any portion of the work. Any employee found to be unskilled or untrained in his work shall be removed from the work.
- B. <u>Licensed Employees:</u> When Municipal, County, State, or Federal laws require that certain personnel (electricians, plumbers, architects, engineers, etc.) be licensed, then all such personnel employed on the work shall be so licensed.
- C. <u>Quantity of Labor</u>: The Contractor shall employ on the work, at all times, sufficient personnel to complete the work within the time stated in the Contract.
- D. <u>Work Areas.</u> The Contractor shall confine the operations of his employees to the limits as provided by law, ordinance, permits, or direction of the Department.

E. Methods and Quality:

- All workmanship shall be of good quality. Whenever the method of the work or manner of procedure is not specifically stated in the contract documents, then it is intended that the best standard practice shall be followed. Recommendations of the manufacturers of approved materials shall be considered as a part of these specifications and all materials shall be applied, installed, connected, erected, used, cleaned and conditioned as so called for thereby. This, however, does not remove any requirement in these specifications to add to the manufacturer's recommendations.
- 2) All materials shall be accurately assembled, set, etc., and when so required in good construction, shall be true to line, even, square, plumb, level and regularly spaced, coursed, etc. Under no circumstances, either in new or old work shall any material be applied over another which has not been thoroughly cleaned, sanded, or otherwise treated so as not to impair the finish, adhesion, or efficiency of the next applied item.
- All methods, procedures, and results are subject to the County's approval as to finished result to be obtained.

F. Scheduling:

- 1) The Contractor shall so schedule the work as to ensure efficient and uninterrupted progress and to hold to an absolute minimum the cutting and patching of new work. All cutting, patching, and digging necessary to the execution of the work is included.
- 2) The Contractor shall so schedule the scope of work (including design, construction, maintenance, training, etc.) that each installation or portion of the work shall be properly coordinated with all other portions of the work as required for a complete installation, all according to accepted good design and construction practice, and in accordance with the project schedule.
- G. Superintendent. The Contractor shall keep on the project site, at all times during its progress, a competent, English-speaking Superintendent and any necessary assistants, all approved by the Department prior to commencement of the work. The Contractor shall submit in writing to the Department the name of the person it intends to employ as superintendent for the execution of this Contract with a statement of the proposed superintendent's qualifications. This data will be reviewed by the Department and a response given in writing. Persons who have previously provided unsatisfactory work executed for the County or who are without proper qualifications, will not be approved. Should it be necessary to change the Superintendent, this procedure will be repeated. A single Superintendent will be permitted to superintend two or more jobs located at the same institution or close to each other only when approved by the Department in writing. The Superintendent shall represent the Contractor. All directions given to the Superintendent shall be as binding as if given to the Contractor. Directions shall be confirmed in writing on written request from the contractor. Should the Superintendent be complained of by the Department for cause, he shall be removed from the work and a new Superintendent obtained and approved as described above.
- H. <u>Discipline.</u> The Contractor shall at all times enforce strict discipline and good order among their employees and shall not employ or permit to remain on the work any unfit person. They shall enforce all instructions relative to use of water, heat, power, no smoking, and control and use of fires as required by law, and the County. Employees must not be allowed to loiter on the premises before or after working hours.
- I. <u>Employee Safety</u>. The Contractor shall designate a responsible member of his organization, on the work, whose duty it shall be, in addition to his other duties, to prevent accidents and to enforce the standards required under the Contract. The name and position of the person so designated shall be reported to the Department by the Contractor at the commencement of the work.

69. INTENTIALLY DELETED

70. SUBCONTRACTS

- A. The Contractor shall, as soon as practicable and before the execution of the Contract, notify the Department in writing, of the name of subcontractors proposed for the principal parts of the work and for such others as the County may direct and shall not employ any that the Department may object to as incompetent or unfit.
- B. The Contractor agrees that the Contractor is as fully responsible to the County for the acts and omissions of their subcontractors at any time and of persons either directly employed by them as it is for the acts and omissions of personsdirectly employed by the subcontractors.
- C. Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the County, and nothing in the contract documents is intended to make the subcontractor a beneficiary of the Contract between the County and the Contractor.

71. RELATION OF CONTRACTOR AND SUBCONTRACTOR

- A. The Contractor agrees to bind every subcontractor and will see that every subcontractor agrees to be bound by the terms of the Contract documents, as far as applicable to its work, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the County.
- B. The Contractor agrees and shall incorporate by reference or otherwise include these General Conditions and the following provisions in all subcontracts and supply contracts applicable to the work. Subcontractor agrees to be bound to the Contractor by the terms of the Agreement, General Conditions, Drawings and Specifications, and to assume toward them all obligations and responsibilities that they, by those documents, assumes toward the County.
- C. The subcontractor agrees, upon completion of their work, to promptly pay all labor, material suppliers, vendors, subcontractors and others, to permit simultaneous final payment by the Contractor.
- D. The Contractor and the subcontractor agree that nothing in the Contract shall create any obligation on the part of the County to pay to or to see to the payment of any sums to any subcontractor.

72. CONSTRUCTION SAFETY AND HEALTH STANDARDS

It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to this Contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of this Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health or safety, as determined under construction safety and health standards, laws and regulations of the locality in which the work is done, the State, and the Federal government.

III. SCOPE OF WORK

A. The Contractor shall:

5)

- 1) Provide all necessary study, investigation, design, construction, training, monitoring and verification, and maintenance for the complete installation of ECM's under the conditions required in this Contract.
- 2) Provide construction drawings, specifications, and equipment submittals for review and approval by the County.
- Provide a program that will result in the savings identified in the energy performance contract (Howard County Government EPC-2) (Revised June 16, 2014).
- 6) Provide Certificate of Insurance and bond prior to any funding of the projects.
- Provide training to facility maintenance/operations and County personnel.
 Training shall address the purpose, operation and maintenance of the equipment and systems installed throughout the project.
- 8) Provide monitoring and validation of energy consumption throughout the period of time in which the County purchases M&V Services from Contractor.
- 9) Provide service/maintenance, as stated in Contractor's proposal, throughout the contract period, unless the County terminates such services.
- B. All energy audits, feasibility studies, plans and specifications shall be prepared by Professional Engineers licensed in the State of Maryland at the time of Contractor's submittal. A certified energy manager is required on each project.
- C. Any as-built drawings of the facility shall be made available to the Contractor upon assignment of a project. The County does not guarantee the accuracy or completeness of these documents. The Contractor shall consult with the facility maintenance/operations staff as to any conditions which might exist not shown in the drawings. The Contractor shall be responsible for verifying the accuracy of the information given to it by the County.
- D. The Contractor shall also field verify existing conditions as necessary to accurately design and locate the installation of new equipment and retrofit or expansion of existing systems. The County is not liable under any circumstances for differing site conditions.
- E. <u>Phase II.</u> The Contractor shall implement the comprehensive energy efficiency and guaranteed savings program, which shall include:

- Final Design and Specifications. Before installation of the proposed ECMs, the Contractor shall prepare detailed construction plans and specifications for the installation of all equipment and systems proposed in their Phase II Proposal. The plans and specifications shall be prepared in accordance with the Howard County Design Manual, latest edition, and shall include, but not be limited to the following:
- (a) Within 14 days of the execution of the contract, Contractor must submit a preliminary critical path network (CPM) diagram outlining activities for the first 90 days of construction. Include a skeleton diagram for the remainder of the work with the preliminary diagram. This preliminary diagram must be approved prior to the first requisition being processed. Include each significant construction activity. Coordinate each activity in the network with other activities. Schedule each construction activity in proper sequence.
 - (1) Floor plans and site plans showing equipment, equipment location, pipe routing, pipe connections to existing systems, valves and fittings, instrumentation and electric meter location, electrical connections, electrical schematics are including wire and conduit sizes, electrical equipment, and isometric diagrams showing connections to all HVAC equipment.
 - (2) Control sequence of operation, logic diagrams, and wiring diagrams.
 - (3) Equipment list with: manufacturer names, model numbers, and operating characteristics.
 - (4) Specifications indicating material, sizes, and thicknesses being used in construction components and equipment components, pressure and temperature ratings of system components, national standards or national laboratory testing standards being met (i.e. NFPA, ASHRAE, ASME, UL, NEG, ASTM, etc.), methods of installation, electrical ratings of electrical components, and any special requirements relating to this installation.
 - (5) A complete description of any modifications to existing HVAC equipment.
 - (6) Lighting retrofit plans and specifications.
 - (7) All shop drawing submittals during construction shall be in

accordance with Section III- General Conditions, paragraph 21 of this RFP. All submittals must be approved by DGS prior to ordering of equipment. Contractor shall allow a three week turnaround for DGS review.

(8) Ninety-five percent (95%) and one hundred percent (100%) construction documents, prepared in accordance with the Howard County Design Manual, latest edition. Allow Three week turnaround for County review. All drawings must be approved and signed by the Bureau of Facilities prior to initiation of construction.

F. The Contractor shall do or provide the following:

- (a) Furnish and install all equipment and accessories in accordance with the requirements specified in the Contract (including Section II General Conditions), and the Contractor's Phase II proposal.
- (b) Completions of all punch list items.
- (c) Submittal of all applicable O&M manuals to Using Agency.
- (d) Completion of on-site training and education of facility maintenance and operating personnel in the functions, operations and maintenance of all equipment installed under the project.
- (e) Completion of all necessary commissioning.
- (f) Compliance with all issued change orders.
- (g) Electrical inspection certificate is sued by County approved independent inspection company.
- (h) Boiler inspection by Department of Labor, Licensing, and Regulation (if applicable).
- (i) Detailed list of all installed and/or repaired equipment (for loan takedown).
- (j) Final acceptance of construction phase by the Department of Public Works, Bureau of Facilities.

- (k) Maintenance, for the term of the contract, of installed equipment including replacement of worn, failed, and doubtful components, preventive service. Emergency on-site service and component replacement must be included on a 24-hour per day basis. Specific list to include each piece of equipment and the applicable service schedule. During Phase II, Contractor shall provide the Bureau of Facilities, submittals of all equipment, including piping, valves, etc, in coordination with construction documents for DGS approval prior to ordering of equipment before proceeding with construction, Allow 21 day turnaround for County review of all construction drawings, specifications and shop drawings.
- (I) All necessary support services during the period of operations and throughout the contract, including, but not limited to, the following:
 - (1) Ongoing Monitoring and Verification Services. (See section IV for details).
 - (2) Periodic on-site analysis to determine whether mechanical/electrical systems are operating as programmed and to assess the operational efficiencies of the systems and equipment installed.
 - (3) Re-evaluation of software provided as newer versions become available and upgrade of software.
 - (4) Hourly, daily, weekly, monthly, quarterly and annual operation and maintenance tasks that must be performed.
- (m) Provision of an acceptable project financing plan to cover 100% of the costs of developing and implementing the approved comprehensive energy efficiency and guaranteed savings program.
- (n) The Contractor shall recover all costs of the feasibility study, identified ECM's engineering design, equipment procurement, installation, maintenance, training, support services and finance charges over the life of the contract. Payments by the facility will be solely from the savings guaranteed and payments will never be greater than the actual savings generated.
- (0) The financing shall be severable from all other aspects of this project and is subject to the fiscal non-appropriation clause.
- (p) Conditions of Work and Job Site Visit

- (1) <u>Site Investigation:</u> The Contractor acknowledges that it has investigated and satisfied itself as to the conditions affecting the work, including but not restricted to those bearing upon physical conditions at the site, the formation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work.
- (2) Any failure of the Contractor to acquaint itself with the available information will not relieve it from responsibility for estimating properly the difficulty or cost of successfully performing the work. The County will not be responsible for any conclusions or interpretations made by the Contractor on the basis of the information made available in this Contract.

2. ENERGY SAVINGS GUARANTEE/PROJECT FINANCING

The Contractor shall provide an energy savings guarantee whereby the Contractor guarantees that a certain level of energy and energy related operating and maintenance savings will accrue as result of implementing the approved comprehensive energy efficiency and guaranteed savings program, and that if the actual savings achieved is less than the guaranteed savings, the Contractor will reimburse the County an amount equal to the difference between the actual savings and the guaranteed savings.

The County requires that the Contractor provide a method of guaranteeing the energy savings promised to the County as stipulated in the Phase II Proposal Prior to the initiation of the work, the Contractor shall provide an indexed rate of interest which reflects the cost of the financing to be provided by the Contractor. The effective rate of interest the Contractor proposes to charge for this contract will be determined and fixed on the funding date based on the index.

The County shall, at its sole option, determine whether or not to accept the financing offered by the Contractor or arrange an alternate means of financing. No payments by the County for the capital costs (design, construction, training and startup services) shall be made to the Contractor until100% completion and acceptance of all ECM installations by the County. Payments by the County (including capital cost principal & interest cost of the guarantee, and maintenance costs) for the duration of the project will be solely from the guaranteed cost savings.

3. CAPACITY TO PERFORM WORK

The Contractor shall maintain an adequate staff to provide the services required herein with the professional quality and timeliness mutually agreed upon. Preferably, the same personnel shall be utilized for the duration of each project. Failure to maintain adequate staff or to provide staff replacements with personnel of equivalent quality and experience shall be cause for Termination for default by Project Manager.

4. SCHEDULE

The County and the Contractor will mutually agree on the schedule for the work. Failure of the Contractor to satisfactorily complete work assignments within the time specified may be cause for termination for default by Project Manager.

5. GENERAL

A. <u>Energy Reduction</u>

It is expected that implementation of this program will result in a net reduction in energy consumption, comprising electricity, natural gas, fuel oil, water, and other utilities in County owned facilities.

B. Cost Avoidance

It is expected that implementation of this program will result in guaranteed energy cost avoidance, sufficient to finance the cost of the program over the term of the contract.

IV. Measurement and Verification

1. STANDARDS

All measurement and verification procedures shall be consistent with the following documents:

A. <u>International Performance Measurement and Verification Protocol (IPMVP2001)</u>

B. Federal Energy Management Program M&V Guidelines: Measurement and Verification for Federal Energy Projects, Ver. 2.2 (FEMP)

C. Overview

- Various measurement and verification (M&V) methodologies may be employed to document guarantee performance. All methodologies shall be consistent with the documents cited in Paragraphs A and B above.
- 2) The Contractor, in consultation with the County, developed the appropriate M&V methodology or methodologies, during the technical feasibility study phase (Phase I). Each methodology or procedure has been approved by the County, and no substitutions will be permitted without explicit approval of the County.

D. <u>M&V Plan and Methodology</u>

- 1) The Contractor has prepared and included, as a separate section of the final Phase I technical feasibility study, a detailed M&V plan. The plan indicates and describes the proposed IPMVP (2001) and/or FEMP methodology or methodologies, to be employed throughout the project, for baseline development and ongoing monitoring during the guarantee period. In accordance with Section IV, B.5.), the County requires, unless otherwise directed, as part of the M&V Plan, installation of metering, instrumentation and related software, during Phase 1 for various purposes, including to verify existing equipment performance, to refine energy reduction estimates and guarantee cost avoidance, development of performance baselines, and ongoing monitoring during the guarantee period.
- 2) The M&V plan shall be summarized in table format. In addition, accompanying documentation shall describe how each methodology is to be implemented.
- 3) For ECM specific methodologies, the following shall also be specified:
 - (a) Method A

Basis for stipulated performance parameters. (Rarely acceptable to the County. Note: stipulated measures are generally unacceptable and must be specifically approved by the County.)

(b) Method B

- (1) All parameters, which are to be measured, including units of measure, e.g.:
 - Power (watts, kilowatts)
 - Energy (watt-hours, kilowatt-hours, therms)
 - Temperature (°F, °C)
 - Flow rate (gallons per minute, cubic feet per minute)
- (2) Measurement frequency and duration, e.g.:
 - One-time
 - Once each 15 minutes

- 24 hours
- 60 days
- (3) Measurement method, e.g.:
 - Hand held instrument
 - Portable data Jogger
 - Field mounted data collection panel

(c) Performance Baseline

- (1) Performance baseline (baseline) shall be defined as a detailed documentation of the operating characteristics of a facility during a suitably chosen recent period, prior to implementation of any ECMs. Documented operating characteristics shall include, but not necessarily be limited to:
 - Electric energy consumption and demand
 - Natural gas, fuel oil and water consumption
 - Operating hours of heating, cooling and ventilating equipment
 - Operating hours of lighting systems
 - Facility occupancy levels
 - Facility square footage
 - Weather severity (degree days)
- (2) The baseline period shall be chosen such that the nature, level and pattern of operations during the period are most representative of current operations.
- (3) The Contractor shall develop and include, documentation and detailed descriptions of baseline performance. Documentation shall indicate and describe the proposed IPMVP 2001 and/or FEMP methodology or methodologies, to be employed throughout the project, for initial baseline development, as well as on-going monitoring during the guarantee period.
- (4) During the guarantee monitoring period, the Contractor may adjust the baseline, as required, to account for changes in facility operational characteristics (see Paragraph 3, C. 1), beyond the Contractor's control, which occur after the original baseline is established.

(b) <u>Sampling Plan</u>

For certain ECMs, which encompass multiple units of a similar equipment type, and monitored through IPMVP 2001/FEMP Method B, the Contractor may elect to perform measurements on a random statistical sample, for the purpose of establishing baseline or guarantee performance. Prior to performing measurements, the Contractor shall prepare a detailed sampling plan, indicating sample size and measurement locations. The sampling plan must be carefully designed, based on recognized statistical techniques, in

accordance with procedures set forth in FEMP M&V Guidelines: Measurement and Verification for Federal Energy Projects, Ver. 2.2., Appendix D. Prior to implementation, the Sampling Plan must be submitted to the County for approval.

(c) Energy Rates

- (1) Unless explicitly approved by the County, all performance results (baseline and guarantee period) shall be based on costs determined through application of applicable utility rate schedules to energy units. Electric costs and cost avoidance, in particular, must be based on the application of time-of-use {TOU} energy rates, where in effect, and separate demand rates, to energy and demand units, respectively. In addition, the application of rate schedules shall include an explicit itemization of fixed charges, such as customer charges of minimum charges, and all applicable surcharges.
- (2) Technical feasibility study, applicable baseline energy rates and/or utility rates schedules, for each energy type, where utility rate schedules are not available (e.g. fuel oil rates), the Contractor shall include documentation, supporting the baseline rate.
- (3) Where utilities are provided on a deregulated basis, the Contractor shall include separate schedules for commodity and distribution components.

(d) Energy and Cost Avoidance Calculation

- (1) Energy units avoidance during any period shall be calculated as the difference between baseline units consumed, adjusted for changes in operational characteristics, as described in Paragraph 3, C., 4), and actual units consumed, during the period.
- (2) Energy cost avoidance during any period shall be calculated as the difference between baseline energy cost, adjusted for changes in operational characteristics, as described in Paragraph 3, C., 4), and actual cost, during the period. Costs shall be calculated by applying actual utility or energy supplier rates to baseline units and actual units. Unless explicitly approved by the County, cost avoidance calculated with blended unit rates will not be acceptable.

(3) Applied Energy Rates

- For measures which achieve cost avoidance through energy units reduction, applied rates shall be the greater of baseline or actual energy rates, currently in effect.
- For measures which achieve cost avoidance through energy rate reduction (e.g. fuel switching), shall be the lesser of baseline or current energy rate differentials, during the period. (Rate differential is the difference between rates of the baseline energy source and converted energy source.)

(e) Reconciliation of Actual vs. Guaranteed Savings

At the end of each year following completion of the ECM installation the Contractor shall provide documentation verifying actual energy use and cost avoidance, as defined in Paragraph 3 above. If the actual cost avoidance is greater than the Contractor's guaranteed cost avoidance, then the County shall retain the difference.

- 1) If the actual cost avoidance is less than the guaranteed 64 cost avoidance, the Contractor shall submit documentation verifying temperature setpoints operating .hours or other parameters agreed to in the Contract. If a deviation from Contract parameters by the County has resulted in lower than expected cost avoidance, then the amount due to the County may be reduced by an amount equivalent to the actual cost avoidance minus the expected cost avoidance.
- (2) Any payment due the County shall be made within 60 days of the yearly anniversary date of the completion of the ECM installation. Failure to submit payment during this time frame may result in Termination for Default by the Project Manager.

The County will not permit any provisions allowing excess cost avoidance during any annual monitoring period to be carried over to any future (or past) year, to offset future (or past) cost avoidance shortfalls. Each monitoring year following completion of ECM installation is to be evaluated and reconciled on a stand-alone basis.

The County will not allow any provisions allowing cost avoidance realized during the ECM installation period (construction period) to be applied toward the guarantee cost avoidance.

2. PRODUCTS AND SPECIAL SERVICES

A. Energy Accounting Software

- 1) If IPMVP/FEMP Whole Building Method C methodology is employed, the Contractor shall provide and use County approved, third-party commercially available energy accounting software. Such software shall accommodate a detailed inventory of energy records and shall employ linear regression analysis to model baseline performance, incorporating changes in weather severity, and other operational variations.
- 2) The County may direct the Contractor to include in the project cost, purchase of one or more licenses as directed by the County on a

project by project basis of any energy accounting software, including training and product support, as the County may require.

B. <u>Internet Data Acquisition</u>

- The County may direct the Contractor to include in the project cost, purchase of an Internet based facility energy monitoring service, including setup, training and product support, as the County may require.
- 2) The Internet monitoring service shall support interval storage and retrieval of utility and energy data, which will permit calculation of an approximate monthly bill, for a given utility, and creation of usage trend reports.

C. Instrumentation

- 1) Electric Power and Energy
 - All devices employed to meter electric power use shall be capable of metering continuous RMS power at accuracy within +/- 1.0% of actual value, over the entire load range.
 - b) Metering of polyphase loads shall include independent measurement of each phase.
 - c) All devices employed to meter electric power for continuous monitoring (i.e. other than one-time measurement) shall be minimally capable of storing data in 15 minute intervals, for a minimum of 24 hours.
 - d) Where required, due to voltage levels, the Contractor shall employ potential transformers.

2) Temperature

All devices employed to meter temperature of liquid media shall have accuracy within +/- 0.1 Fo of actual value, or better. Sensors such as strap on types may not be used for the purpose of verifying baseline or guarantee period performance, unless specifically approved by the County. Temperature sensors shall be suitable insertion type.

3) Pressure

All pressure sensing devices shall have accuracy within +/- 1% of full scale. Primary devices used for the purpose of providing information to a control system or energy information system, shall be provided with an accuracy/calibration certificate. Sensors needing field calibration shall be calibrated using a dead weight tester, by a qualified technician.

4) Flow Rate

- a) All devices employed to meter flow rate of liquid media shall have accuracy within +/- 1.0 % of actual flow or better.
- b) Approved flow metering devices shall include orifice, venturi, turbine or ultrasonic types. Flow rates based on equipment manufacturer's specifications or performance curves (including pump curves), or operating equipment pressure differential, will not be acceptable, for the purpose of verifying baseline or guarantee period performance.
- c) Flow rates in constant volume flow systems shall be verified by monitoring average flow rate, for a minimum continuous period of 30 minutes.
- d) Flow rates in variable volume flow systems shall be verified by continuous monitoring, throughout the monitoring period.

3. COMMISSIONING

- A. Prior to final acceptance by the County, the Contractor shall demonstrate to the satisfaction of the County that all components, systems, and processes required to fully verify guaranteed cost avoidance, are complete and properly functioning.
- B. Prior to final acceptance by the County, the Contractor shall submit to the County for approval, a Commissioning plan. The plan will include a detailed specification of all procedures, including preliminary check-out and functional performance testing, which must be executed to demonstrate and verify proper data collection, processing, communication, and report preparation capability.
- C. The Contractor shall prepare and submit to the County for approval, detailed documentation of all conditions, requirements and the results of all final inspections and functional performance tests.
- D. The County shall be notified in advance, of the schedule of any final inspections and functional performance tests.

4. ENERGY AND COST AVOIDANCE REPORTS

- A. The Contractor shall provide a detailed report of energy and cost avoidance performance, at least once a year, or at frequency specified in the Contract. Reports must clearly indicate energy baselines, monitoring period energy performance, applicable rates and any adjustments to energy and cost baselines.
- B. All reports shall conform to the format agreed to by the Contractor and the County. Report formats shall be such that the County can easily confirm the logic, formulas, and calculation algorithms, in order to independently validate the performance results.