Request for Quotes

for Consulting Services

for a Guaranteed Energy Savings Project at:

Pennsylvania Department of Transportation
Districts 1, 2, and 10

Project No. GESA 2025-1(C)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG

Josh Shapiro
Governor

Reggie McNeil
Secretary

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PART 1

General Information for Offerors

1.1 Purpose.

A. This Request for Quotes (RFQ) provides interested ITQ Qualified Contractors with sufficient information to enable them to prepare and submit a Quote for the Service Category of:

GESA Project Consulting Services

As listed in the Commonwealth's Guaranteed Energy Savings Act Project (GESA) Invitation to Qualify (ITQ) in accordance with the Guaranteed Energy Savings Act requirements of the Commonwealth Procurement Code, 62 Pa. C.S. Sec. 3751 – 3758, as amended.

B. All Offerors must qualify as a "Qualified Contractor" through the ITQ process before the RFQ issue date.

C. Each Quote shall consist of a **Technical Submittal** for consideration by the Department of General Services (DGS) to satisfy a need for GESA Project Consultant for the Department of Transportation (aka "DOT", referred hereinafter as the "**Funding Agency**") located in Districts 1, 2, and 10, GESA 2025-1, Pennsylvania. ("the Project").

1. Note: When the GESA project is a "DGS" project (i.e., DGS is not just coordinating the project for another agency), any and all references to DGS and the "Funding Agency" as though they are two separate entities in the contract documents shall mean only "DGS".

D. The Quote evaluation process and, if the Commonwealth decides to proceed, the construction process, are further described in this RFQ.

1.2 Definitions.

A These definitions shall apply to terms used in the RFQ, without conflicting with any definitions in the General Conditions of the GESA Contract:

1. **Energy and Resource Management Office** – The DGS Office responsible to oversee development of the design by the GESA Contractor and Energy Consultant. The DGS Office responsible to advertise, bid, and awards the contract for this Project.

2. **Department of General Services (DGS)** – In addition to the definition stated in the ITQ, DGS helps to oversee adherence to design and construction contractual obligations.

3. **GESA Contractor's Professional (Professional)** – The GESA Contractor's licensed PA Registered Professional.

4. **Offeror** – A consulting firm submitting and signing the Quote in response to this RFQ for consideration by the Commonwealth for the award of an Energy Consulting Contract. The successful Offeror will, if a contract is awarded and fully executed, become the DGS Energy Consultant.

5. **Project** – The site and associated building(s) and infrastructure improvements.

1.3 Issuing Office:

A This RFQ is issued by DGS on behalf of the Funding Agency. The Issuing Office is the sole point of contact in the Commonwealth for this RFQ. Offerors should not contact any other DGS employees, any consultant or any Funding Agency employees about this RFQ.

1.4 Requests for Information (RFI):

A All questions or inquiries regarding this RFQ are to be submitted by use of an RFI. RFIs are to be submitted to the RFQ Coordinator in writing and should include the Project Name and Project Number. RFIs must be submitted NO LATER THAN the date indicated in the Calendar of Events (See end of Part 1 of this RFQ).

B **Questions will NOT be answered via telephone**. All relevant questions and written answers will be issued as a bulletin and become part of this RFQ. DGS shall not be bound by any verbal information or by any written information allegedly supplied by the consultant, the Funding Agency or by DGS that is not either contained within the solicitation documents or issued by DGS through a bulletin. Questions shall not constitute a formal protest of the specifications or of the solicitation. The formal protest process is described below and available in the Procurement Code (62 Pa.C.S. § 1711.1).

RFQ Coordinator: Becky Tomlinson
403 North Office Building
401 North Street
Harrisburg, PA 17120
Telephone: (717) 705-5946
Email: retomlinso@pa.gov

C The RFQ Coordinator will ensure that questions are answered promptly and that all bulletins will be issued to Offerors who have requested project documents. Plan holders who requested the RFQ will get the complete bulletin, including any attachments. Any entity that is not on DGS' list of plan holders will not receive complete bulletins and will be deemed non-responsive on the Quote Submission Deadline.

1.5 Scope/Work and Other Information.

A Information regarding such as state of work, roles and responsibilities (of both the DGS Energy Consultant and GESA Contractor), project goals, costs and payment, and the contract documents (defined in Article 1 of the Energy Consultant Contract) are available to the Offeror in part in the contents of this RFQ and in part in the form of the ITQ documents at the Guaranteed Energy Savings Program's Invitation to Qualify webpage (http://www.emarketplace.state.pa.us/Solicitations.aspx?SID=4400016426), and in part in this RFQ and its Appendices.

1.6 Type and Award of Contract.

A If a contract is entered into as a result of this RFQ process, DGS will award a single Energy Consultant Contract to the successful Offeror. The language of the Energy Consultant Contract is non-negotiable. The Effective Date of the contract shall be the date on which all signatures required by law are affixed to the contract. No contract exists until all such signatures are fixed and the final date becomes the Effective Date of the contract. See the Calendar of Events at the end of this Part 1 for anticipated dates and durations for the procurement process on this Project. This single Energy Consultant Contract will encompass the costs for any and all Energy Consultant services necessary for Project as described in the contract documents. The successful Offeror will become the DGS Energy Consultant.

1.7 Commonwealth's Rights Reserved.

A DGS reserves the right to cancel or withdraw this RFQ, in whole or in part, any time prior to award of the contract. DGS reserves the right to reject any and all Quotes received as a result of this request. DGS may, in its discretion, waive any informality or technical deficiency in a Quote.

1.8 Incurring Costs.

A The Commonwealth is not liable for any costs incurred by Offerors prior to Offerors entering contract with the Commonwealth.

1.9 Amendments to the RFQ.

A If the RFQ needs to be amended, the RFQ Coordinator will administer the issuance of bulletin(s) setting forth all modifications to the RFQ and questions and answers about the RFQ. Notice of each bulletin will be emailed to all entities that have requested the RFQ and provided the required contact (email) information. Entities that do not provide complete contact information including firm name, prime contact, address, phone, fax and email might not receive all bulletins. The Offeror shall acknowledge receipt of the bulletin(s) as required by the language of the bulletin. Any Quote that does not acknowledge all bulletins may be considered non-responsive. The bulletin(s) will become part of the RFQ. DGS will not issue any bulletin later than indicated in the RFQ Calendar of Events, unless DGS extends the Quote Submission Deadline. By submitting a Quote, the Offeror acknowledges and affirms that the provisions of all bulletins have been included in the Quote, and the Offeror understands its responsibility for all provisions of all Bulletins. DGS reserves the option to issue bulletin(s) shipped in hardcopy format.

B **A written bulletin issued by DGS is the only binding revision to this RFQ. No other information or form of amendment, written or oral, shall be considered binding upon DGS, nor should a Offeror rely upon them. Offerors shall not contact DGS, the Funding Agency, or the consultant with any questions. Offerors may only submit written questions as described in this RFQ**.

1.10 Quote Submission Deadline.

A To be considered responsive, a Quote must be delivered to the RFQ Coordinator **in Harrisburg, Pennsylvania**, on or before the Quote Submission Deadline set forth in the

Calendar of Events. Offerors who mail Quotes should allow sufficient mail delivery time to ensure timely receipt of their Quotes. If, due to inclement weather, natural disaster, or any other cause, the DGS office to which Quotes are to be submitted is closed on the Quote Submission Deadline, the Quote Submission Deadline shall be automatically extended until the next Commonwealth business day on which the office is open, unless the Offerors are notified otherwise by DGS. The time of day for the extended Quote Submission Deadline shall remain the same.

B **The Offeror shall be solely responsible for assuring that the Quote arrives prior to the Quote Submission Deadline. Quotes delivered after the Quote Submission Deadline, regardless of the reason for lateness, will automatically be rejected and returned unopened to the Offeror.**

1.11 If the Offeror is a Joint Venture.

A If the entity that will be signing the Quote is a joint venture, then there are additional requirements that apply.

1. The Joint Venture must submit a copy of the Joint Venture Agreement with the Technical Quote. This Agreement shall not count against the page limits.

2. Each entity comprising the Joint Venture must submit with the Quote the corporate resolution or other legal document evidencing the entity's authorization to participate or form the Joint Venture.

3. The Qualification form for the Joint Venture GESA shall address the scoring requirements for each entity of the Joint Venture. Each entity of the Joint Venture may have three (3) sheets for that entity's qualifications. Any Joint Venture that exceeds this page limit will forfeit all points for the GESA Qualification.

4. The Joint Venture should specifically identify and discuss in the Work Plan Section the responsibilities and scope of work on the Project for each entity in the Joint Venture.

1.12 Withdrawal of Quote.

A Each Offeror specifically waives any right to withdraw or modify a submission, except as hereinafter provided. A Quote may be withdrawn by written, emailed or faxed notice received at the Issuing Office's address for Quote delivery prior to the exact hour and date specified for receipt of the Quote. If, however, the Offeror chooses to attempt to provide such written notice by fax transmission, DGS shall not be responsible or liable for errors or failures in fax transmission. A Quote may also be withdrawn in person by an Offeror or its authorized representative, provided its identity is made known and it signs a receipt for the Quote, but only if the withdrawal is made prior to the exact hour and date set forth for receipt of the Quote. A Quote may only be modified by the submission of a new, sealed submission or a sealed modification that complies with the requirements of this RFQ and is received by the Issuing Office prior to the Quote Submission Deadline.

1.13 Alternate Quotes.

A DGS has identified the basic approach to meeting its requirements and will not accept alternate Quotes or uninvited Quotes.

1.14 Contact for Clarification.

A Offerors that submit Quotes may be required to make an oral or written clarification of their Quotes to the Issuing Office to ensure thorough mutual understanding and Offeror responsiveness to the solicitation requirements. The Issuing Office will handle any requests for clarification.

1.15 Disclosure of Quote Contents.

A Confidential Information. The Commonwealth is not requesting, and does not require, confidential proprietary information or trade secrets to be included as part of Offerors' submissions in order to evaluate Quotes submitted in response to this RFQ. Accordingly, except as provided herein, Offerors should not label Quote submissions as confidential or proprietary or trade secret protected. Any Offeror who determines that it must divulge such information as part of its Quote must submit the signed written statement described below and must additionally provide a redacted version of its Quote, which removes only the confidential proprietary information and trade secrets, for required public disclosure purposes.

B Commonwealth Use of Quote Contents. All material submitted with the Quote shall be considered the property of the Commonwealth of Pennsylvania and may be returned only at the Issuing Office's option. The Commonwealth has the right to use any or all ideas not protected by intellectual property rights that are presented in any Quote regardless of whether the Quote becomes part of the contract. Notwithstanding any Offeror copyright designations contained on Quotes, the Commonwealth shall have the right to make copies and distribute Quotes internally and to comply with public record or other disclosure requirements under the provisions of any Commonwealth or United States statute or regulation, or rule or order of any court of competent jurisdiction.

C Public Disclosure. Public records requests for Quotes are governed by and shall be handled in the following manner:

1. After the award of a contract pursuant to this RFQ, or all Quotes are opened and rejected, all Quote submissions are subject to disclosure in response to a request for public records made under the Pennsylvania Right-to-Know-Law, 65 P.S. §67.101, et seq. If a Quote submission contains confidential proprietary information or trade secrets, a signed written statement to this effect must be provided with the submission in accordance with 65 P.S. §67.707(b) for the information to be considered exempt under 65 P.S. §67.708(b)(11) from public records requests. Financial capability information submitted with this RFQ is exempt from public records disclosure under 65 P.S. § 67.708(b) (26).

1.16 News Releases.

A All news releases and media contacts regarding this project will be made only by DGS, unless DGS directs otherwise in specific instances. Offeror(s) shall not initiate news releases or media contact without prior written permission of DGS. This paragraph does not apply to any advertisement soliciting interested subcontractors made by the Offeror during the preparation of the Quote.

1.17 Restriction of Contact.

A From the issue date of this RFQ until the issuance of a Notice of Selection, there shall be no contact between the Offerors and DGS and/or Funding Agency personnel concerning this RFQ, Quotes and the evaluation process except as discussed in Part 1 of this RFQ. The only person who may be contacted directly is the RFQ Coordinator. This restriction ensures that all Offerors obtain the same accurate and binding information, with no advantage or undue influence on any potential Quote scores. Any violation of this condition is cause for DGS to reject the Offeror's Quote. If DGS discovers that any violations have occurred, DGS may reject any Quote or rescind any contract awarded pursuant to this RFQ.

1.18 Successful Quote Events.

A Upon the Evaluation Committee's completion of the interview process, the following order of events will occur:

1. Each Evaluation Committee member will calculate their score for each Quote using the scoring matrix included in this RFQ as an appendix.

2. The RFQ Coordinator will convene a meeting of the scoring members of the Evaluation Committee to discuss and finalize scoring (Legal counsel and Comptroller's Office may be represented).

3. The RFQ Coordinator will compile the Technical Submission scores.

4. The RFQ Coordinator will submit a recommendation memo to the Deputy Secretary for Property and Asset Management for DGS for review and approval.

5. DGS will issue a written Notice of Selection to the Offeror whose Quote is determined to be the most advantageous to the Commonwealth in accordance with the evaluation factors, procedures and criteria set forth in this RFQ.

6. DGS will post the following information on the DGS GESA website within 2 business days after the Notice of Selection is issued:

    a. The successful Quote's Technical submission

    b. All Offerors' Quote Score Summary with the successful Offerors' identity only.

    c. The RFQ Coordinator's recommendation memo to the Deputy Secretary

1.19 Debriefing of Unsuccessful Offerors.

A DGS will provide notice to all unsuccessful Offerors (unsuccessful letter) on the same day DGS issues the Notice of Selection (if one is issued) to the successful Offeror. As part of this notice to unsuccessful Offerors, DGS will notify them of the opportunity for a debriefing and time frame for this optional debriefing. Any unsuccessful Offeror who wants to be debriefed must email a written request to the RFQ Coordinator within three (3) calendar days of the date of the unsuccessful letter. DGS will hold a debriefing conference for each unsuccessful Offeror who submitted a written request for such a

conference within four (4) calendar days of receipt of notice of a request for a debriefing but no later than seven (7) calendar days from the date of the unsuccessful letter.

B The timeframe for debriefing of unsuccessful Offerors neither extends nor modifies in any way the deadlines for the RFQ Protest Procedure set forth herein.

C The RFQ Coordinator will hold the debriefing conference in Harrisburg or by telephone or video conference, if possible. The unsuccessful Offeror may verify the accuracy of the submission scores prior to the debriefing conference based upon the overall scoring sheet posted to the DGS website.

1.20 Commonwealth Participation.

A Unless specifically noted in this Section, the DGS Energy Consultant must provide all services to complete the identified work. DGS participation includes the following:

1. DGS Office of Energy & Resource Management – Project Administration

2. Funding Agency -- Final Design Review and Approval

1.21 Term of Contract.

A The term of the contract will commence on the Effective Date as defined in the Energy Consultant Contract. The Effective Date shall be fixed by the Issuing Office after the contract has been fully executed by the DGS Energy Consultant and the Commonwealth, and all approvals required by DGS contracting procedures have been obtained.

1.22 RFQ Protest Procedures.

A In addition to the summary provided herein, the Protest Procedure is available in the Procurement Code (62 Pa. C.S. § 1711.1).

B Who may file: Any Offeror or Prospective Offeror who is aggrieved in connection with the RFQ or the award of a contract resulting from the RFQ may file a protest.

1. Prospective Offeror – is an entity that has not submitted a Quote in response to the RFQ.

2. Offeror – is an entity that has submitted a Quote in response to the RFQ.

C Time limits

1. If a protest is filed by a Prospective Offeror, it must be filed, in writing, with the RFQ Coordinator prior to the Quote Submission Deadline by e-mail or regular mail.

2. If a protest is filed by an Offeror, it must be filed, in writing, with the RFQ Coordinator within seven (7) days after the protesting Offeror knew or should have known of the facts giving rise to the protest except in no event may a protest be filed later than 7 days after the Notice of Selection is posted on the DGS website. Proposers must file protests by either email or mail.

3. "Filed" is defined as the date upon which the Protest is submitted via e-mail or, if mailed, the date upon which the DGS receives the written protest.

4. If the Offeror fails to file/submit a protest or files/submits an untimely protest, then the Proposer shall be deemed to have waived the right to protest the solicitation or award of the contract in any forum. Untimely protests will be disregarded by the DGS.

D DGS may cancel an RFQ or may reject all Quotes at any time prior to the time a contract is executed by all parties when it is in the best interests of the Commonwealth. The Offeror may not submit a protest relating to cancellation of the solicitation or rejection of all Quotes.

E A protest shall state all grounds upon which the protestant asserts that the solicitation or award of the contract was improper. The protestant may submit with the protest any documents or information it deems relevant to the protest.

1.23 Job Posting.

A Pennsylvania, along with the rest of the nation, is experiencing high rates of unemployment. Recognizing that construction workers are among the hardest hit by the economic recession and their re-employment is essential, the DGS Energy Consultant and all subcontractors and suppliers are encouraged to post jobs created by this Project or jobs they seek to fill, to the PaCareerLink system at www.cwds.state.pa.us. The DGS Energy Consultant, subcontractors and suppliers, can locate their local PaCareerLink office through the same website. Staff at local PaCareerLink can assist employers to post positions and explain how to retrieve resumes or applications generated by their systems.

1.24 Calendar of Events:

Activity	**Date, Place and Time**
Notice to Offerors and RFQ Issued	**March 7, 2025**
Offerors' Deadline to Submit Questions	**COB April 1, 2025**
DGS Deadline to Issue Bulletins	**COB April 4, 2025**
Quote Submission Deadline	**By 2:00 PM. on April 8, 2025** **Delivered to:** **Becky Tomlinson** **DGS Energy Office - RFQ Coordinator** **Room 403 North Office Building** **401 North Street** **Harrisburg, PA 17120-0500**

End of Part 1

PART 2

Information Required from Offerors

2.1 General.

A The Quote must be submitted in the format, including heading descriptions, outlined below. To be considered responsive, the Quote Submission must respond to all requirements in this part of the RFQ (see Requirements Checklist in the Appendices of this RFQ).

B Maintaining the confidentiality of the submittal information is critical, which is why each submission must be separately submitted. There will be no opportunity for an Offeror to resubmit or amend the Quote submission after the Quote Submission Date.

C The Commonwealth reserves the right to request additional information from secondary sources (such as a Dunn & Bradstreet report) which, in the Commonwealth's opinion, is necessary to assure that the Offeror's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to the Energy Consultant Contract.

D The Commonwealth may conduct investigations deemed necessary to determine the ability of the Offeror to perform the work, and the Offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested by the Commonwealth. The Commonwealth reserves the right to reject any Quote if the evidence submitted by, or investigation of, such Offeror fails to satisfy the Commonwealth's requirement that such Offeror possesses the capability to fully perform the requirements of the Energy Consultant Contract and complete the work specified therein.

2.2 Quote Submission.

A This RFQ is intended to provide interested Offerors with the basic information necessary to evaluate the Project scope and requirements. Each Offeror shall develop an independent assessment of the Project that shall form a suitable basis for their respective Quote. An official authorized to bind the Offeror to the provisions of the Energy Consultant Contract must sign the Quote Submission. The Technical Submission shall be a complete response to the RFQ following the format described in this RFQ. By submitting a Quote, the Offeror agrees to the terms and conditions stated in this RFQ. For this RFQ, the Quote Submission, as submitted, must remain valid for 180 calendar days after the Quote Submission Deadline.

2.3 Quote Requirements.

A To qualify for evaluation, each Quote must include or satisfy the items listed on the Requirements Checklist (provided as an Appendix to the RFQ). Any Quote that does not comply with these listed requirements may be rejected as non-responsive.

B Offeror must be ITQ qualified on or before the issue date of the RFQ.

2.4 Quote Format.

A The Quote shall **be submitted in separately sealed envelopes or packages clearly labeled as:**

Volume I Technical Submission (3 hard copies and 1 electronic copy)

The label on each separately sealed package should include the Offeror's name, address, and Project information, including the specific contract for which the Quote is being submitted, as described in Part 1 of this RFQ.

B The Offeror should submit a cover letter providing, at a minimum, the following information:

- Company name
- Company mailing address
- Contact person
- Contact person's phone number and e-mail address
- Company PA vendor number

2.5 Technical Submission Requirements.

A The Offeror shall submit three (3) hardcopies of its Technical Submission and one (1) electronic version of the Technical Submission on a USB drive in a separately sealed envelope.

The Technical Submission must include:

1) Energy Consultant Information Form (**Appendix A**),
2) Signed Quote Signature Page signed (**Appendix B**), and
3) Signed and notarized Non-Collusion Affidavit (**Appendix C**).

End of Part 2

PART 3

Evaluation Process and Criteria for Selection

3.1 Competitive Sealed Quote Award.

A If the Commonwealth awards an Energy Consultant Contract, the award will be made only to the responsive and responsible Offeror whose Quote conforms to the requirements of this RFQ and receives the highest overall score by the Evaluation Committee in accordance with the evaluation factors, procedures, and criteria set forth in this RFQ.

3.2 Quote Evaluation Process.

A The Technical Submittals will be evaluated by a Quote Evaluation Committee (the Evaluation Committee) comprised of three scoring members. The maximum Quote Score is 1000.

B After the Quote Submission Deadline, a representative from DGS' Office of Chief Counsel (OCC) will assist a representative of DGS' Bidding Unit in opening each Quote and will conduct a Quote Compliance Review, the purpose of which is to determine each Quote's compliance with the Mandatory Quote Requirements.

C After the OCC/Bidding Unit representatives determine the responsiveness of all the Quotes received, the OCC representative will forward the Technical Submissions to the RFQ Coordinator. The RFQ Coordinator will not distribute the Technical Submission for any Quote that has been deemed non-responsive.

1. Technical Submission Evaluation

a. Each Evaluation Committee scoring member will evaluate each Technical Submission independently from other Evaluation Committee Members using the scoring matrix which has been tailored to reflect the needs of this specific project. The scoring matrix that will be used to score each Quote is included as an appendix to this RFQ and may be used by Prospective Offerors in preparing their Quotes.

b. The RFQ Coordinator will convene with the scoring members of the Evaluation Committee to calculate the Total Technical Submission score for each Offeror. All three scores from each member will be averaged, resulting in a Total Technical Score for each Offeror.

c. The Quote with the highest total base technical points will receive the maximum score. The score for the remaining Quotes will be calculated using the formula presented below:

$$\text{Technical Score} = 1000 - \left(1000 \times \frac{\text{Highest Offeror's points} - \text{Offeror's points}}{\text{Highest Offeror's points}}\right)$$

Part 4

Work Statement

4.1 Work/Scope

A. See Part 1, Section 1.5 of this RFQ.

APPENDIX A

Energy Consultant Information Form

ENERGY CONSULTANT INFORMATION FORM
(Complete in INK or TYPE only - DO NOT use pencil)

DGS GESA-2025-1C DOT Districts 1, 2, 10 Consultant
LOCATION: Department of Transportation, Districts 1, 2, and 10, PA

COMPLETE ALL APPLICABLE AREAS

Pa. Vendor ID Number: All GESA Consultants must be approved thru the DGS ITQ process: http://www.dgs.internet.state.pa.us/ITQ/Default.aspx	
ITQ CONTRACT NO.	4400016426
CONSULTANTS BUSINESS NAME:	
CONTACT AND TITLE OF PERSON:	
ADDRESS:	
PHONE NUMBER:	
E-MAIL ADDRESS:	

A. **List the number of full-time personnel currently employed with the firm. Do not include Sub-Consultants. Discuss use of Sub-Consultants in Section "C" below.**

	REGISTERED	PROF. DEGREE	CEM	OTHER	TOTAL
Architect					
Civil/Structural Engineer					
Mechanical Engineer					
Electrical Engineer					
Account Manager					
Project Managers					
Site Inspectors					
Measurement & Verification					
Other/Specialist					

B. **<u>Submit as a separate page to this form, on one (1) page</u>, identify no more than three (3) projects that best illustrate your firm's current qualifications to perform the review and construction services for this project. DO NOT list projects by consultants or by staff that will not be assigned to this project. Use the categories bulleted immediately below in describing identifying projects.**

- Project Name
- Location
- General Description of work performed by Consultant on the project
- Gross Construction Cost
- Duties Performed
- Fee
- Comments
- Contact References (include Email and Telephone No.)

C. **<u>Submit as a separate page to this form, on one (1) page</u>, listing the Key Sub-Consultant(s) (if needed) who will be retained to assist in the consultant's process. Sub-Consultants Basic Service work in sum-total must be less than 50% of Total Basic Service Fees. Use the categories bulleted immediately below in listing Key Sub-Consultants.**

- Name of Sub-Consultant
- Address
- Specialty/Discipline
- Number of Projects Worked Together
- Value of Projects Worked Together

D. **<u>In the space provided below</u>, indicate and list driving distances (in miles) from the office where the on-site personnel will be located to the project site. Use actual street addresses and Google Maps to determine driving distance.**

_____ Miles

E. **<u>Submit as a separate page to this form, on one (1) page</u>, provide any additional comments or description of relevant information supporting your selection for Consulting Services on this Project. Information specifically related to this project is preferred over boilerplate or general marketing material. Why should your firm be selected for this assignment?**

APPENDIX B

Quote Signature Page

Quote Signature

Offeror's Representations and Authorizations. Offeror by signing on the signature page and submitting its Quote understands, represents, acknowledges and certifies that:

1. All information provided by, and representations made by, the Offeror in the Quote are material and important and will be relied upon by the Issuing Office in awarding the contract(s). Any misstatement shall be treated as fraudulent concealment from the Issuing Office of the true facts relating to the submission of this Quote. A misrepresentation shall be punishable under 18 Pa. C.S. § 4904.

2. No attempt has been made or will be made to induce any firm or person to refrain from submitting a Quote on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.

3. The Quote is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.

4. To the best knowledge of the person signing the Quote for the Offeror, the Offeror, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as disclosed by the Offeror in its Quote.

5. To the best of the knowledge of the person signing the Quote for the Offeror and except as otherwise disclosed by the Offeror in its Quote, the Offeror has no outstanding, delinquent obligations to the Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Offeror that is owed to the Commonwealth.

6. The Offeror is not currently under suspension or debarment by the Commonwealth, or any other state, or the federal government. If the Offeror has received, within three years of the issuance of this RFQ, a Notice of Default from the Commonwealth, other state or the federal government, then the Offeror shall submit, as part of the Technical Submission, seven copies of a written explanation of why such Notice of Default was issued. This written explanation shall not exceed 1 sheet (2 pages) and shall not count towards the sheet and page limit established for the Technical Submission of the Quote.

7. The Offeror has not, under separate contract with the Issuing Office, made any recommendations to the Issuing Office concerning the need for the services described in the Quote or the specifications for the services described in the Quote.

8. Each Offeror, by submitting its Quote, authorizes all Commonwealth agencies to release to the Commonwealth information related to liabilities to the Commonwealth including, but not limited to, taxes, unemployment compensation, and workers' compensation liabilities.

9. Until the awarded DGS Energy Consultant receives a fully executed and approved written contract from the Issuing Office there is no legal and valid contract, in law or in equity, and the DGS Energy Consultant should not begin to perform.

10. The total energy savings projected in the final scope of work will be at least 95% of the savings projected in the Quote and that the project will be self-funded over the financial term of the project (maximum term of 20 years.)

11. Offeror agrees and certifies in accordance with the enclosed Commonwealth of Pennsylvania:

    - Nondiscrimination/Sexual Harassment Clause
    - Tax Liability Certification
    - Americans Disabilities Act
    - Contractor Integrity Provisions
    - Contractor Responsibility Provisions
    - Environmental Statement
    - Compliance with State and Federal Statutes, Rules and Regulations
    - Non-Collusion Affidavit

I am authorized to sign this Quote on behalf of the Offeror and I agree and state that _____ (Name of Firm) understands and acknowledges that the above representations are material and important, and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand and my firm understands that any misstatement shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.

_____
Signature

_____
Print Name Legibly

_____
Title

APPENDIX C

Non-Collusion Affidavit

INSTRUCTIONS FOR NONCOLLUSION AFFIDAVIT

1. This Noncollusion Affidavit is material to any contract awarded pursuant to this Quote. According to §4507 of the Commonwealth Procurement Code, 62 Pa.C.S. §4507, governmental agencies may require Noncollusion Affidavits to be submitted with Quotes.

2. This Noncollusion Affidavit must be executed by the member, officer, or employee of the Offeror who makes the final decision on prices and the amount quoted in the Quote.

3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of Quotes are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Offeror with responsibilities for the preparation, approval or submission of the Quote.

4. In the case of a Quote submitted by a joint venture, each party to the venture must be identified in the Quote documents and an affidavit must be submitted separately on behalf of each party to the joint venture.

5. The term “complementary Quote” as used in the affidavit has the meaning commonly associated with that term in the Quote process, and includes the knowing submission of Quotes higher than the Quote of another firm, any intentionally high or noncompetitive Quote, and any other form of Quote submitted for the purpose of giving a false appearance of competition.

6. Failure to submit an affidavit with the Quote in compliance with these instructions may result in disqualification of the Quote.

NONCOLLUSION AFFIDAVIT

DGS Project Number: _____

State of _____:

County of _____: s.s.

I state that I am the _____ (Title) of _____ (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the prices(s) and the amount of this Quote.

I state that:

1. The price(s) and amount of this Quote have been arrived at independently and without consultation, communication or agreement with any other contractor, Offeror, or potential Offeror.
2. Neither the price(s) nor the amount of this Quote, and neither the approximate price(s) nor approximate amount of this Quote, have been disclosed to any other firm or person who is a Offeror or potential Offeror, and they will not be disclosed before the Quote submission date.
3. No attempt has been made or will be made to induce any firm or person to refrain from proposing on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.
4. The Quote of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.
5. _____ (Name of Firm) its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to proposing and/or bidding on any public contract, except as follows:
   _____

I state that _____ (Name of Firm) understands and acknowledges that the above representations are material and important, and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.

_____
(Signature)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF
_____, 20_____.

_____
(Signatory's Printed Name)
Notary Public

_____

_____
(Signatory's Title)

My Commission Expires_____

APPENDIX D

Requirements Checklist

REQUIREMENTS CHECKLIST

RFQ for Project Number:	GESA 2025-1C DOT Districts 1, 2, 10 Consultant	
Offeror's Name:		
Office of Chief Counsel Rep:		Date:
Bidding Unit Rep:		Date:

Mandatory Submittal Requirements

Indicate in the spaces provided if the Quote meets each of following mandatory Quote requirements. Any Quote that has a "No" checked will be rejected as non-responsive.

Mandatory requirements	**Yes**	**No**
Offeror is an Energy Saving Program Qualified Contractor		
Technical Submittal included		
If Offeror is a Joint Venture:		
• Joint Venture Agreement submitted		
• Entity Authorization to Enter Into Joint Venture is included		
Energy Consultant Information Form is included		
Quote Signature properly completed and signed		
Non-Collusion Affidavit properly completed and notarized		
• If Joint Venture, one Non-Collusion Affidavit for each entity		

APPENDIX E

Energy Consultant Scoring Matrix

ENERGY CONSULTANT SCORING MATRIX

DGS NO.: GESA XXXX-XX

DATE:

TITLE:

LOCATION:

SCORERS:

Town, County, PA

TYPE: Energy Consulting

FIRM	STAFF 250 pts max (25%)	CAPABILITY 250 pts max (25%)	PROXIMITY 250 pts max (25%)	OTHER 250 pts max (25%)	TOTAL	RANK	SELECT

SAMPLE

APPENDIX F

Proposed Core Energy Conservation Measures

Core Energy Conservation Measures

Note: All items listed below **must** be considered in the RFQ response. For any measure that cannot be incorporated into the proposal or is determined infeasible, a detailed explanation must be provided that clearly outlines the financial and technical rationale behind the choice not to include the measure. **Please use the same ECM names/numbers when referencing them in your RFQ response.**

The following sites should be considered during the survey: Warren County Maintenance Office / Garage (MO/G), Forest County MO/G, Venango County MO/G, Erie County MO/G, Erie Site M Welcome Center, Mercer County MO/G, Juniata County MO/G, Clinton County MO/G, Potter County MO/G, Centre County MO/G, District 2-0, Clearfield County MO/G, Cameron County MO/G, Jefferson Site 25/26, District 10-0 Office, and Indiana County Maintenance Office.

Note: After the winning quote is selected, additional sites may be included in the IGA & final project.

General Core ECMs for the above-mentioned sites are:

ECM #1	Convert all lighting to LED, where appropriate.
ECM #2	Building weatherization.
ECM #3	Install full back up generator(s).
ECM #4	Re-commissioning of the HVAC system.
ECM #5	Install Electric Vehicle (EV) charger(s).
ECM #6	Water conservation.
ECM #7	Garage door replacement(s) and/or repair(s).
ECM #8	Inclusion of gender-neutral, multipurpose restroom(s).

Specific site information and opportunities:

Venango County Maintenance Office / Garage

ECM #9	Insulate vehicle wash facility's roof.
ECM #10	Upgrade existing electric water heater to natural gas.
ECM #11	Upgrade basement furnace.

Blue Building

ECM #12	Replace window AC units with split systems.

Erie County Maintenance Office / Garage

ECM #13	Upgrade oil storage heater.
ECM #14	Increase water line size to truck wash & salt brine operations.
ECM #15	Replace older windows.
ECM #16	Install illuminated exit signs.
ECM #17	Re-design drain systems, specifically at the welding shop.

ECM #18 Update the HVAC control system.
ECM #19 Replace boiler for snow melt system.
ECM #20 Develop solution for water intrusion of brick walls.
ECM #21 Upgrade vehicle exhaust system.
ECM #22 Install smoke & fire detection systems.

Erie Welcome Center

ECM #23 Provide solution for pressure problem opening exterior doors.
ECM #24 Upgrade rest area and welcome center HVAC systems.
ECM #25 Upgrade lighting controls in the welcome center.
ECM #26 Secure dome windows.
ECM #27 Retro commissioning of existing geothermal heat pump system.
ECM #28 Provide solution for refilling of the diesel generator.

Crawford County Maintenance Office/Garage

ECM #29 Reline or replace sewer line.
ECM #30 Upgrade fire alarm system.
ECM #31 Upgrade bathroom exhaust system.
ECM #32 Paint ceiling in garage.

Mercer County Maintenance Office/Garage

ECM #33 Develop solution for water intrusion in basement.
ECM #34 Upgrade exhaust system in weld shop.
ECM #35 Upgrade fire alarm system.
ECM #36 Replace roof of vehicle wash bay.

MR Shop

ECM #37 Replace roof.
ECM #38 Replace windows.
ECM #39 Redesign storefront.

District Office 10-0

ECM #40 Replace basement AHUs.
ECM #41 Replace hot water heater.
ECM #42 Upgrade BAS.
ECM #43 Upgrade boiler.
ECM #44 Replace hot water pumps / install VFD drives.

Indiana County Maintenance Office/Garage

ECM #45 Replace garage door seals.
ECM #46 Redesign fire alarm system.

Centre County Maintenance Office/Garage

ECM #47 Install split systems in storeroom and garage office.

ECM #48 Replace heating system in wash bay and garage.
ECM #49 Update HVAC in training room.
ECM #50 Repair roof / prevent water intrusion.

District Office 2-0

ECM #51 Install surge protection system.
ECM #52 Retro commissioning of water source heat pump system and controls.

Clearfield County Maintenance Office/Garage

ECM #53 Replace failing radiant heating and split systems.
ECM #54 Replace/redesign oil pump manifold.
ECM #55 Repair/redesign the steam generator.
ECM #56 Repair/redesign the oil separator system.
ECM #57 Repair/redesign the vehicle exhaust system(s).
ECM #58 Replace garage doors and openers.
ECM #59 Replace exterior doors and windows.
ECM #60 Replace garage and wash bay roofs; repair flashing and capping at edges of buildings.

Jefferson County – Brookeville Rest Stops (Route 80 near mile marker 87)

ECM #61 Replace hot water heater.
ECM #62 Install power surge system.
ECM #63 Redesign / upgrade water treatment system & blower motors.
ECM #64 Install metal roof and removed snow melt system.
ECM #65 Redesign / upgrade sewer treatment system.
ECM #66 Replace windows and doors.

Cameron County Maintenance Office/Garage

ECM #67 Replace window AC units.
ECM #68 Upgrade UST and AST fuel monitoring system.
ECM #69 Install boiler isolation valves.
ECM #70 Replace the air compressor in garage.
ECM #71 Install fire alarm system & security system with card readers.
ECM #72 Replace make up AHU in welding shop.
ECM #73 Replace hot water heating system.
ECM #74 Replace the Cutler-Hammer electrical panels.
ECM #75 Replace uninsulated garage door.
ECM #76 Replace single pane windows.

Juniata County Maintenance Office/Garage

ECM #77 Replace outdated electrical panels.
ECM #78 Initiate service.
ECM #79 contracts for HVAC equipment.
ECM #80 Recommissioning of the storeroom RTU.

Clinton County Maintenance Office/Garage

ECM #81 Replace the Reznor AHUs and the Trane condensing units.
ECM #82 Repair the garage ERV.
ECM #83 Repair garage door.

Potter County Maintenance Office/Garage

ECM #84 Recommissioning of administrative office RTU.
ECM #85 Repair brick at door lintels.
ECM #86 Determine correct circuit breaker designations and generate accurate circuit directories.

Warren County Maintenance Office/Garage

ECM #87 Repair the Sterling MAU in the garage.
ECM #88 Install an FCU unit in the basement that heats and dehumidifies.
ECM #89 Replace the diesel air compressor.
ECM #90 Upgrade the ventilation in the weld shop.

Forest County Maintenance Office/Garage

ECM #91 Verify adequate generator size.
ECM #92 Replace generator transfer switch.

APPENDIX G

Energy Consultant Contract

ENERGY CONSULTANT CONTRACT

GESA "PROJECT NAME"

This Energy Consultant Contract ("contract is between the Department of General Services ("the Department") and **[CONSULTANT]** ("Energy Consultant") at **[ADDRESS]**, a corporation incorporated under the Laws of the State of **[STATE]**, its successors and assigns, with its principal offices located at **[CONSULTANT ADDRESS]**, with Federal Identification No. **[FED ID#]** and Commonwealth Vendor Identification No.**[COPA VIN]**.

The Department requires energy consultant services for project and construction administration and assessments and design review for certain GESA projects in various areas of the Commonwealth.

The Department has determined that the best method for making these Energy Consultant services available is to contract with Energy Consultant firms on a nonspecific basis to permit the Department to obtain services by Work Order on GESA Projects to be specified at some future time.

The parties, intending to be legally bound, agree as follows:

Article 1

Definitions

A. Contract Documents ("contract documents"): The contract documents consists of the Invitation to Qualify (ITQ) documents (including the ITQ and all appendices and attachments), the ITQ Proposal submitted by the GESA Contractor and Energy Consultant the ITQ Contract, this contract and all its attachments, the Request for Quote for GESA Contractor, as well as Request for Quote for Energy Consultant, the GESA Contract, Bonds, the GESA Contractor's Proposal, the Conditions of the GESA Contract (General, Special, Supplementary, and other Conditions), all drawings created by or for the GESA Contractor and/or their Design Consultant, the specifications created by or for the GESA Contractor and/or their Design Consultant, the Comprehensive Energy Audit (i.e., Investment Grade Audit) prepared by the GESA Contractor, all bulletins and addenda issued prior to execution of the GESA Contract, all change orders, the GESA Project Design Manual, and the Administrative Procedures for the GESA Contract.

B. Department of General Services ("Department"): The executive agency of the Commonwealth of Pennsylvania, also known as "DGS" and referred through the contract documents as singular in number.

C. ESCO: The Energy Savings Company that was awarded the GESA Contract for the project. After award to the ESCO, they are also referred to in the contract documents as the GESA Contractor.

D. Funding Agency: The executive agency that will enter the GESA Contract for the GESA Project

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("project") and that operates the facilities included in the scope of the Work Order and project.

E. GESA: Guaranteed Energy Savings Act: 62 Pa. C.S. §§ 3751-3758, as amended.

F. Energy Use Intensity (EUI) score: EUI is a unit of measurement that describes a building's energy use. EUI represents the energy consumed by a building relative to its size. Its value is expressed in kBTUs/sq. ft.

G. GESA Project ("project"): The evaluation and recommendations of energy conservation measures and for implementation of one or more such measures at a facility that will be included in the Energy Consultant's Work Order.

H. Work Order: The authorization by the Department that defines the Energy Consultant's specific scope of work and location of the project.

Article 2

Scope of Services

The Energy Consultant, after a Work Order is executed and during the project, along with other items specifically stated elsewhere in this contract, will provide the following architectural, engineering, and consulting services to assist the Department and Funding Agency:

A. Energy Consultant shall provide peer reviews of all architectural and engineering services performed by the ESCO during the project, including, but not limited to, reviews of structural, mechanical, and electrical engineering services. The Energy Consultant warrants that the reviewers of the ESCO's architectural and engineering services are regularly licensed, as required by the Pennsylvania Statutes and Pennsylvania Code (Architects Licensure Law, Act of Dec. 14, 1982, P.L. 1227, as amended, 63 P.S. §34.1 et seq. and Regulations of the State Architects Licensure Board, 49 PA. CODE §9.1 et seq. and the Engineer, Land Surveyor and Geologist Registration Law, Act 367, 63 P.S. §148-158.2, as amended and Regulations of the Board of Engineers, Land Surveyors and Geologists, 37 PA. Code §37.31 et seq.), to practice their professions in the Commonwealth of Pennsylvania.

B. Energy Consultant shall designate an individual as the Project Manager in charge of the project upon issuance of a Work Order.

C. Energy Consultant shall become familiar with their role in the contract documents posted on the Department's web site.

D. Energy Consultant shall assist the Department in the preparation of a Request for Quote ("RFQ") to solicit competitive Quotes from ESCOs for the project, as further discussed in Article 3.

SAMPLE

E. If requested to do so by the Department, Energy Consultant shall assist with conducting interviews with the ESCOs, clarify the scope and cost of the proposed project, and review the qualifications and experience of each ESCO team.

F. Energy Consultant shall assist the Department and/or Agency in creating a standard ECM matrix to fairly evaluate both the core ECMs and any additional ECMs submitted by the ESCO.

G. If requested to do so by the Department, Energy Consultant shall assist and advise regarding financing for the project.

H. Energy Consultant shall monitor and review the ESCO during the ESCO's preparation of specifications and drawings for the project. The drawings, plans, and specifications prepared by the ESCO will be prepared in compliance with all applicable laws, rules, regulations, and codes, including, but not limited to, the GESA, Uniform Construction Code, and other applicable standards as appropriate. The Energy Consultant will review and comment on the final submission to the Department and Funding Agency.

I. Energy Consultant shall provide construction administration/inspection services throughout the project to ensure that work is completed in accordance with approved plans and specifications, and the GESA Contract in accordance with Article 5 of this contract.

J. Energy Consultant shall supervise the ESCO's monitoring, verification, and commissioning procedures to ensure that savings will be realized.

K. Energy Consultant shall prepare certificate(s) of substantial completion and assist the Funding Agency and the ESCO in applying for and receiving grants, incentives, rebates, and aid for the project.

L. For a period of three (3) years after the date of substantial completion, Energy Consultant shall assist the Funding Agency with the evaluation of actual energy savings realized by the project. This will include, where needed, discussions and meetings with the Funding Agency and the ESCO, and the review of monitoring and verification procedures, reports, and related calculations. If the guaranteed savings do not materialize, the Energy Consultant will assist the Funding Agency to recoup the deficit.

M. Energy Consultant shall certify that it is free from financial interest in all the ESCOs submitting Quotes for the project which conflicts with the proper completion of the audit and any Consulting work associated with the project, and that full disclosure will be made to the Department detailing all financial compensation received from the ESCO at the appropriate time. By signature to this contract, the Energy Consultant represents and warrants that it will not have any interest, monetary or otherwise, and/or is not affiliated with the ESCO selected for the project, and that it will abide by the Contractor Integrity Provisions included in this contract.

These above services shall be performed in accordance with all applicable laws, rules, and

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regulations.

Article 3

Request for Quote and Energy Contract Award

A. The Energy Consultant shall assist the Department in the preparation of Request(s) for Quote ("RFQ") to solicit Quotes from the ESCOs for a specific GESA project. The Energy Consultant shall ensure that the RFQ is capable of attracting competitive and qualified proposers and include energy saving measures preferred by the Funding Agency.

B. The Energy Consultant will cooperate with the Department in the preparation of the RFQ. The Energy Consultant shall insure that the RFQ specifies non-binding, no obligation Quotes that result in a no cost, no risk, energy performance project.

C. The Energy Consultant, in cooperation and consultation with the Department, following the Department's approval of the RFQ format, shall assist the Department during the procurement period, including the following services:

1. Provide the Department with draft answers to any written Request for Information received during the procurement process so that the Department may issue bulletins providing these answers to the proposers.

2. Attend and present project specifics at the Pre-Proposal Conference and site visit of the facilities with prospective ESCOs.

3. If requested by the Department, attend any pre-award conferences with successful proposers. Any such conferences will be conducted by the Department.

D. If requested by the Department, the Energy Consultant shall review the Quotes received including, but not limited to, the feasibility of the proposed energy project, the financial and technical evaluation of ECMs proposed, the guarantee and the qualifications, and experience of proposers, and assist the Department in determining the proposal that is in the Department's best interest.

E. Upon the Department's selection of an ESCO, the Energy Consultant will review and monitor the development of the Investment Grade Audit ("IGA") submitted by the ESCO to ensure that a feasible energy project exists. The Energy Consultant shall review all ESCO documentation to justify the proposed energy savings contained in the IGA and present this information to the Department.

F. The Energy Consultant will review the GESA Contract with regard to specific products and procedures that will be employed in constructing the various ECMs that were agreed to in the GESA Contract.

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Article 4

Design Services

A. The ESCO (not the Energy Consultant) shall be the design professional for the project. The Energy Consultant will communicate with the ESCO during the ESCO's preparation of plans, specifications, and applications for approval by the appropriate authorities. These documents will reflect the scope of services for the project in accordance with the Department's GESA Design Manual.

B. Energy Consultant shall review and evaluate plans, specifications, and applications for approval by appropriate authorities that are produced by the ESCO to ensure the quality and proper utilization of ECMs. Energy Consultant shall review the costs submitted by the ESCO to verify the accuracy of the construction costs. The Energy Consultant shall further review the cash flow analysis for the project to be certain that work to be performed by the ESCO will guarantee that the Funding Agency will maintain a non-negative cash flow for each year during the term of the GESA Contract and guarantee period.

C. The Energy Consultant will work with the Funding Agency in assisting the ESCO to prepare a project schedule to accomplish the work of the project, as set forth in detail in the General Conditions of the Energy Contract.

Article 5

Construction Administration Services

A. The Energy Consultant shall provide construction administration of the GESA Contract for the project, as set forth in this Article and the project-specific contract Documents. If a conflict arises, the construction administrative services that best serve the Department or Funding Agency will control.

B. The Energy Consultant's responsibility to provide services for the construction phase of this contract commences as of the effective date of GESA Contract with the ESCO and terminates upon the issuance to the Funding Agency of the final certificate of payment to the contractor.

C. The Energy Consultant shall have authority to act on behalf of the Department only to the extent provided in this contract, unless the Department consents to such authority, and/or unless otherwise set forth in the contract documents.

D. The Energy Consultant shall set aside 1 work day (approximately 8 to 10 hours) each week to visit the sites, under construction, while there is active work, and as often as required to resolve critical design issues in the field, to observe the site and work, to familiarize itself with the general progress and quality of the work, and to determine for the Funding Agency's benefit and protection if the work is proceeding in accordance with the intent of the contract documents. The sites which are to be visited weekly will be decided at the biweekly

SAMPLE

construction meetings.

E. The Energy Consultant shall consult with the Funding Agency as often as necessary concerning design issues arising during construction and the ESCO's compliance with the contract documents.

F. On the basis of its on-site observations, the Energy Consultant shall keep the Funding Agency and DGS informed by email of the progress and quality of the work, and it shall use reasonable care in guarding the Funding Agency against defects and deficiencies in the work and against the ESCO's failure to carry out the work in accordance with the construction documents.

G. The Energy Consultant shall be present at bi-weekly project meetings with the ESCO and the Funding Agency's representatives to discuss issues relative to design, progress of the work, quality of the work, and timely completion of the work. Agenda and minutes for said meetings shall be developed by the Energy Consultant. The project meetings shall be held at a single, central location.

H. The Energy Consultant shall review, comment, and advise appropriate action upon the ESCO's submittals (including Shop Drawings, Product Data and Samples, etc.) as discussed in the General Conditions of the GESA Contract ("General Conditions") to ascertain their conformance with design requirements, as indicated in the contract documents. The Energy Consultant's review shall not be conducted for the purposes of confirming dimensions or quantities, except to the extent that the ESCO has requested in writing, the assistance of the Energy Consultant to determine certain dimensions, because those indicated in the contract documents conflict with existing field conditions, or because the dimensions in the contract documents contain erroneous, inconsistent, or incomplete dimensions for which clarification is needed and can best be supplied by the Energy Consultant.

I. The Energy Consultant shall maintain a record of each submittal received from the ESCO as discussed in the General Conditions. The record shall include, at a minimum, the subject matter of the submittal, the related specification section number, the provider or supplier of the subject item, material or system, the date received, the action taken, and the date returned to the ESCO.

J. The Energy Consultant's review of a specific item shall not indicate approval of an assembly of which the item is a component. When professional certification of performance characteristics of materials, systems, or equipment is required by the contract documents, the Energy Consultant shall be entitled to rely upon such certification to establish that the materials, systems, or equipment will meet the performance criteria required by the contract documents.

K. The Energy Consultant may authorize a field order (a minor change in the Work not involving an adjustment in the contract sum and/or an extension of the contract time), which is consistent with the intent of the contract documents.

L. The Energy Consultant shall not have control over, or charge of, and shall not be responsible for: construction means, methods, techniques, sequences, procedures, scheduling, or for safety precautions and programs in connection with the Work. The Energy Consultant shall not

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have control over, charge of, or responsibility for, acts or omissions of the Department, the Funding Agency, the ESCO, its subcontractors, or their agents or employees, or of any other persons performing portions of the work. However, as set forth in subparagraph M, the Energy Consultant shall report to the Funding Agency known material deviations from the contract documents as to quality and scope of work, as well as timeliness of the ESCO's performance as ascertained from the most recent construction schedule submitted by the ESCO.

M. The Energy Consultant shall advise the ESCO of work which does not conform to the contract documents as to quality of the work, scope of the work, or progress of the work. If the Energy Consultant observes or is aware of work which does not conform to the contract documents, he shall immediately advise the Funding Agency.

N. Whenever the Energy Consultant considers it necessary or advisable for implementation of the intent of the contract documents, the Energy Consultant will have authority to require additional inspection or testing of the Work in accordance with the provisions of the contract documents, whether or not such Work is fabricated, installed, or completed, at no cost to the Funding Agency, as further described in the General Conditions. Additionally, when the Energy Consultant receives a recommendation that such additional testing or inspection is required, the Energy Consultant shall require such additional inspection or testing. However, neither this authority of the Energy Consultant nor a decision made in good faith, either to exercise or not to exercise such authority, shall give rise to a duty or responsibility of the Energy Consultant to the ESCO, its subcontractors, material, and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

O. Based on the Energy Consultant's on-site observations and analysis of the ESCO's Applications for Release of Payment, the Energy Consultant shall review and certify the amounts due to the ESCO. The Energy Consultant's certification for payment shall constitute a representation to the Funding Agency, based on the Energy Consultant's evaluations of the work and on the data comprising the ESCO's Application for Release Payment, that the Work has progressed to the point indicated and that, to the best of the Energy Consultant's knowledge, information and belief, the quality of the Work is in accordance with the contract documents. The foregoing representations are subject to an evaluation of the Work for conformance with the contract documents upon Substantial Completion and measurement and verification for three (3) years after, to results of subsequent tests and inspections, to minor deviations from the contract documents correctable prior to completion, and to specific qualifications expressed by the Energy Consultant.

P. The Energy Consultant shall maintain a record of the ESCO's applications for release payment, copies of which applications shall be sent to the Funding Agency with certification of each such application by the Energy Consultant. Further, the Energy Consultant shall not certify said application for release payment if it does not comply with the Administrative Procedure governing payment, including, but not limited to:

    1. A current Sworn Statement from the ESCO setting forth all subcontractors and material suppliers with whom the ESCO has subcontracted, the amount of such subcontract, the amount requested for any subcontractor or material supplier in the application for payment and the amount to be paid to the ESCO from such progress payment,

together with a current, duly executed waiver of mechanics' and material supplier's liens from the ESCO establishing receipt of payment or satisfaction of the payment requested by the ESCO in the current Application for Release of Payment;

2. PA Prevailing Wage Certified payrolls for employees and employees of subcontractors performing work on the project;

3. Other documents as deemed necessary by the Funding Agency relevant to an Application for Release of Payment (e.g., E-Verify).

Article 6

Energy Consultant's Close-out Services

A. The Energy Consultant, in accordance with this Article and the contract documents, shall provide the following services upon completion of the work:

1. Preparation of punch lists for completion of the Work by the ESCO.

2. Review of final close-out paperwork submitted by the ESCO, reviewed, and collected, and execute such documents which require the Energy Consultant's signature.

3. The Energy Consultant shall conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, shall receive and review, approve or disapprove as appropriate, and forward to the Funding Agency, for the Funding Agency's review and records written warranties and related documents required by the contract documents and assembled by the ESCO, and shall recommend the Funding Agency issue a final Certificate for Payment upon compliance with the requirements of the contract documents.

B. The Energy Consultant's responsibility to provide services for Close-out phase are included in the contract Documents and terminates upon issuance to the Funding Agency of the final certificates for payment from all contractors.

C. The Energy Consultant shall provide post construction services to the Funding Agency, including an evaluation of actual energy savings realized during the first, second, and third years of the ESCO guarantee period following completion of the project.

Article 7

Additional Services

A. The Department reserves the right to request Additional Services from the Energy Consultant. Such request will be in writing by the Department or Funding Agency and generally based on the Energy Consultant's advice as to the need for these Additional Services arise. The

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Department or Funding Agency is not liable for any costs incurred by Energy Consultant in performing any services without the Department's or Funding Agency's prior written authorization. If Additional Services are required due to circumstances beyond the Energy Consultant's control, the Energy Consultant shall notify the Department or Funding Agency prior to commencing such services. If the Department or Funding Agency deems that such Additional Services are not authorized, the Department or Funding Agency shall give prompt written notice to the Energy Consultant.

B. The Energy Consultant's compensation for the Additional Services must be agreed upon by the ESCO for purposes of reimbursement from the ESCO in accordance with Article 9 of this contract. All approved Additional Services shall be invoiced by the Energy Consultant pursuant to the hourly rate schedule annexed as Chart A.

Article 8

Department's Responsibilities

A. The Department shall furnish the following documentation, if it possesses same, to the Energy Consultant to assist it in the performance of its obligations under this contract:

1. Existing surveys describing physical characteristics, legal limitations, and utility locations for the site or the project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions, and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths.

2. Existing Long-Range Planning Studies prepared on behalf of the Department.

3. Existing Asbestos Reports on file with the Department or Funding Agency.

4. Utility bills and water usage bills of the Funding Agency who operates the facility for as many years as possible.

B. Ownership of documents: All design concepts; preliminary, feasibility, and special studies; design calculations; contract Drawings and Specifications; Special Conditions; Statements of Probable Construction Costs; and all other data, samples, and surveys compiled by the Energy Consultant or its Consultants under this contract, become the sole property of the Department. Such documents may be used by the Department for any desired purpose without any compensation to the Energy Consultant.

1. All proprietary materials and methodologies brought by the Energy Consultant to the project and all documents, sketches, drawings, designs, works, papers, files, reports,

SAMPLE

computer programs, data, computer documentation, and other tangible materials authored and prepared by Energy Consultant as the work product covered in the scope of work shall be treated in accordance with the following principles:

a. Patent Ownership: Energy Consultant and its subconsultants shall retain ownership to patentable items, patents, processes, inventions, or discoveries (collectively the "PATENTABLE ITEMS") made by the Energy Consultant during the performance of this contract. Notwithstanding the foregoing, the Department is granted a non-exclusive, non-transferable, royalty free license to use or practice the PATENTABLE ITEMS. The Department may disclose to third parties any such PATENTABLE ITEMS made by Energy Consultant or any of its Subconsultants under the scope of work for the project that have been previously publicly disclosed. The Department understands that any third- party disclosure will not confer any license under such PATENTABLE ITEMS.

b. Copyright Ownership – Ownership of materials developed as part of the Scope of Work for the project: All documents, sketches, drawings, designs, works, papers, files, reports, computer programs, data, computer documentation, and other tangible materials authored and prepared by Energy Consultant as the Work Product covered in the scope of work for the project (collectively the "Works"), including Works developed by Subconsultants, are the sole and exclusive property of the Department and shall be considered works made for hire under the federal Copyright Act of 1976, as amended. (Copyright Act). In the event that such Works do not fall within the specifically enumerated works that constitute works made for hire under the Copyright Act, Energy Consultant agrees to assign and, upon their authorship or creation, expressly and automatically assigns all copyright interests, proprietary rights, trade secrets, and other right, title, and interest in and to such Works to the Department. The Department shall have all rights accorded a holder of copyright under the Copyright Act including, but not limited to, the exclusive right to reproduce the Works in copies, the right to distribute copies by sale or other transfers, the right to register all copyrights in its own name as author in the United States and in foreign countries, the right to prepare derivative works based upon the WORKS, the right to display the WORKS and the right to perform the work digitally. Upon completion or termination of this contract, all working papers, files, and other documentation shall immediately be delivered by Energy Consultant to the Department. Energy Consultant warrants that the Works are original and do not infringe the rights of any other work.

c. Engineer License: Notwithstanding the foregoing, Energy Consultant and any Subconsultants shall retain a royalty free non-exclusive license to reproduce such Works for internal use and to have such Works published for any academic purpose including, but not limited to, publication as part of any thesis or dissertation or journal article. This license is conditioned on the Energy Consultant's and the Subconsultants' compliance with the provisions

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of the intellectual property laws of the United States. All copies of reproductions and publications made pursuant to this License shall bear appropriate proprietary notices.

d. Pre-existing Materials Brought by the Energy Consultant to the project: The Department shall have no ownership rights to Energy Consultant's proprietary materials, data, software, methodologies, or other intellectual property that Energy Consultant brings to the project or has previously developed with or obtained from third parties ("Energy Consultant Property");

e. Federal Government Interests: It is understood that certain funding under this contract may be provided by the Federal government. Accordingly, the rights to Works or Patentable Items of Energy Consultants or Subconsultants hereunder will be further subject to government rights, as set forth in 37 C.F.R. Section 401, and other applicable statutes. Notwithstanding the foregoing, the Department retains the right to share information relating to WORKS or Patentable Items developed under the scope of work for a wholly state-funded contract with the Federal Government.

Article 9

Payments to the Energy Consultant

A. Payment for the services under this contract shall be fully realized from the guaranteed savings realized by the GESA contract. The Department or Funding Agency shall not be responsible to the Energy Consultant for any direct payments for services performed under this contract. The Energy Consultant acknowledges that the Department, through a Work Order, may engage the Energy Consultant in connection with a GESA Project, and that payment for the Energy Consultant's services will be subject to the execution of the GESA Contract.

B. In the event that the Funding Agency enters into a GESA Contract, the Energy Consultant's compensation for the services outlined in Article 2 through 7 from the selected ESCO shall be:

1. 4% of the of the GESA Contract value for projects equal to or greater than $18 million; or

2. 5% of the GESA Contract value for projects equal to or greater than $13 million but less than $18 million; or

3. 6% of the GESA Contract value for projects equal to or greater than $8 million but less than $13 million; or

4. 7% of the GESA Contract value for projects less than $8 million, as approved and financed by the Department or Funding Agency.

C. The Energy Consultant shall prepare and submit invoices for its statement of services rendered

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to the Department for the Department's review and approval. If authorized by the Department, the Department will transmit the invoices to the Funding Agency and/or ESCO for payment to the Energy Consultant. The Department shall not be responsible for any delays associated with payment to the Energy Consultant.

1. In accordance with the above, the Department agrees to insert the following payment schedule into the RFQ and resulting GESA Contract, if any:

The Energy Consultant selected by the Department shall be entitled to receive:

- 4% of the of the GESA Contract value for projects equal to or greater than $18 million; or
- 5% of the GESA Contract value for projects equal to or greater than $13 million but less than $18 million; or
- 6% of the GESA Contract value for projects equal to or greater than $8 million but less than $13 million; or
- 7% of the GESA Contract value for projects less than $8 million.

Payments shall be in accordance with the following schedule:

- 10% upon fully executed contract with the ESCO;
- 20% upon approval of all plans and specifications by both the Department and Labor & Industry, to the extent L&I has jurisdiction over the project based upon the scope of the project. Invoices may be submitted on a percent complete basis for this milestone;
- 60% divided into equal monthly payments based upon the duration of construction;
- 10% upon completion of the three years of Measurement and Verification of post-construction services. Invoices may be submitted on a percent complete basis for this milestone.

D. Payment of all fees identified in this contract shall be the sole responsibility of the ESCO selected by the Department for this project. The Department or Funding Agency shall not be responsible for any Energy Consultant fees not covered by the guaranteed savings and the schedule of fees as provided by the Energy Consultant.

E. In the event that the Funding Agency decides not to pursue a GESA Contract for any reason whatsoever, the Funding Agency shall pay the Energy Consultant ten percent of the ESCO's IGA fee.

F. Any additional compensation provided for in this contract will also be funded by the selected ESCO, and this obligation must be included in the ESCO contract with the Funding Agency. To that end, the Department agrees to include a copy of Chart A in the GESA Contract with the

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Funding Agency, if any.

Article 10

Termination

A. The Department may terminate this contract any time for any reason upon fourteen (14) calendar days' written notice to the Energy Consultant. The Department shall be under no obligation to pay for any services provided by the Energy Consultant.

B. The Energy Consultant may terminate this contract any time prior to full execution of a Work Order regarding a GESA Project for any reason upon fourteen (14) calendar days' written notice to the Department. The Department shall be under no obligation to pay for any services provided by the Energy Consultant.

C. Subsequent to the full execution of a Work Order regarding a GESA Contract, if this contract is terminated by the Department pursuant to any of the provisions of this Article, the Energy Consultant shall be compensated for work performed to the date of such termination, if the termination is not the fault of the Energy Consultant. In the event that the Energy Consultant has not completed any issued Work Order prior to the Termination Date, this contract shall remain in effect as to that Work Order until its completion.

Article 11

Miscellaneous Provisions

A. This contract shall be governed by the laws of Pennsylvania.

B. By entering this contract, the Energy Consultant is not guaranteed any present or future Work Orders.

C. The Energy Consultant shall not assign this contract without the prior written consent of the Department, which consent shall not be unreasonably withheld.

D. This contract represents the entire and integrated agreement between the Department and Energy Consultant and supersedes all prior negotiations, representations, or agreements, either written or oral. This contract may be amended only by written instrument signed by both Department and Energy Consultant.

E. Nothing contained in this contract shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Department or Energy Consultant. Nothing in this contract between the Department and the Energy Consultant should be construed to authorize any person not a party to this contract to maintain any lawsuit involving the contract, unless otherwise provided by law.

SAMPLE

F. The Energy Consultant shall have the right to include representations of the design of the project, such as photographs of the exterior and interior, among the Energy Consultant's promotional and professional materials in accordance with Article 11, with the approval of the Funding Agency. The Energy Consultant's materials shall not include the Department's confidential or proprietary information if the Department has previously advised the Energy Consultant in writing of the specific information considered by the Department to be confidential or proprietary.

G. The Energy Consultant shall provide Worker's Compensation, automobile, comprehensive general liability and professional liability (Errors and Omission) insurance in amounts set forth by this contract. All policies shall be in a form, with a deductible, and with a carrier reasonably acceptable to the Department. Promptly upon signing this contract, and after as necessary or requested, the Energy Consultant shall provide the Department with proof of the required insurance coverages. Simultaneously with the execution of this contract, Energy Consultant shall deliver insurance policies and certificates to Department which will provide at least a 30-day notice of cancellation or amendment.

H. The Energy Consultant shall maintain professional liability insurance in an amount no less than $1,000,000 per occurrence, $3,000,000 aggregate, worker's compensation in amounts required by law, and general liability insurance (including owned, non-owned, and hired motor vehicles) in a single limit amount of no less than $1,000,000.

I. The Energy Consultant shall hold the Commonwealth harmless from, and indemnify the Commonwealth against, any and all third-party claims. Demands and actions based upon or arising out of any activities performed by the Energy Consultant and its employees and agents under this contract, provided the Commonwealth gives Energy Consultant prompt notice of any such claim of which it learns. Pursuant to the Commonwealth Attorneys Act (71 P.S. Section 732-101, et seq.), the Office of Attorney General (OAG) has the sole authority to represent the Commonwealth in actions brought against the Commonwealth. The OAG may, however, in its sole discretion and under such terms as it deems appropriate, delegate its right of defense. If OAG delegates the defense to the Energy Consultant, the Commonwealth will cooperate with all reasonable requests of Energy Consultant made in the defense of such suits.

J. Notwithstanding the above, neither party shall enter into any settlement without the other party's written consent, which shall not be unreasonably withheld. The Commonwealth may, in its sole discretion, allow the Energy Consultant to control the defense and any related settlement negotiations.

K. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this contract. For the purpose of these provisions, the term "the Commonwealth" shall refer to the contracting Commonwealth agency.

    1. If the Commonwealth needs the Energy Consultant's assistance in any matter arising out of the RTKL related to this contract, it shall notify the Energy Consultant Funding the legal contact information provided in this contract. The Energy Consultant, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Commonwealth.

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2. Upon written notification from the Commonwealth that it requires the Energy Consultant's assistance in responding to a request under the RTKL for information related to this contract that may be in the Energy Consultant's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Energy Consultant shall:

    a. Provide the Commonwealth, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in the Energy Consultant's possession arising out of this contract that the Commonwealth reasonably believes is Requested Information and may be a public record under the RTKL; and

    b. Provide such other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this contract.

3. If the Energy Consultant considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Energy Consultant considers exempt from production under the RTKL, the Energy Consultant must notify the Commonwealth and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of the Energy Consultant explaining why the requested material is exempt from public disclosure under the RTKL.

4. The Commonwealth will rely upon the written statement from the Energy Consultant in denying a RTKL request for the Requested Information unless the Commonwealth determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Commonwealth determine that the Requested Information is clearly not exempt from disclosure, the Energy Consultant shall provide the Requested Information within five (5) business days of receipt of written notification of the Commonwealth's determination.

5. If the Energy Consultant fails to provide the Requested Information within the time period required by these provisions, the Energy Consultant shall indemnify and hold the Commonwealth harmless for any damages, penalties, costs, detriment, or harm that the Commonwealth may incur as a result of the Energy Consultant's failure, including any statutory damages assessed against the Commonwealth.

6. The Commonwealth will reimburse the Energy Consultant for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

7. The Energy Consultant may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts; however, the Energy Consultant shall indemnify the Commonwealth for any legal expenses incurred by the Commonwealth as a result of such a challenge and shall

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hold the Commonwealth harmless for any damages, penalties, costs, detriment, or harm that the Commonwealth may incur as a result of the Energy Consultant's failure, including any statutory damages assessed against the Commonwealth, regardless of the outcome of such legal challenge. As between the parties, the Energy Consultant agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.

8. The Energy Consultant's duties relating to the RTKL are continuing duties that survive the expiration of this contract and shall continue as long as the Energy Consultant has Requested Information in its possession.

L. The Energy Consultant shall comply with, and shall include in substantially, the same form in any and all contracts between the Energy Consultant and any consultant or contractor hired by the Energy Consultant to perform work related to the project, all of the clauses, provisions, and requirements agreed to in the ITQ Part IV – Terms and Conditions.

M. **CLAIMS**. The following process will be followed for claims:

Claims By Energy Consultant Against the Department:

1. Any claim, dispute, question, or other matter, which the Energy Consultant may have against the Department under this contract, will be considered by the Deputy Secretary or their designee, if the Energy Consultant files a written claim with the Deputy Secretary within six (6) months after the Energy Consultant knew, or should have known, that the claim arose. No claim can be filed later than six (6) months after the Energy Consultant knew, or should have known, of the conditions or facts giving rise to the claim, dispute, or other matter.

2. If the controversy is not resolved by mutual agreement, the Deputy Secretary will issue a decision in writing. The decision will:

    a. State the reasons for the action taken; and

    b. Inform the Energy Consultant of its right to administrative and judicial review.

3. A copy of the decision will be delivered to the Energy Consultant by registered mail.

4. The decision issued by the Deputy Secretary is final and conclusive unless the Energy Consultant files a claim with the Board of Claims within (15) fifteen days of its receipt of the decision.

5. If the Deputy Secretary does not issue a written decision within 120 days after the claim is filed, then the Energy Consultant may proceed as if an adverse decision had been received. The 120- day period may be extended with the written consent of the Department and the Energy Consultant.

6. The Energy Consultant shall carry on its work during the claims process, including Board

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of Claims proceedings, if any, unless otherwise agreed by it and the Department in writing. Should the Energy Consultant fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional costs incurred by the Department, or the Energy Consultant, as a result of such failure to proceed shall be borne by the Energy Consultant, and the Energy Consultant shall make no claim against the Department for such costs.

N. Claims against the Energy Consultant:

1. Should any claim be brought, or action brought, either directly or indirectly relating to the Energy Consultant's services supplied under this contract, the Energy Consultant shall render to the Department without compensation any proper and necessary assistance which the Department may require, provided however, that if the claim is the result of action or negligence by the Department, the Energy Consultant shall be reimbursed for any assistance he may be required to provide.

2. The terms and conditions of this contract, the General Conditions and Special Conditions, and any other document incorporated by reference, shall not be construed so as to enable any party other than the Department and its assigns to bring any claim or action as referenced in this Section 7 to this contract.

3. The Energy Consultant shall carry on its work during the claims process, including Board of Claims proceedings, if any, unless otherwise agreed by the Energy Consultant and the Department in writing. Should the Energy Consultant fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional costs incurred by the Department or the Energy Consultant as a result of such failure to proceed shall be borne by the Energy Consultant, and the Energy Consultant shall make no claim against the Department for such costs.

[SIGNATURE PAGE IMMEDIATELY FOLLOWS.]

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The parties, through their authorized representatives, have signed this agreement below.

ENERGY CONSULTANT	COMMONWEALTH OF PENNSYLVANIA, ACTING THROUGH THE DEPARTMENT OF GENERAL SERVICES
_____	_____
Title: Date	Deputy Secretary Date

APPROVED AS TO LEGALITY AND FORM:

_____	_____
Office of Chief Counsel, DGS Date	Office of Attorney General Date
_____	
Office of General Counsel Date	
_____	
Comptroller Operations Date	

(Comptroller Operations execution may be by electronic signature and does not imply verification of funds)

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Chart A

Hourly Rate Schedule

Licensed Engineer	$250.00
Project Engineer	$200.00
Certified Energy Manager	$175.00
LEED Certified Professional	$150.00
Project Administrator	$125.00

Note: Chart A lists the maximum hourly fees that can be charged for any additional work, outside of the normal scope of the project, that has been agreed upon by the Funding Agency & the ESCO.

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APPENDIX H

General Conditions for GESA Contract

pennsylvania

DEPARTMENT OF GENERAL SERVICES

GENERAL CONDITIONS

OF THE GESA CONTRACT

HARRISBURG, PENNSYLVANIA

OCTOBER 2022 EDITION

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GENERAL CONDITIONS

OF THE GESA CONSTRUCTION CONTRACT

ARTICLE 1: DEFINITIONS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

Whenever in the Contract Documents the following words and expressions occur, they have the following meanings, which shall be construed in conjunction with the applicable definitions of the Commonwealth Procurement Code:

1.1 **Administrative Procedures:** The Department of General Services' (DGS) construction procedures manual to be followed for various administrative functions.

1.2 **Bi-weekly**: An event occurring every two weeks.

1.3 **Commonwealth**: The Commonwealth of Pennsylvania.

1.4 **Contract Documents**: As described in Article I of the GESA Contract, the Contract Documents consists of the Invitation to Qualify (ITQ) documents (including the ITQ and all appendices and attachments, the ITQ Quote submitted by the GESA Contractor, and the ITQ contract; this GESA Contract and all attachments hereto; the Request for Quote, ("the RFQ"); the GESA Contractor's Quote submitted in response to the RFQ; the Contract Bonds; the Conditions of the Contract (General, Special, Supplementary, and other Conditions); all drawings created by or for the GESA Contractor and/or the GESA Contractor Design Consultant; the specifications created by or for the GESA Contractor and/or its GESA Contractor Design Consultant; the Investment Grade Audit (IGA) prepared by the GESA Contractor setting forth the approved energy conservations measures (ECMs – Attachment 1); all bulletins and addenda issued before and after to execution of the contract; all change orders; the GESA Project Design Manual; and the Administrative Procedures for the GESA Contract. These documents form the contract and are as fully part of the contract as if attached to this Contract or repeated herein. To the extent that any of these documents are amended by statute, the statutory language will control.

1.5 **Contract Duration**: The number of calendar days set forth in the Contract Documents for completion of the Work, also referred to as Contract Time.

1.6 **Contract Limits**: The area designated on the Contract Documents as the limit of construction, within which the Contractor may perform the Work.

1.7 **Contract Start Date**: For purposes of calculating dates for completion of the Work, this is the date upon which the GESA Contract is fully executed and is transmitted to the GESA Contractor.

1.8 **Contractor**: The GESA Contractor.

1.9 **Days**: Calendar days unless specifically stated otherwise in the Contract.

1.10 **Deficiency Item**: Any work or activity, either performed or unperformed, which the DGS will not certify as being performed in accordance with the Contract Documents.

1.11 **Effective Date of Contract**: The date on which the last Commonwealth official who is required to execute the contract executes it.

1.12 **Escrow Agent**: If applicable, the financial entity designated by the Third-Party Lender or Energy Financial Provider to maintain and administer the Escrow Account from which the Contractor will be paid upon submission of approved Applications for Payment during design and construction.

1.13 **Extension of Time**: A formal approved extension of a contract duration.

1.14 **Field Order**: A record of a minor adjustment in the Work that results in no change in cost or duration of the Contract.

1.15 **Final Inspection**: A review of the Work conducted by the Contractor, Funding Agency, DGS and Energy Consultant after the Contractor requests a Final Inspection. The review will determine whether the Work is substantially complete. If, as a result of this inspection, the Work is determined by DGS and Funding Agency to be substantially complete, the Energy Consultant generates a certificate of final inspection and a Punch List of incomplete items and a reasonable estimated cost of completion.

1.16 **Funding Agency**: The agency of the Commonwealth that operates the facility where the GESA project will occur. The Funding Agency will sign the GESA contract on behalf of the Commonwealth and manage the Project. In the case where DGS operates the facility and signs the GESA Contract, references of the Funding Agency or to DGS and the Funding Agency as though they are two separate entities shall mean only "DGS".

1.17 **GESA Contractor's Professional ("Professional")**: the entity(s) by the Contractor to provide necessary professional design services under the GESA contract.

1.18 **Milestone activity**: An indication on the Project Schedule that designates the start or completion of a significant construction activity.

1.19 **Notice of Deficiency**: A document to record non-conforming work, deficient work and/or schedule slippage.

1.20 **Off-Site Work**: All Work that is not physically carried out within the Contract Limits.

1.21 **On-Site Work**: All Work that is physically carried out within the Contract Limits.

1.22 **Postconsumer Recovered Paper**: Any paper, paperboard and fibrous wastes from retail stores, office buildings, homes and so forth, after they have been passed through their end-usage as a consumer item including used corrugated boxes, old newspapers, old magazines, mixed wastepaper, tabulating cards and used cordage, as well as all paper, paperboard and fibrous wastes that enter and are collected from municipal solid waste.

1.23 **Project**: The total Work to be performed by the Contractor.

1.24 **Project Procedures Manual**: The Project Procedures Manual for GESA Projects ('the Design Manual' or 'PPM') that provides the Energy Consultant and the Contractor's Professional with a guideline of procedures and standards for the design and construction of GESA projects. The Manual's organization reflects the sequence in which services and submissions will normally occur.

1.25 **Project Schedule**: The Critical Path Method (CPM) schedule prepared by the Contractor.

1.26 **Recovered Materials**: Waste material and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

1.27 **Request for Information (RFI)**: A written question issued by the Contractor seeking clarification of the Contract Documents.

1.28 **Samples**: Physical examples furnished by the Contractor to illustrate materials, equipment, or workmanship, and to establish standards by which the work will be judged.

1.29 **Secretary**: DGS' administrative head.

1.30 **Superintendent**: The Contractor's full-time construction representative at the project site. The Superintendent is responsible for continuous field supervision, coordination, and completion of the construction work, and, unless another person is designated in writing by the Contractor to DGS, for the prevention of accidents. The Superintendent shall have full authority to act on behalf of the Contractor in relation to construction activities and associated work.

1.31 **Supplier**: An individual, firm, partnership, association, corporation, or other legal entity who receives compensation from the Contractor, pursuant to the terms of a purchase order or invoice, to provide any material and/or any equipment to the Project. Nothing contained in the Contract Documents between the Contractor and DGS creates any contractual relationship between DGS and any Supplier. A Supplier lacks privity of Contract to DGS and every Supplier agrees that it neither acquires nor intends to acquire any rights against DGS on a third-party beneficiary theory or any other theory.

A **Stocking Supplier**: a firm that owns, operates, or maintains a store, warehouse, or other establishment, in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

B **Non-stocking Supplier**: non-stocking supplier does not carry inventory but orders materials from a manufacturer, manufacturer's representative or a stocking supplier. In order for a non-stocking supplier to receive credit, it must perform a useful business function by engaging in meaningful work (i.e., negotiating price; and determining quality and quantity; and ordering materials; and paying for the materials).

ARTICLE 2: EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

2.1 **Contract Execution**. The Funding Agency and Contractor shall sign the GESA Contract in triplicate. All drawings created during the design portion of the Project shall be sealed as appropriate by the Contractor. No oral contract or conversation with any officer, agent or personnel of DGS or Funding Agency either before or after the execution of the Contractor Contract shall affect or modify any of the terms or obligations herein contained.

2.2 **Contract Interpretation**.

A The Contract Documents are complementary, and what is required by any one of the Contract Documents is binding as if required by all. The intention of the Contract Documents is to include all labor, materials, equipment and other items or conditions necessary for the proper design, construction and testing of the Work for its intended use. The omission of words or phrases for brevity of the Contract Documents, the inadvertent omission of words or phrases or obvious typographical or written errors shall not nullify DGS' interpretations so long as that interpretation is reasonably inferable from the Contract Documents as a whole. Except as noted otherwise, references to standard specifications or publications or associations, bureaus, or organizations shall mean that latest edition or revision of the referenced standard specification or publication as of the issuance date of the RFQ. Words which have well-known technical or trade meanings are used in this contract in accordance with such recognized meanings.

B In the event of a conflict in the Contract Documents, the Contractor shall notify the Energy Consultant and DGS. The Energy Consultant or DGS (as appropriate) shall interpret the Contract Documents using the following priorities:

1. Change Orders shall govern over all Contract Documents (with subsequent Change Orders governing over prior Change Orders).
2. The GESA Contract for the Project and any attachment thereto including the General Conditions, Administrative Procedures, and RFQ for the Project;
3. Bulletins or addenda and subsequent addenda shall govern over prior addenda only to the extent modified.
4. The RFQ shall govern over Design Documents.

2.3 **Contract Errors or Conflicts**. If the Contractor, in the course of design and construction, finds any conflict, error or discrepancy on or among the Contract Documents, such conflict, error or discrepancy shall be immediately referred to the Contractor's Professional in writing, with a copy of each such referral to be forwarded to DGS. If the matter concerns the Design Documents only, Energy Consultant must review the matter and issue an interpretation to DGS in writing within seven (7) days after receipt of the Contractor's written request, with a copy of

each such interpretation to be forwarded to DGS for acceptance. If the matter concerns the RFQ documents, DGS shall review the matter and issue an interpretation to the Contractor in writing within seven (7) days after receipt of the Contractor's written request, with a copy to the Professional.

2.4 **Copies of Drawings and Specifications**. Unless otherwise provided in the Contract Documents, the Contractor will furnish two (2) complete paper sets and two (2) complete sets in DGS accepted electronic format and media of drawings and specifications to DGS at the time they are issued for construction of the project. These two sets of drawings and specifications shall be in addition to any drawings and specifications submitted in response to the RFQ or required as preliminary design documents. If DGS requires additional sets for DGS' use during the project, DGS shall pay for the cost of obtaining additional specifications and drawings. All drawings, specifications and copies thereof furnished by the Contractor and/or the Contractor's Professional are and shall remain the property of DGS. They are not to be used on any other project, and, with the exception of one Contract set for each party to the Contract, are to be returned to DGS on request at the completion of the Work.

ARTICLE 3: PROJECT DESIGN, CONTRACTOR, AND CONTRACTOR'S PROFESSIONAL

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

3.1 **Relationship between DGS, Funding Agency, Energy Consultant, Contractor and Contractor's Professional.** The Contractor shall be the professional of record for the Project. Where the Contractor designs in-house and does not retain a Professional, the Contractor shall be considered the "Design Professional" as it relates to these documents. The Contractor's Professional will coordinate with the Energy Consultant on the scope and design of Energy Conservation Measures for the project. The Contractor's Professional shall be in-house or under contract to the Contractor. The Contractor's Professional is responsible to the Contractor and only the Contractor may give instructions which bind the Contractor's Professional. Neither DGS nor the Funding Agency assume any privity or liability for the performance of the Contractor and or the Contractor's Professional. The Contractor shall construct the Project for Funding Agency in accordance with the Contract Documents. Neither the Energy Consultant, the Contractor or the Contractor's Professional may change scope or direct that items be included in the design that will increase the Contract Amount without the prior written approval of DGS and the Funding Agency.

A **Project Design**. The Contractor and/or the Contractor's Professional shall provide all Architectural and Engineering services during the Project, including but not limited to structural, mechanical and electrical engineering services, required to complete the GESA Project.

1. If the DGS or Funding Agency do not approve the plans, or any portion thereof, the Contractor and/or Contractor's Professional shall promptly revise the document(s) to comply with their requirements, unless the requirements violate federal, state and/or local laws governing the project, and/or the standard of professional care used in the industry governing the project.
2. The Contractor and/or the Contractor's Professional shall prepare and submit for review and approval all documents, applications, and other submittals as the same may be required by DGS and any other governmental agency, Local, State or Federal, having jurisdiction over the projects (s).
3. The Contractor and/or the Contractor's Professional shall compile and bind the Project Manual for the Project, which shall include technical specifications and drawings for the project and such other material necessary to provide a complete manual for construction purposes.
4. At DGS's request, the Contractor and/or the Contractor's Professional shall prepare drawings, specifications and other documentation and supporting data in connection with Change Orders for the Funding Agency's approval and execution in accordance with the General Conditions. All drawings, specifications and other documents prepared by the Contractor and/or the

Contractor's Professional shall comply with all applicable laws, statutes, ordinances, codes, orders, rules and regulations in effect at the time said drawings, specifications and other documents are submitted to DGS.

5. Any errors or omissions on drawings, specifications or other documents furnished by the Contractor shall be promptly corrected by the Contractor at no cost to the DGS, Funding Agency, or the Energy Consultant. Nothing contained herein shall preclude a claim against the Contractor by DGS for damages arising from errors or omissions on drawings, specifications or any other of the Contract Documents furnished by the Contractor. Change orders resulting from the Contractor's errors or omissions shall not be subject to any additional Contractor's fees. DGS's or the Funding Agency's approval, acceptance, use of or payment for all or any part of the Contractor's services or of the project shall not in any way alter the Contractor's obligations or DGS's or the Funding Agency rights hereunder.

B **Additional Services**. The following services shall be compensated to the Contractor as additional services if approved by DGS or Funding Agency:

1. Making revisions in Drawings, Specifications or other documents when such revisions are required by the enactment or revision of codes, laws or regulations effective subsequent to the completion by the Contractor of the construction documents.

2. If the Funding Agency requests a Change Order, including, but not limited to, size, quality, and complexity, the Contractor shall receive a pre-negotiated fee on the change order. However, the Contractor shall not be entitled to additional fees for services related to the modification of documents as required for approval.

3. DGS or the Funding Agency shall not be responsible for paying for Contractor to provide consultation concerning replacement of Work damaged by fire or other cause during construction, and furnishing services required in connection with the replacement of such Work as long as this damage was not the fault of the Contractor.

3.2 **Administration of Contract**. The GESA Professional will assist Energy Consultant in providing administration of the Construction Contracts. Energy Consultant will review all DGS forms that require a Professional's review and signature under the Contract. Energy Consultant will also review submittals as provided in the Submittal Article of these General Conditions.

3.3 **Site Visits**. The GESA Professional should visit the site at least bi-weekly, or more often as required by the construction activities and progress during periods of active construction. The Energy Consultant is not responsible for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work.

3.4 **Access to Work**. The GESA Professional and the Energy Consultant shall have full access to the Work at all times.

3.5 **Interpretation of Documents**. Energy Consultant or DGS and/or the Funding Agency (as appropriate) shall be the interpreter of the Design Documents themselves. Interpretation shall comply with Article 2 of these General Conditions.

3.6 **Cooperation with Local Bodies**. During the design of the Project, the Contractor's Professional shall keep the local government informed about the Project and comply with any applicable requirements of local zoning, planning and supervisory bodies. If any of these requirements vary with the RFQ and substantially increase the cost of the Project, or should any required approvals be withheld by the local bodies, the Contractor's Professional shall immediately notify both the Energy Consultant and DGS in writing of the issue.

3.7 **Coordination with Existing Facilities and Utilities**. The Contractor's Professional and Energy Consultant shall consult with the DGS and Funding Agency to obtain all necessary data for coordinating the Project with existing structures and all support utilities. The Contractor's Professional shall consult with Funding Agency regarding any correlation of design with future planning. Energy Consultant and the Contractor's Professional shall verify the information provided in the RFQ regarding the various public services and utility companies, such as gas, electric, water, steam, waste water treatment/disposal, surface water disposal, telephone and communication, the commitment of their capability to service this Project, and shall submit same to DGS as part of its design submissions. The Contractor's Professional shall bring to DGS' immediate attention any reservations to this commitment by the utility companies, such as in-house engineering and construction costs and any inconsistencies regarding the locations and characteristics of such utilities between the actual field conditions and those indicated.

3.8 **Standards of Quality**. Refer to the Standards of Quality and Substitution of Materials in Article 8.

3.9 **Rejection of Work**. Energy Consultant is authorized to recommend rejection of Work that does not conform to the Contract Documents and shall immediately notify DGS, the Funding Agency and the Contractor of such rejection. If Energy Consultant discovers Work that is non-conforming or discovers an unforeseen condition, the Energy Consultant must make all necessary and appropriate recommendations, in writing, to DGS and the Funding Agency as soon as possible, but no later than twenty-four (24) hours after such discovery, with regards to directing any or all Contractors to stop any portion of the Work, or requiring special inspection or testing of the Work as provided in Testing and/or Special Testing paragraph of these General Conditions. Neither Energy Consultant authority to make recommendations under this paragraph, nor any decision made by Energy Consultant in good faith to either exercise or not to exercise such authority shall give rise to any duty or responsibility of the Energy Consultant to the Contractor, or any Subcontractor, any of their agents or employees, or any other person performing any of the Work.

3.10 **Non-Conforming Work**. If corrective work or drawings are required due to defective or non-conforming work by the Contractor, the cost for Energy Consultant's additional services shall be borne by the Contractor.

3.11 **As-Built Record Documents Submission**. No later than at Final Inspection of the Project, the Contractor shall submit As-Built Record Documents showing all changes or variations from the original contract drawings and specifications made during the course of construction. These drawings shall indicate all items uncovered during the Work and show details of the work as actually built, including

but not limited to horizontal and vertical dimensional references of all concealed pipe, conduit and other lines and equipment and similar items. Recorded changes shall be obtained from clearly marked field prints provided by the construction contractors and field office and from change orders. These As-Built Record Drawings shall be in pdf and AutoCAD format on CD/Flash drive (three copies) and shall be identified as “DGS As-Built Record Documents", shall be delivered to Project Coordinator, and shall become the sole property of DGS.

3.12 **Operations and Maintenance Data**. Prior to Final Inspection of the Project, the Contractor shall assemble, as provided in the Construction Documents, a final draft of the Operation and Maintenance Instructions Manuals prepared by the Contractor and its various subcontractors. Energy Consultant shall review the draft for completeness including all pertinent shop drawings, diagrams, catalog data, manufacturers operating instructions, manufacturer's or supplier's maintenance instructions, certificates, warranties, guarantees and other pertinent operating and maintenance data. Energy Consultant shall indicate its approval of the draft with correction if necessary or request a revised draft and resubmission of the manual. Upon receipt of the two (2) final bound manuals from the Contractor, Energy Consultant shall review them for accuracy and content, and when they meet with its approval, forward to DGS the two (2) copies and two (2) identical, additional copies in electronic format(s) and on media acceptable to DGS prior to Final Inspection.

3.13 **Replacement of Contractor’s Professional**. If the Contractor terminates its Professional, the Contractor may hire a new Professional whose status under the Contract Documents shall be that of the former Contractor’s Professional. The decision of whether to terminate the Professional rests solely with the Contractor. DGS expressly reserves the right to evaluate and either accept or reject the Contractor’s replacement Professional. The Contractor’s decision as to replacement of the Contractor’s Professional shall not give rise to any claim for additional costs or time to complete the GESA Contract.

ARTICLE 4: THE DEPARTMENT (DGS)

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

4.1 **Administrative Procedures**. The RFQ contains a copy of the GESA Administrative Procedures, which are incorporated herein by reference and made a part hereof, as if fully set forth herein. In the event there is any redundancy, conflict, contradiction, discrepancy or inconsistency between any portions of or criteria set forth in the Administrative Procedures and the other Contract Documents, the most restrictive or demanding of the criteria shall take precedence over any less restrictive or demanding criteria as determined by DGS and/or its designee.

4.2 **Commonwealth Not Responsible for GESA Contractor Acts or Omissions**. Neither DGS nor Funding Agency are responsible for the acts or omissions of the Contractor, or any of its subcontractors or any of their agents or employees, or any other persons performing any of the Work for the Contractor.

4.3 **DGS' Access to the Work**. DGS and its designee will, at all times, be provided full access to any area DGS deems necessary in order to observe the Work. The Contractor shall provide the facilities for such access so DGS may perform its functions under the Contract Documents.

4.4 **Rejection of Work.** DGS may reject Work that is not in conformance with the Design Documents or direct the Contractor to stop any portion of the Work, or to require special inspection or testing of the Work whenever such action is necessary or advisable to insure the proper implementation of the Contract Documents. DGS' failure to reject Work does not relieve the Contractor from performing Work in accordance with the Contract Documents.

ARTICLE 4A: THE ENERGY CONSULTANT

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

4A.1 Information and Services Required of the Energy Consultant

A If the DGS retains an energy consultant on the project, the energy consultant shall carry out the duties specified in the contract between DGS and the energy consultant, acting as an agent and authorized representative/designee of the DGS and funding agency.

1. The Energy Consultant will determine in general if the Work is being performed in accordance with the requirements of the Contract Documents, will keep the DGS and the Funding Agency informed of the progress of the Work, and will endeavor to guard the Funding Agency against defects and deficiencies in the Work.
2. The Energy Consultant will not have control over or charge of and will not be responsible for construction means, methods, techniques or procedures in connection with the Work, since these are solely the Contractor's responsibility.
3. The Energy Consultant will review, certify and recommend release of payment for all acceptable Applications for Payment from the Contractor, including final payment.
4. The Energy Consultant will review and advise the Funding Agency and the DGS on Change Orders.

B At a point in time no later than two weeks from notice to the Consultant of being the selected firm of the RFQ. The Energy Consultant shall provide the Contractor with a list of its principal staff assignments, including the Site Representative and other personnel to be in attendance at the site, identify individuals, their duties and responsibilities and list their addresses and telephone numbers.

C For purposes of this GESA Contract, the Contractor shall consider and assume that any requisite approval shall be deemed to have been given by DGS for any such authority exercised by the Energy Consultant.

D Except as expressly stated in the GESA Contract, the Energy Consultant shall have no authority and no liability to relieve the Contractor of any of its obligations under the Contract.

E It is not the intention of these General Conditions to inhibit communications between the Energy Consultant and the Contractor as it relates to clarification, interpretation and other issues related to progressing of the Work. The Energy Consultant is available to discuss issues, provided such discussions or communications are coordinated with the Energy Consultant.

F If, in the opinion of the Energy Consultant, an emergency occurs affecting the Work or adjoining property, the Energy Consultant may, without relieving the

Contractor of any of its duties and responsibilities under the Contract, instruct the Contractor to execute all such Work or to do all such things as may, in the opinion of the Energy Consultant, be necessary to abate or reduce the risk. The Contractor shall immediately comply, despite the absence of approval of DGS or the Funding Agency with any such instruction of the Energy Consultant.

G The Energy Consultant's Site Representative will be responsible for the Construction Management of this Project and shall carry out all required duties and exercise such authority as may be required under the terms of this Contract, including but not limited to reviewing Change Orders, Applications for Payment and Extensions of Time.

H The Energy Consultant's Site Representative will execute the duties and authorities vested in the Energy Consultant. The Energy Consultant's Site Representative has been fully vested with a level of authority that is adequate to execute the requirements of the Construction Management for this Project. The Contractor is expected to and allowed to rely upon the directions that may be provided from the Energy Consultant's Site Representative.

I Any communication given by the Energy Consultant's Site Representative to the Contractor in accordance with such delegation shall have the same effect as though given by the Energy Consultant or DGS.

J The Energy Consultant may appoint any number of persons from its staff to assist in the carrying out of the Energy Consultant's duties. Such assistants shall have no authority to issue any instructions to the Contractor unless such instruction may be necessary to enable the Contractor to carry out their duties and to secure their acceptance of materials, equipment or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Energy Consultant.

K Instructions given by the Energy Consultant shall be in writing, but if, for any reason, the Energy Consultant considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Written confirmation of such oral instruction given by the Energy Consultant shall be deemed to be an instruction within the meaning of this subparagraph. If the Contractor, within seven (7) days of the oral instruction, confirms in writing to the Energy Consultant the oral instruction and such confirmation is not contradicted in writing within seven (7) days by the Energy Consultant, it shall be deemed to be an instruction of the Energy Consultant. The provisions of this subparagraph shall equally apply to instructions given by the Energy Consultant's assistants.

L In all cases of misunderstanding and disputes, verbal instructions that were not subsequently reduced to writing as discussed above in the preceding subparagraph will not be considered binding upon DGS or the Funding Agency. The Contractor must produce written evidence in support of its contentions and shall advance no claim in the absence of such written evidence, or use, or attempt to use any conversation with any parties against the Energy Consultant, the Funding Agency or DGS, or in prosecuting any claim against the Energy Consultant, the Funding Agency or DGS.

M Wherever, under the Contract, the Energy Consultant is required to exercise its discretion by:

1. Giving decision, opinion or consent; or
2. Expressing satisfaction or dissatisfaction; or
3. Determining value; or
4. Otherwise taking action which may affect the rights and obligations of DGS or the Contractor,

the Energy Consultant shall exercise such discretion impartially within the terms and conditions of the Contract and having regard to all the circumstances. To the extent the Contractor disagrees with the Energy Consultant's determination on an issue, any such decision, opinion, consent, expression of satisfaction, or dissatisfaction, determination of value or action may be subject to the Disputes Article of these General Conditions of the Contract.

N The Energy Consultant's failure to insist on strict compliance with any term, condition or provision of this Contract or instruction under it, or to exercise any right, remedy, privilege or power provided under this Contract, or the Energy Consultant's waiver of any breach, shall not relieve the Contractor of responsibility for compliance with the Contract requirements and shall neither waive nor prevent the Energy Consultant, the Funding Agency or DGS from subsequently requiring strict compliance with that term, condition, provision, instruction, right, remedy, privilege or power.

4A.2 Energy Consultant's Access to the Work. The Energy Consultant or the authorized representative of the Energy Consultant, will at all times be provided full access to any area it deems necessary in order to perform its responsibilities to assist coordination and inspect the Work. The Contractor shall provide the facilities for such access, so the Energy Consultant may perform its functions under the Contract Documents.

4A.3 Replacement of Energy CONSULTANT. In case of the termination of the Agreement for Energy Consultant Services, DGS may appoint a new Energy Consultant whose status under the Contract Documents shall be that of the former Energy Consultant. The decision of whether or not to replace and/or appoint a new Energy Consultant or to assume construction management responsibilities is solely within DGS's discretion.

4A.4 Energy Consultant Is Not Responsible for Contractor Acts or Omissions. The Energy Consultant is not responsible for the acts or omissions of the Contractor, or any of its subcontractors, or any of their agents or employees, or any other persons performing any of the Work for the Contractor.

4A.5 Contractor Not an Intended Third-Party Beneficiary of the Energy Consultant's Agreement. The Contractor is not an intended third-party beneficiary of the Agreement for Energy Consultant Services between DGS and the Energy Consultant. Nothing in the Contract Documents should be construed to authorize any person not a party to the Agreement for Energy Consultant Services to maintain any lawsuit involving that contract, unless otherwise provided by law.

4A.6 Communications to DGS. At least bi-weekly, The Energy Consultant will provide the Energy and Resource Management Office with a GESA Project report detailing: any changes or expected changes to the schedule, all additional expenditures or use of the contingency funds, additional testing, any changes in material, any/all

disputes relating to the project and any condition that would affect the original scope or work.

ARTICLE 5: THE GESA CONTRACTOR

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

5.1 Review of Contract Documents and Site Conditions.

A Quote Preparation Stage Investigation and Document Review. During the Quote preparation stage, the Contractor has an affirmative duty to examine the nature and location of the Work, the soil and rock conditions if applicable and the character, quality and quantity of the materials that are required for the Work. The Contractor may rely upon the geotechnical information, if any, available for review on the Project. The Contractor also has a duty to carefully study and compare the existing documents to the physical conditions of the site. If the Contractor does not request a clarification during the Quote preparation stage regarding the site conditions or discrepancies within the Contract Documents, the Contractor may not submit a claim after award of the contract alleging insufficient data, ambiguity in the documents or incorrectly assumed conditions.

B Post-Award Investigation and Document Review. If, after award, the Contractor finds any material change in the condition of the site since the submission date of the Quote, the Contractor must immediately inform DGS in writing of the change site condition. DGS will, within 7 days from receipt of such notice, address the alleged material change in the site conditions and notify the Contractor in writing of such review.

5.2 Supervision and Construction Procedures. The Contractor is solely responsible for all construction means, methods, techniques, procedures, and safety programs in connection with the work under the Contract. Furthermore, the Contractor shall perform the Work in accordance with applicable industry standards for performance, service life, deterioration and wear; in a good and workmanlike manner, and in accordance with manufacturer's recommendations and requirements; in compliance with regulatory approvals and applicable laws, regulations, and ordinances; and in accordance with the Contract Documents.

5.3 Coordination of the Work. The Contractor is solely responsible for the coordination of the Work, ensuring the proper function and sequence to avoid delays. The progress of the Work shall not be delayed by any disputes between the Contractor and any subcontractors and/or suppliers.

5.4 Coordination of Subcontractors. The Contractor shall be responsible for all acts of its subcontractors utilized under the GESA Contract and for their compliance with all terms and provisions of the GESA Contract applicable to their performance. The Contractor shall continuously coordinate the Work of all subcontractors to assure proper processing and progress of the Work. The Contractor's subcontractors shall not be removed from the Project without DGS' review and acceptance. Subcontractors are also subject to review by DGS as set forth in the Administrative Procedures. The Contractor will not receive an extension of time or additional compensation for the removal of any unacceptable subcontractors. The failure of any subcontractor to complete its portion of the Work in a satisfactory manner

within the proper time will not relieve the Contractor of responsibility for the proper and satisfactory execution and completion of the entire Work.

5.5 Use of Site. The Contractor shall confine its apparatus, the storage of equipment, tools and materials and its operations and workers at the site to the limits of contract as permitted by Funding Agency, the law, ordinances, permits and the Contract Documents. The Contractor shall not unreasonably encumber the site with any materials or equipment.

5.6 Job Conferences. Job Conferences may be held as often as required but shall be held at least bi-weekly and must be attended by the Contractor. The names of the authorized representative of the Contractor shall be submitted to DGS and the Funding Agency at the first Job Conference. The Funding Agency will also attend the Job Conferences. The Funding Agency will advise the Contractor of the dates and times of the Job Conferences and will be placed in the conference meeting notes. Failure to attend a Job Conference or any other mandatory meeting (unless excused by DGS) constitutes a breach of the Contractor contract.

5.7 Drawings and Specifications at the Site.

A The Contractor shall maintain in good order at the site one record copy of all drawings, specifications, bulletins, addenda, contract modifications, change orders and requests for information. As appropriate, the above will be updated regularly to record accurately as-built conditions, selections and changes. The Contractor shall include the value of the as-built drawings as a cost item and activity in the Contract Breakdown. The value included in the Project Schedule for this item is subject to the acceptance of DGS.

B The Contractor shall also maintain at the site one record copy of approved shop drawings, catalog data, operating and maintenance instructions, certificates, warranties, samples and similar submittals. These shall be available to DGS, Funding Agency and Energy Consultant at all times, and they shall be delivered to Funding Agency as part of the Operation and Maintenance Instruction Manuals.

5.8 Provision of Labor and Materials. Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and all other facilities and services necessary for the proper execution and completion of the Work.

5.9 Responsibility for those Performing Work. The Contractor is responsible for the acts and/or omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the Work under a subcontract or purchase order with the Contractor.

5.10 Equipment and Materials. The Contractor shall furnish and deliver the necessary equipment and materials in ample quantities and as frequently as required the proper prosecution of the work in an acceptable manner and at a satisfactory rate of progress as depicted in the Contractor's Schedule. The equipment used on any portion of the work shall be such as not to endanger the lives of the operators or any persons in the vicinity of the equipment nor cause damage to adjacent property or highways. Any damages resulting from the operations of such equipment to any person or property is the responsibility of the Contractor.

5.11 Supervision. The Contractor shall provide on-site supervision by an employee who shall act as the duly authorized and competent Superintendent. This Superintendent shall be on-site during the progress of the Work, including any time when any Work is being performed by any Contractor or any subcontractor that will impact the Work of the Contractor. The Superintendent shall represent the Contractor, and all communications given to the Superintendent shall be binding as if given to the Contractor.

5.12 Good Order Among Employees. The Contractor shall at all times enforce good order and conduct among its employees and subcontractors. Every employee and subcontractor shall be skilled in the performance of work assigned to that employee or subcontractor. All Contractor personnel shall be respectful of all Commonwealth employees and the general public. Any incidents of disrespect, verbal abuse, threatening statements, unwelcome comments, unwelcome interaction or any form of harassment from any Contractor personnel toward any Commonwealth employee, or the general public is strictly prohibited. Any violation is sufficient cause for DGS to direct the Contractor to remove such person from employment on the site.

5.13 Permits and Fees. Due to the UCC, all state-owned facilities fall under the jurisdiction for plan review and inspection only by the Commonwealth Department of Labor & Industry. Consequently, the Contractor shall not obtain any building permits from local authorities. The Contractor shall, however, continue to obtain and pay for all other necessary permits, licenses, and certificates required by law for the proper execution and completion of its work. The Contractor shall furnish proof of payment for all such items, or proof that no such items are required. No change order will be issued for these costs since they are to be included in the lump sum cost submission portion of the RFQ.

A Sewer and Water Tap-In Fees shall be obtained and added to contract cost without mark-up. Tap Fees shall be included in the Contractor's Quote price.

5.14 PCCA/UCC Inspections and Compliance with Applicable Laws, Ordinances, Regulations, etc.

A The Contractor shall give all notices and comply with all applicable laws, ordinances, regulations, rules and orders of any public authority bearing on the performance of the Work. If the Contractor observes any of the Contract Documents conflicting with applicable laws, ordinances, regulations, rules and orders of any public authority in any respect, it shall promptly notify the Professional of Record, Energy Consultant and DGS in writing. Any necessary modifications will be made by Professional of Record at no cost to DGS unless applicable laws, ordinances, regulations, rules and/or orders are changed after the receipt of the Contractor's Cost Submittal, If the Contractor performs any work knowing it to be contrary to such applicable laws, ordinances, regulations, rules or orders, and without such written notice to the Professional, Energy Consultant and DGS, the Contractor assumes full responsibility therefore and shall bear all costs attributable thereto.

B This Project shall be subject to the Pennsylvania Construction Code Act (PCCA) and the Uniform Construction Code Statute. The Contractor shall become familiar, and is responsible for complying, with all aspects of the PCCA and the UCC, including but not limited to the site inspection procedure set forth in the

Department of Labor & Industry's Inspection Procedures. For purposes of inspection, the Contractor shall be deemed the "owner" as described in the PCCA/UCC. The most recent list of inspections required by L&I can be found on L&I's website.

C Contractor must include the PCCA/UCC inspections (to the extent they are applicable to their scope of Work on this Project) in the Project Schedule created pursuant to the applicable paragraph(s) in the General Conditions and Administrative Procedures.

D The L&I mandated advance notice, defined for each inspection activity, shall be considered and included as GESA time in the development of the Master Project Schedule. The Contractor shall assume the responsibility of the permit applicant/permit holder as applicable. The Contractor shall be responsible to contact L&I to schedule the required inspections in accordance with the inspection procedures outlined in the Building Permit. Failure by Contractor to do so shall not be cause for a delay claim against the DGS. A copy of the Building Permit, which includes a list of the required inspections and the time frames for notifying the Department of Labor & Industry, is available from the DGS.

5.15 Surveys, Lay-Out and Execution of the Work.

A The Contractor is responsible for laying out their work from the points established by the drawings.

B The Contractor shall utilize a competent licensed surveyor to lay out the Work from the initial points established on the drawings.

C The surveyor shall take as a basis the figures on the plans, and shall lay out all intersections, all building lines at corners and centers, test and check all elevations and levels, locate levels and plumb lines of floors, walls, beams and columns and other parts of the construction as the Work progresses.

D All Work of every description shall be laid out by the Contractor, who is solely responsible for its correctness. The Contractor shall pay for all expenses in connection with this Work.

E The Contractor shall submit one copy of its survey notes to Funding Agency for record keeping. Submission of the survey notes does not relieve the Contractor of its duty to identify discrepancies on the site or in the Contract Documents.

5.16 Existing Utilities and Services.

A The Contractor shall comply with all notification requirements established by applicable law relative to protection of underground utilities and shall also check the location of existing utilities required to remain in place, including those overhead or underground, and take all necessary precautions to prevent injury or damage during the performance of the Work.

B When performing excavation, the Contractor is responsible for costs associated with locating all existing underground utilities prior to commencing excavation, including utilities that are owned and operated by DGS or Funding Agency.

C The Contractor shall be responsible for the costs associated with utility interruption and repair due to any excavation if the utility location was not

requested and/or proper location procedures were not performed and/or followed prior to commencing excavation.

D If the Contractor damages a utility, the Contractor shall immediately notify the utility company, Funding Agency and DGS and assume the cost of relocating the service of any utility disrupted due to excavation, or any Contractor action, whatever the circumstance. DGS reserves the right to immediately restore the service of any utility disrupted due to actions of the Contractor and to deduct the cost of such restoration from the Contractor's next Application for Payment.

E Utilities and/or other service which are shown or not shown but encountered shall be protected by the Contractor from any damage from any Work and operations of the Contractor, unless or until they are abandoned

5.17 Interruption of Existing Services. Whenever it becomes necessary to interrupt existing services in use by Funding Agency, such as sewer, water, gas, steam, and electric, the Contractor shall perform the Work during such hours as required by Funding Agency so as to complete the Work and restore all existing services with minimal interruption or disruption to Funding Agency. The Contractor shall continue its work on a twenty-four-hour basis until the Work is completed and the services restored or at such alternate time required by Funding Agency. Before beginning the Work, the Contractor shall apply in writing and receive acceptance in writing from Funding Agency to establish a time when interruption of the service will cause minimum interference with the activities of the Funding Agency. The Contractor's request to interrupt service must be submitted to Funding Agency at least 15 calendar days prior to the date desired for interruption.

5.18 Contractor Performing Excavation or Demolition. If the Contractor performs excavation or demolition work, the Contractor shall fully comply with the requirements of Act 287-74, as amended, approved December 10, 1974, relative to protection of underground utilities which shall include, but not be limited to:

A Ascertain approximate location and type of utility lines at the site by inspecting drawings or by obtaining a list of utility companies' lines on the site from the County Recorder of Deeds and then contacting the utility company.

B Three (3) days before excavation or demolition, request information from the utility companies regarding the steps the Contractor should take to avoid damage.

C Provide each equipment operator or blaster (if applicable) with information obtained in (1) and (2) above.

D Report to the utility company any damage to utility line made or discovered in the course of the work.

E Alert occupants of premises as to any emergencies created or discovered.

F Provisions of (a) (b) and (c) do not apply in an emergency. An emergency is any condition constituting a clear and present danger to life or property by escaping gas, exposed wires or other utility line breaks or defects.

5.19 Cutting and Patching of Work. The Contractor shall do all cutting, fitting or patching of existing materials required for its Work to make its several parts fit

together properly, and shall not endanger any work by cutting, excavating or otherwise altering the work, or any part of it.

5.20 Cleaning the Project.

A The Contractor shall be responsible for the cost of cleaning and removing from the site its identifiable debris, including but not limited to, bulky debris, packaging containers, unused materials and equipment and materials not suitable for disposal by standard commercial procedures, such as masonry, concrete materials, crates and combustible items. Good housekeeping shall be observed at all times, and waste, debris, and garbage shall be removed daily or placed in appropriate waste containers outside of the work place and all materials, tools and equipment shall be stored in a safe and orderly fashion.

B The Contractor shall insure that the Work shall not damage streets connecting to the Project, which shall be protected from mud, sand, and stones/gravel. Streets and adjacent property sites shall be kept free from run-off, litter and/or debris in any form from the Project site. Mud, litter, and/or debris from the Project site that appears on adjacent property shall be removed immediately.

C The Contractor is prohibited from discharging any waste products from concrete trucks or from concrete coring work or any other unsuitable materials, fluids or other products on the site or into the storm water system.

5.21 Repair of Damaged Work. The Contractor shall coordinate the repair of all new Work as well as existing Work required remaining, but which becomes damaged during the course of the Work. This repair work shall include, but not be limited to, restoration of surfaces to the original condition, grading, landscaping or seeding, pavement markings and refinishing.

5.22 Chases and Openings. The Contractor will construct, or have built, into new walls, new partitions, and new floors, all such chases and openings as are required. The Contractor will be responsible to see that the chases and openings affecting its work are installed in accordance with the contract drawings.

5.23 Chases and Openings after Construction of Walls. If cutting of chases and openings is required after construction or of existing walls, partitions and floors is completed, the work shall be performed in such a manner as to result in unmarred work, even to the extent of requiring the removal and rebuilding of walls and partitions, all of which shall be at the sole cost of the Contractor.

5.24 Tests. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction that are in effect at the time of receipt of the GESA Contractor's Cost Submittal require any work to be inspected, tested or approved, the GESA Contractor shall give Energy Consultant, DGS and the Funding Agency timely notice of its readiness and of the date arranged, so Energy Consultant and the Funding Agency may observe such inspection, testing or approval. The GESA Contractor shall bear all costs of such inspections, tests and approvals, unless otherwise provided.

5.25 Special Testing: With the GESA Contractor's assistance and upon the GESA Contractor's advice that such services are necessary, the Energy Consultant or funding Agency shall authorize the GESA Contractor to engage appropriate entities for structural, mechanical, chemical, air and water pollution tests, tests for

hazardous materials, and other laboratory and environmental tests, inspections and reports required by law or the Contract Documents. The GESA Contractor shall request of DGS such soil, foundation, hazardous material, and other tests, inspections, surveys and reports (collectively 'tests' in this subparagraph) as may, in the GESA Contractor's professional judgment, be appropriate in the circumstances. When the GESA Contractor determines such services are necessary as a result of existing site conditions, DGS shall authorize the GESA Contractor to engage the services of a geotechnical engineer or specialist. Such services may include but are not limited to test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, ground corrosion and resistancy tests, including necessary operations for anticipating subsoil conditions, with reports and appropriate professional recommendations. To the extent qualified to do so as an engineer, and as necessary, the GESA Contractor shall cooperate in the formulation of such tests. The GESA Contractor shall take into account the results of such tests in performing the GESA Contractor's services.

A The GESA Contractor shall bear all costs of such inspections, tests and approvals, including such assistance, labor, electricity, fuels, storage, apparatus and instruments as are normally required for examining, measuring and testing any materials or Work and shall supply samples of materials, before incorporation in the Work, for testing as may be selected and required by the Professional, Energy Consultant and the Funding Agency.

B Work requiring testing, inspection or verification of probable compliance of Work shall not proceed to be concealed, covered or closed up until approval is given by Professional, Energy Consultant and the Funding Agency. Examples of work to be reviewed before being concealed include but are not limited to sub-grades prior to backfilling, verification of rebar and formwork prior to placing concrete and installed Work in concealed spaces before the space is closed.

C The non-productive downtime or delay in an operation required to provide the reasonable opportunity for testing, inspection or verification constitutes a portion of Contract Work and is included in the GESA Contractor's Contract Sum. No claim for additional compensation will be allowed related to establishment and timely observation of testing, inspection or verification of Work.

D GESA Contractor is responsible for all Quality Control testing as specified in the Contract Documents.

E If, after the commencement of the work, Energy Consultant, DGS and/or the Funding Agency determines that any work requires special inspection, testing or approval, the Energy Consultant, DGS and the Funding Agency will, by written authorization, instruct the GESA Contractor to order such special inspection and/or testing. The GESA Contractor shall give the Energy Consultant, DGS and the Funding Agency sufficient notice, if such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents or with respect to the performance of the work, with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction. The GESA Contractor shall bear all costs thereof, including any the additional services by the GESA Contractor's Professional necessitated by such failure. If the Work is in compliance with the Contract Documents, however, Energy Consultant and/or

the Funding Agency shall bear such costs and will either be funded through the GESA contingency fund or directly from the Funding Agency.

5.26 Certificates of Inspection. The Contractor is responsible to secure any required certificates of inspection, testing or approval. Such required certificates of inspection, testing and approval include those required by the UCC. The certificates shall be delivered to Energy Consultant or the Funding Agency after they are secured by the Contractor.

5.27 Observation of Testing. Energy Consultant, Funding Agency and, where required by the UCC, L&I, shall observe the inspections, tests or approvals required by the Tests and Special Testing paragraphs of these General Conditions. It shall be the Contractor's responsibility to serve sufficient notice to Energy Consultant, Funding Agency and, where required by UCC, to L&I of such inspections, tests or approvals to enable the timely inspection of the Work without impacting the Project Schedule.

5.28 Effect of Tests. Observations of tests by persons other than the Contractor shall not relieve the Contractor from its obligations to perform the Work in accordance with Contract Documents.

5.29 Environmental Quality Control. The Contractor and its Subcontractors shall perform their work in a manner that minimizes the possibility of air, water, land and noise pollution.

A The Contractor shall be responsible for all dewatering to prevent surface water and ground water from entering excavations (including foundations and drilled piers) from ponding on prepared subgrades and from flooding the Project site and surrounding areas.

B The Contractor shall be responsible to protect subgrades from softening, undermining, washout and damage by rain or water accumulation. The Contractor shall reroute surface water runoff away from excavated areas. The Contractor shall not allow water to accumulate in excavations. The Contractor shall not use excavated trenches as temporary drainage ditches.

C The Contractor shall be responsible for installing a dewatering system to keep subgrades dry and convey ground water away from excavations. The Contractor shall maintain the dewatering system until dewatering is no longer required.

5.30 Solid Waste. Storage, collection, transportation and final disposal of solid waste shall be in accordance with the Solid Waste Management Act regulations and standards of the Department of Environmental Protection (DEP). Immediately upon the effective date of the contract, the Contractor shall obtain, at its cost, the necessary permit(s) from DEP and conduct waste disposal to sites approved under this permit. A copy of this permit must be submitted to Energy Consultant before commencing waste disposal. A record of receipt of the waste material that is signed by the waste company certified to receive the waste material acknowledging receipt and proper disposal must be provided to Energy Consultant.

5.31 Compliance with Statutes and Regulations Administered by DEP. The Contractor shall comply with all statutes and regulations of the Commonwealth of Pennsylvania concerning environmental quality control administered by DEP. These statutes include those listed in the Environmental Statement set forth in the RFQ and are not limited to, the Clean Streams Law, the Clean Water Act,

Pennsylvania Sewage Facilities Act, Air Pollution Control Act, Surface Mining Conservation and Reclamation Act, Bituminous Coal Open Pit Mining Conservation Act, Dams and Encroachments Act, Water Well Driller's Act, Water Works Act and Atomic Energy Act, all as amended to date. The Contractor is responsible for any violations and shall secure all required permits. Erosion control measures are shown on drawings and specifications and/or specified in the General Requirements. The Contractor, if required, shall obtain an erosion control permit. If there are changes to such statutes, regulations and etc. after the time of receipt of the Contractor's Cost Submittal, the Contractor may request an appropriate adjustment through the Changes provision of these General Conditions.

5.32 Burning of Materials. Burning of materials from clearing and grubbing operations periodic and final clean-up, and all related construction, shall be governed by local codes and ordinances and/or the regulations of DEP. Where required, for each day that the Contractor may contemplate open burning, it shall secure written approval from DEP and failure to secure such permission for open burning shall require the Contractor to remove material from the project site and dispose of it in a manner acceptable to DEP.

5.33 Suspension from Metal Roof Decks – New and Existing. Ductwork, conduit, ceiling systems, lighting fixtures or any other miscellaneous equipment shall not be suspended from metal roof decks. These components shall only be suspended from the structural members or a suspension system supported by the structural members.

5.34 Asphalt or Tar Kettles. Asphalt or tar kettles shall not be used inside of or on the roof of any building. Fired kettles shall not be left unattended. There shall be at least one portable fire extinguisher with a minimum 20 BC rating within thirty feet of each fired kettle and one additional portable fire extinguisher with the same rating by the Work area.

5.35 Insulation. All insulation incorporated into the Project must contain the minimum percentage of postconsumer recovered paper or recovered material as shown below for the applicable product:

Material Type	Percent by Weight
Cellulose loose – fill and spray on	75% postconsumer recovered paper
Perlite Composite Board	23% postconsumer recovered paper
Plastic rigid foam, polyisocyanurate/polyurethane	
1.1 Rigid Foam	9% recovered material
1.2 Foam-in-Place	5% recovered material
1.3 Glass Rigid Foam	6% recovered material
1.4 Phenolic Rigid Foam	5% recovered material
1.5 Rock Wool	50% recovered material

5.36 Enforcement of Insulation Requirement. The Contractor may be required to provide DGS with documentary evidence that the insulation provided for the Project was produced with the required minimum percentage of postconsumer recovered paper or recovered material.

5.37 Construction Products Recycled Content. All construction products offered by the Contractor or included in the final product offered by the Contractor and sold to the Commonwealth must contain the minimum percentage of postconsumer and recovered material content as shown in the chart below for the applicable products.

Construction Products	Material	% of Post Consumer Materials	% of total recovered materials
Structural Fiberboard	Recovered Materials	-	80
Laminated Paperboard	Post-consumer Paper	100	-
Rock Wool Insulation	Slag	-	75
Fiberglass Insulation	Glass Cullet	-	20
Cellulose Insulation (loose-fill and spray-on)	Post-consumer Paper	75	-
Perlite Composite Board Insulation	Post-consumer Paper	23	-
Plastic Rigid Foam, Polyisocyanurate/ Polyurethane: Rigid Foam Insulation	Recovered Material	-	9
Foam-in-Place Insulation	Recovered Material	-	5
Glass Fiber Reinforced Insulation	Recovered Material	-	6
Phenolic Rigid Foam Insulation	Recovered Material	-	5
Floor Tiles (heavy duty/commercial use)	Rubber Plastic	90 -	- 90
Patio Blocks	Rubber or Rubber Blends Plastic or Plastic Blends	90 -	- 90
Polyester Carpet Fiber Face	Polyethylene terephthalate (PET) resin	25	-
Latex Paint:	Recovered Material	100	-

Construction Products	Material	% of Post Consumer Materials	% of total recovered materials
1.6 Consolidated[1]	Recovered Material	20	-
1.7 Reprocessed[2]	Recovered Material	50	-
White, Off-White, Pastel Colors			
Grey, Brown, Earth tones, and			
Other Dark Colors			
Shower and Restroom Dividers/Partitions:	Plastic	20	-
	Steel[4]	16	9
		67	33
Carpet Cushion:			
Bonded Polyurethane	Old Carpet Cushion	15	-
Jute		40	-
Synthetic Fibers	Burlap	-	100
Rubber	Carpet Fabrication Scrap	60	-
	Tire Rubber		
Railroad Grade Crossing Surfaces			
1.8 Concrete	Coal Fly Ash	-	15
1.9 Rubber[3]	Tire Rubber	-	85
1.10 Steel[4]	Steel	16	9
		67	33

A The Contractor shall submit certification that the landscaping product(s) which the Contractor used contains the required minimum percentage of post-consumer and recovered material content as shown in this chart. In addition, a Manufacturer's Certification must be completed and signed by the manufacturer

[1] Consolidated latex paint used for covering graffiti, where color and consistency of performance are not primary concerns.

[2] Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceiling, and trim; gutterboards; and concrete, stucco, masonry, wood, and metal surfaces.

[3]The recommended recovered materials content for rubber railroad grade crossing surfaces are based on the weight of the raw materials, exclusive of any additives such as binders or additives

[4] The recommended recovered materials content levels for steel in this table reflect the fact that the designated items can be made from steel manufactured from either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is post-consumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is post-consumer.

before payment will be made to the Contractor for the delivered items. The Manufacturer's Certification must indicate, at a minimum, the manufacturer's federal id number, this project number, and the following paragraph:

B I, the undersigned officer of the manufacturer, do hereby certify that I am authorized to provide this certification on behalf of the manufacturer and that THE TYPE OF CONSTRUCTION PRODUCT(S) LISTED ABOVE WHICH MY COMPANY FURNISHED TO THE CONTRACTOR ON THIS PROJECT CONTAINED NOT LESS THAN _____% POST-CONSUMER MATERIALS AND _____% RECOVERED MATERIALS AS THOSE TERMS ARE DEFINED IN THESE GENERAL CONDITIONS. I UNDERSTAND THAT THIS DOCUMENT IS SUBJECT TO THE PROVISIONS OF THE UNSWORN FALSIFICATION TO AUTHORITIES ACT, 18 P.S. §4904.

C DGS shall have no obligation to pay for item(s) until a properly completed and signed Manufacturer's Certification is submitted.

5.38 Storage Enclosure. The Contractor shall provide, at its cost, in a location directed by Funding Agency, a suitable, substantially watertight storage shed in which it shall store all materials that might be damaged by the weather. A mobile trailer is acceptable.

5.39 No Storage in Existing Buildings. The Contractor shall not store any materials in any existing building or beyond the contract limits as defined by the drawings without prior written authorization from Funding Agency.

5.40 Operation and Maintenance Instruction Manuals. The GESA Contractor shall carefully compile during the progress of the Work indexed Operation and Maintenance Manuals to include methods of care and cleaning of all types of visible surface materials, both interior and exterior, and descriptions of all systems and equipment and methods of operations thereof. Descriptions shall give pertinent diagrams, identifying charts, color coding, connections, lubricating instructions, and single line and detailed wiring diagrams, using manufacturers' printed information where possible. Where manufacturers' printed information is not available, the GESA Contractor shall obtain written instructions prepared by subcontractors and sub-subcontractors. The GESA Contractor shall include names, addresses and phone numbers of all subcontractors and sub-subcontractors, and of service firms of each mechanical item, for the Funding Agency's use after expiration of the guarantee period. Prior to Final Inspection, the GESA Contractor shall submit a final draft of the manual in a loose-leaf binder for approval. After approval and before final payment, the GESA Contractor shall furnish two (2) corrected, indexed, bound copies and one (1) electronic copy in DGS accepted formats and media to the Energy Consultant for issuance to the Funding Agency no later than Final Inspection.

5.41 As-Built Record Drawings. No later than at the time of Final Inspection, the Contractor shall prepare and deliver to DGS a complete set of contract prints, corrected with suitable markings to show all changes or variations from the original contract, including all items uncovered during the Work and showing the details of the Work as actually built, including but not limited to horizontal and vertical dimensional references of all concealed pipe, conduit and other lines and equipment.

5.42 Contractor Evaluation. The Contractor, by entering the Construction Contract, consents to the evaluation of its performance by DGS and Funding Agency and understands that any such evaluation may be used in future procurements to determine Contractor's responsibility. DGS and Funding Agency shall provide the Contractor with written notice of any unsatisfactory evaluations and the reasons therefore. Contractor shall be entitled to submit a reply.

ARTICLE 6: SUBCONTRACTORS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

6.1 Contractor's Interest in Subcontractor/Supplier. Pursuant to Contractor Integrity Provisions (included in the RFQ), as amended June 17, 2010, Item 8, a Contractor may not, except with the consent of the Commonwealth, have a financial interest in any other Contractor, Subcontractor, or Supplier providing services, labor, or material on this project. The Contractor will be requested to disclose the names of all Subcontractors and/or Suppliers in which the Contractor has a financial interest, and which will be utilized in the Project. If DGS has a reasonable objection to the proposed Subcontractors and/or Suppliers, the Contractor shall promptly propose another Subcontract and/or Supplier to whom DGS does not have an objection. DGS' acceptance of the Subcontractors and/or Suppliers will be deemed to be consent for the purposes of Contractor Integrity Provisions. Failure to disclose the names of such Subcontractors and/or Suppliers is sufficient grounds for termination of this Contract. Such failure may also be grounds for the initiation of civil or criminal proceedings. The Contractor shall not replace any Subcontractor and/or Supplier previously selected and/or accepted by DGS, without prior written notification to DGS and receipt of DGS's written acceptance for such substitution.

6.2 Subcontractor/Supplier Responsibility. If the Contractor enters into any subcontracts or purchase orders under this Contract with Subcontractors or Suppliers currently suspended or debarred by the Commonwealth, or who become suspended or debarred by the Commonwealth during the term of this Contract or any extensions or renewals of it, DGS may require the Contractor to terminate such Contract.

6.3 Contractor Responsibility for Actions and Compliance. The Contractor shall be responsible for all acts of its Subcontractors and Suppliers utilized under this Contract, and for their compliance with all terms and provisions of the Contract applicable to their performance. The Contractor shall continuously coordinate the Work of all Subcontractors to assure proper processing and progress of the Work.

A Subcontractors proposed by the Contractor will not be acceptable to DGS if evidence exists or arises during the Work that the Subcontractors are unable or unwilling to comply with the requirements of the Contract Documents which govern the Work of the Subcontractors involved, or if the Subcontractors have experience which is inconsistent with requirements for the Work of the Subcontractors. In the event a Subcontractor is or becomes unacceptable to DGS, the Contractor will not be entitled to a change in the Contract Sum or Contract Duration and shall propose substitute Subcontractors for unacceptable Subcontractors.

B The failure of any Subcontractor to complete its portion of the Work in a satisfactory manner within the proper time will not relieve the Contractor of responsibility for the proper and satisfactory execution and completion of the entire Work.

6.4 Acts and Omissions of Subcontractors. The Contractor acknowledges its full responsibility to DGS for the acts and omissions of its Subcontractors, and of the persons and firms either directly or indirectly employed by them, equally to the extent that the Contractor is responsible for the acts and omissions of persons and firms directly or indirectly employed by it. The Contractor acknowledges that it remains fully responsible for the proper performance of its Contract whether work is performed by the Contractor's own forces or by Subcontractors engaged by the Contractor.

6.5 Subcontractors. All Work performed for the Contractor by a Subcontractor shall be done pursuant to a written subcontract between the Contractor and the Subcontractor. The form of the written subcontract must be the same for all Subcontractors. All subcontracts between the Contractor and each Subcontractor must be signed by both parties and contain Provisions that sets forth the amount the Subcontractor is to be paid, describes the scope of Work to be performed by the Subcontractor and require that such Work be performed in accordance with the requirements of the Contract Documents.

A Each subcontract must contain language requiring each subcontractor, prior to commencing onsite or offsite work, to comply with the provisions of the Public Works Employment Verification Act (43 P.S. §§ 167.1 – 167.11), which requires subcontractors to utilize the Federal E-Verify program to verify the employment eligibility for every new employee hired after January 1, 2013 and to submit to DGS a Commonwealth Public Works Verification Form available on DGS's web site at www.dgs.state.pa.gov

B Each subcontract must require each Subcontractor to include provisions in each of its subcontracts regarding the applicability of the Public Works Employment Verification Act (43 P.S. §§ 167.1 – 167.11), information regarding the use of the Federal E-Verify program, and reference to DGS's web site to obtain a downloadable copy of the Commonwealth Public Works Employment Verification Form required to be submitted to DGS.

C The Contractor shall submit one copy plus an electronic copy of all subcontracts for Work to be performed on the Project to DGS for the Project prior to the commencement of any Work by the Subcontractor.

D For every purchase order with a Small Diverse Business or Veteran Business Enterprise Supplier and Small Diverse Business and Veteran Business Enterprise Manufacturer, the Contractor shall submit a copy of the purchase order to DGS's Bureau of Small Business Opportunities. The purchase order for a Nonstocking Supplier must include the fee or commission paid to the Nonstocking Supplier

E The Contractor shall identify all material and/or equipment that will be supplied by a Supplier on a separate line item (per Supplier not per material and/or equipment) on the Contract Breakdown Sheet.

6.6 No Contractual Relationship between DGS or the Funding Agency and Subcontractor. Nothing contained in the Contract Documents creates any contractual relationship between DGS and any Subcontractor, Sub-Subcontractor or any of its authorized representatives. Nothing contained in the Contract Documents creates any contractual relationship between the Funding Agency and

any Subcontractor, Sub-Subcontractor or any of its authorized representatives. Nothing in the Contract Documents should be construed to authorize any person not a party to the GESA Contract to maintain any lawsuit involving that contract, unless otherwise provided by law.

6.7 No Contractual Relationship between DGS or the Funding Agency and Supplier. Nothing contained in the Contract Documents creates any contractual relationship between DGS and any Supplier or its authorized representatives. Nothing contained in the Contract Documents creates any contractual relationship between the Funding Agency and any Supplier or its authorized representatives. Nothing in the Contract Documents should be construed to authorize any person not a party to the GESA Contract to maintain any lawsuit involving that contract, unless otherwise provided by law.

6.8 Payment of Subcontractors by Contractor Governed by Prompt Payment Schedule. Payments to Subcontractors are subject to the provisions of the Commonwealth Procurement Code (62 Pa. C. S. §3931 et seq.) also known as the "Prompt Payment Schedule". The general description set forth in the General Conditions does not relieve the Contractor from strict compliance with the requirements of the Prompt Payment Schedule. Nothing described in these General Conditions is intended to impose a duty greater than that imposed by the Prompt Payment Schedule.

6.9 Failure to Release Progress Payment. If the Funding Agency or the Energy Consultant does not approve the release of some or all of an approved Application for Payment for any cause which is the fault of the Contractor and not the fault of a particular Subcontractor, the Contractor shall pay that Subcontractor, upon demand made by the Subcontractor at any time after the approved Application for Payment should otherwise have been issued, for its Work to the extent completed, less the percentage.

6.10 Percentage of Completion. The Energy Consultant may, on request, furnish to any Subcontractor, if practicable, information regarding percentages of completion stated by the Contractor in an Application for Payment of work done by such Subcontractor.

6.11 No Obligation on Part of DGS or Funding Agency to Pay Subcontractors or Suppliers. Subcontractor or Supplier issues concerning delayed and non-payment should be addressed to the Contractor and the Contractor's payment bond surety. Neither DGS nor Funding Agency shall have any obligation to pay or to ensure the payment of any moneys to any Subcontractor, or Supplier except as may otherwise be required by law. Subcontractors or Suppliers acknowledge they have no direct cause of action (unless otherwise provided by law) against the Energy Consultant, DGS or Funding Agency relating to any payment issues.

6.12 Subcontractor and Supplier Claims. The Contractor agrees to require the Subcontractor and Supplier to submit all claims for extras, extensions of time or for damages to the Contractor in the manner provided in the Contract Documents for claims against the Funding Agency. Since neither Subcontractors nor Suppliers have privity of contract with DGS or Funding Agency, they may not pursue a claim directly against the Commonwealth.

ARTICLE 7: PROJECT SCHEDULE

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

7.1 Submission of the Project Schedule. The Critical Path Method (CPM) shall be used to generate the project schedule. The schedule need not be cost-loaded; costs and payment will be governed by the Cost Breakdown sheet. The Project Schedule is to be submitted to DGS within thirty (30) days of the Initial Job Conference. The project shall be submitted in .pdf and XER formats. The Project Schedule shall include all design, permitting, procurement, construction, inspections and contract activities through thirty days past Final Inspection.

7.2 DGS Reservation of Rights. DGS reserves the right to accept the Project Schedule developed, signed and submitted by the Contractor while preserving exceptions to any defects in the means, methods, sequences, durations and/or logic which DGS believes exist in the schedule. The acceptance of the updated Project Schedule by DGS in no way relieves the Contractor from their duty to coordinate the Work and shall not make DGS or its designee a guarantor of the Project Schedule.

A The Energy Consultant, DGS Energy and Resource Management Office and the Funding Agency reserves the right to accept the Project Schedule developed, signed and submitted by the GESA Contractor while preserving exceptions to any defects in the means, methods, sequences, durations and/or logic that exist in the schedule. The acceptance of the updated Project Schedule by the Energy Consultant, DGS Energy and Resource Management Office and the Funding Agency in no way relieves the GESA Contractor from their duty to coordinate the Work and shall not make the Energy Consultant, DGS Energy and Resource Management Office and the Funding Agency a guarantor of the Project Schedule.

1. Upon request, the GESA Contractor shall provide to the Energy Consultant and the Funding Agency all the planning data used to develop the Project Schedule. This planning data shall include, but is not limited to: Job Sequences;
2. Activity Logic;
3. Man loading;
4. Crew sizes;
5. Number of shifts planned per working day;
6. Number of crews per shift; and
7. Equipment loading.

7.3 Time Is of the Essence. All time limits stated in the Contract Documents are of the essence. The Contractor shall perform the Work expeditiously with adequate forces using all calendar days to complete the Work no later than the Contract Completion Date. **No float shall be used by the Contractor without written**

directive from DGS' Energy and Resource Management Office. Total float is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every activity in the Project Schedule. Extensions of time to interim milestone dates or the Contract Completion Date under this Contract will be granted only to the extent that equitable time adjustments to the activity or activities affected by the Contract Modification or delay exceeds the total float of the affected or subsequent paths and extends any interim milestone date or the Contract Completion Date. Such determination shall be made at the discretion of the Energy Consultant and Funding Agency.

7.4 Schedule Requirements. The minimum number of construction activities in the Project Schedule diagram shall be at a level to describe a discreet amount of work that can be accomplished within a fixed time frame.

A No activity, except for a design or procurement activity should have durations greater than 30 calendar days.

B Separate subcontractors and other outside activities that could impact progress shall be clearly identified. These activities include but are not limited to: approval of submittal reviews, inspections/tests, utility outages, and delivery of equipment.

1. Show activities indicating furnished materials and equipment utilizing delivery dates supplied by others.

2. External contractors' or others' activities will be driven by calendars that reflect Saturdays, Sundays and all State Holidays as non-work days unless any additional costs for these being work days are borne by the Contractor.

C The Project Schedule shall consider and include all time durations associated with UCC Inspection criteria by DGS of Labor and Industry, along with all other testing and inspections required by contract. It must take into account the advance notice needed for L&I Inspectors as defined by the UCC Building Permit criteria.

D Use of float suppression techniques, such as preferential sequencing (arranging critical path through activities more susceptible to an owner caused delay), special lead/lag logic restraints, zero total or free float constraints, extended activity times, or imposing constraint dates other than as required by the contract, shall not be used.

7.5 Design Activities.

A Design activities shall include but are not limited to: Tasks related to site planning, preliminary design, final design, Energy Consultant, DGS and Funding Agency reviews, regulatory requirements, and permitting. Activities will be driven by calendars that reflect Saturdays, Sundays and all State Holidays as non-work days unless any additional costs for these being work days are borne by the Contractor.

B Design Activities will have the same properties as Construction Activities.

C Failure to include adequate time for Energy Consultant, DGS and Funding Agency design reviews in the Project Schedule will be cause for rejection of the submission.

D List design activities as they will be completed. Design activities should be concurrent with construction activities. Design activities will be discreet in description so as to define the particular efforts associated with any one particular building, area, site or system.

7.6 Construction Activities. Construction activities shall include, but are not limited to: Tasks related to mobilization/demobilization; submittal and review activities, the installation of temporary or permanent work; testing and inspections of installed work; start-up and testing of equipment; site management and cleaning, commissioning of building and related systems; scheduling of specified manufacturer's representatives; final clean-up; training to be provided; and administrative tasks necessary to start, proceed with, accomplish or finalize the contract. Contractor activities will be driven by calendars that reflect Saturdays, Sundays and all State Holidays as non-work days unless any additional costs for these being work days are borne by the Contractor. List items of construction as they will be installed. When more than one building, level or floor is included, each building, level or floor shall be listed separately.

7.7 Procurement Activities. Tasks related to the procurement of material or equipment shall be included as separate activities in the project schedule. Examples of procurement activities include but are not limited to Material/equipment submittal preparation, submittal and approval of material/equipment, material/equipment fabrication and delivery and delivery of O&M manuals.

7.8 Initial Job Conference. The Initial Job Conference will be held within thirty (30) calendar days from the Effective Date of Contract.

7.9 Commencement of On-Site Work. On-site work will commence within ten (10) calendar days after the Initial Job Conference.

7.10 Work During Formation of Project Schedule. Until the Project Schedule is signed by the GESA Contractor and accepted by the Energy Consultant, DGS Energy and Resource Management Office and the Funding Agency, the GESA Contractor must proceed with the Work utilizing all the information available to them, including but not limited to attendance at Job Conferences, two week look ahead activities, weekly superintendent's meetings, and any other means necessary to maintain work progress until such time as the Project Schedule is complete and accepted. As such, the GESA Contractor shall not assert any claim whatsoever for any delay or additional cost incurred with the development of the Project Schedule.

7.11 Maintaining the Project Schedule. The GESA Contractor shall ensure that such manpower, materials, facilities, and equipment is applied to the Work, and shall work such hours as approved, including night shifts, overtime operations, Sundays, and holidays, as may be necessary, to maintain its progress in accordance with the Project Schedule so that no delays are caused to the Project and to insure the progress and completion of the Work within the time allowed by the Contract. If the GESA Contractor refuses or fails to keep up with the Project Schedule or fails to proceed as directed by the Energy Consultant or Funding Agency, DGS' Energy and Resource Management Office will be notified, who will note this refusal/failure in the Contractor Responsibility Program and will consider suspension of the Contractor in accordance with Section 531 of the Commonwealth Procurement

Code. DGS may also, in its sole discretion, find the GESA Contractor in breach of its Contract and/or declare the Contractor in default of its Contract in accordance with the Termination Article of these General Conditions.

7.12 Project Schedule Updating. The Project Schedule will be updated at least once per month by the GESA Contractor to reflect actual progress. At its sole discretion, the Energy Consultant/DGS may require more frequent updates if deemed necessary to facilitate the Work. If the Project is not on schedule, Energy Consultant/DGS reserves the right to request additional updates and recovery schedules, at no cost to the Energy Consultant, DGS or the Funding Agency, from the GESA Contractor.

7.13 Recovery Plan. The Energy Consultant/DGS reserves the right to require submission of a Recovery plan if: occurrence of any of the following events:

A The progress of the Work or a single activity falls behind the contract time as shown in a currently updated and approved Project Schedule by more than fifteen (15) calendar days; or

B A missed milestone; or

C When an updated Project Schedule provides a completion date past the Contract Completion Date; or

D When a late finish for any activity does not come within the time allowed by the current Project Schedule.

E When, in the sole opinion of the Energy Consultant/DGS, it appears likely that the Work will not be completed within the Contract Time.

F The GESA Contractor will prepare a Recovery Schedule indicating that all future activities, project completion and occupancy dates will be met within the Contract Duration. The Recovery Schedule shall be implemented within 3 days after written direction from Energy Consultant/DGS. In order to create and maintain the Recovery Plan, the GESA Contractor agrees to undertake, but not be limited to, some or all of the following actions at no additional cost to the Energy Consultant, DGS or the Funding Agency: increase the manpower, the number of working hours per shift, the number of shifts per day, the number of working days per week, the quantity of equipment, or any combination of the foregoing, and reschedule such activities to bring the project back on schedule. Failure of the GESA Contractor to comply with these requirements may result in default and/or suspension and/or debarment of the GESA Contractor.

7.14 Requests for Extensions of Time. All requests for Extensions of Time shall be submitted to the Energy Consultant/DGS and Funding Agency in writing on the form provided by the Administrative Procedures. Reasons substantiating the request shall be included or the request may be denied. All such requests must be filed within ten (10) calendar days of the end of the event or issue that caused the alleged delay.

7.15 Extensions of Time and Impact on Schedule. A change order, field order or delay may not affect existing critical activities or cause non-critical activities to become critical. Change orders, field orders or delays may result in the Energy Consultant/DGS giving the Contractor part of or the entire available total float that may exist within an activity chain on the Network, thereby not causing any effect on

any interim milestone date or the Contract Completion Date of this Contract. The Project Schedule shall not excuse the performance of the Contractor from activities not indicated on the Project Schedule.

7.16 Unfavorable Weather. Unfavorable weather, including but not limited to rain, snow, and cold or freezing weather, is not an excuse for stopping Work under the Contract. The Contractor shall use such methods of protection as may be necessary to continue the Work throughout the period of unfavorable weather. Any Extension of Time due to unfavorable weather conditions shall be excusable and non-compensable.

7.17 Extensions of Time Not an Admission of Liability for Delay. The approval of an Extension of Time only constitutes a release by DGS of DGS' ability to assess liquidated damages against the GESA Contractor for the number of days granted by the Extension of Time. The Energy Consultant's/DGS approval of an Extension of Time shall not be construed or interpreted by the Contractor as an admission that DGS is liable for delay damages. The GESA Contractor agrees that Energy Consultant's/DGS grant of an Extension of Time will not be used as an admission by DGS of any liability for delay in any subsequent dispute regarding delays. This Paragraph does not preclude either the Contractor's rights or DGS' rights to pursue a claim for damages under other provisions of the Contract Documents.

ARTICLE 8: SUBMITTALS & COORDINATION DRAWINGS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

8.1 Submittals. The Contractor shall submit all necessary submittals to Energy Consultant, DGS or Funding Agency for review as discussed at initial job conference. Submittals shall be in accordance with the Contract Documents and include, but not be limited to, such items as:

A Subcontractor's, manufacturer's or fabricator's shop drawings.

B Descriptive literature including, but not limited to:

1. Catalog cuts
2. Diagrams
3. Operation charts or curves
4. Test reports
5. Samples
6. Operations and maintenance manual, including parts lists
7. Certifications
8. Warranties

C The Energy Consultant's or others review of submittals does not relieve the Contractor of the responsibility for any deviation from the requirements of the Contract Documents. Failure to mention a deviation shall be construed as a non-conformance with the Contract Documents. The Contractor shall be responsible for all costs associated with bringing the Work back into conformance with the Contract Documents, including costs incurred by the Contractor, the Contractor's Professional and DGS as a result of such non-conformance.

8.2 Standards of Quality. Where trade names, catalog number and manufacturers of material or equipment are specified, they are mentioned for the purpose of establishing a standard of quality, performance, and appearance. If the Contractor wishes to utilize material or equipment that is of the same type but manufactured by others than those named in the specifications, the Contractor shall certify that the material or the equipment is equal in quality, performance and appearance to that mentioned in the specifications. If the Contractor refuses or fails to proceed as directed, DGS may declare the Contractor in default. The Contractor may file a claim for additional costs resulting from this decision.

8.3 Substitution of Materials. If the Contractor desires to furnish materials or equipment other than that which is specified, the Contractor shall submit to Energy Consultant, DGS and/or the Funding Agency a comprehensive description of the material or equipment proposed for substitution, including engineering, construction, dimension, performance and appearance data, along with a statement of the cost involved. Energy Consultant/DGS, with the approval of DGS and Funding Agency, shall render a written determination to the Contractor. If the

substituted material or equipment is approved, the Contractor is responsible for any and all costs incurred and working to eliminate any additional time needed as a result of the substitution. If the cost of the substituted item is less than the specified item, Funding Agency is entitled to a credit for the difference between the cost of the substituted item and the item specified.

ARTICLE 9: PROTECTION OF PERSON & PROPERTY AND INSURANCE AND INDEMNIFICATION

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

9.1 Safety Precautions and Programs. The Contractor is responsible for initiating, maintaining and supervising all safety precautions and programs required under its portion of the Work.

9.2 Safety of Persons and Property. The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to:

A All employees involved in the Work and all other persons who may be affected thereby; and

B All the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of its subcontractors or sub-subcontractors; and

C Other property within the Contract Limits or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and

D All areas of the Project site where unauthorized entry or presence would present a potential hazard to the health and safety of trespassers shall be adequately posted to prevent access by unauthorized personnel.

9.3 Compliance with Safety Laws. The Contractor shall comply at all times with all applicable Federal, Commonwealth, and local laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property and to protect them from damage, injury or loss. The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities until the acceptance of all on-site physical work, change order work, and/or demobilization. All areas of the Project shall be hardhat areas. All persons within the Contract Limits are required to be protected by protective helmets in compliance with Occupational Safety & Health Administration (OSHA) requirements.

9.4 Emergency Notification. A procedure will be established by the Contractor to provide emergency communications to all individuals on the site. This procedure will not be used to handle routine calls to individuals.

9.5 Failure to Comply with Safety Requirements. Failure to comply with the Contract safety requirements will be considered as non-compliance with the Contract and may result in remedial action provided by the Contract. The

Contractor shall be responsible for payment of all fines and/or claims for damages levied for deficiencies relating to conduct of Contractor's Work.

9.6 Explosives. Unless explicitly permitted in writing from Funding Agency, the use of explosives and other hazardous materials or equipment is not permitted for the execution of the Work. If explosives are permitted, the Contractor shall observe the utmost care, performing such Work with experienced personnel and in accordance with all Federal, Commonwealth, local, Departmental, and institutional regulations, so as not to endanger life or property. Rock encountered within five (5) feet of pipelines or buildings shall be removed without blasting. All explosives shall be stored in a secure and safe manner, in strict conformity with all Federal, Commonwealth and municipal regulations and all such storage shall be clearly marked "Dangerous-Explosives" and shall be in the care of competent watchmen at all times. The Contractor shall provide insurance in accordance with the special insurance provision in these General Conditions relating to "Blasting". The Contractor shall be responsible for all damages caused by the use of explosives, hazardous materials and/or equipment, and blasting and shall notify DGS of any claims of damage associated with this Paragraph at the time of claim.

9.7 Remediation of Damages. The Contractor shall remedy all damages or loss to any property caused in whole or in part by the Contractor, any Subcontractor, any sub-subcontractor, or anyone directly or indirectly employed by any of them. If damage or loss is attributable to faulty drawings or specifications or to the acts or omissions of DGS, and the damage or loss is not attributable to any fault or negligence of the Contractor, then the Contractor shall not provide remediation.

9.8 Contractor's Liability Insurance. The Contractor, during the progress of the Work and until the acceptance of all on-site physical work, change order work, and/or demobilization, shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations by itself or by any Subcontractor:

A Claims under Worker's Compensation Disability Benefit and other similar employee benefit Acts; and

B Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees, and claims insured by usual personal injury liability coverage; and

C Claims for damages because of bodily injury, sickness or disease, or death, of any person other than its employees, and claims insured by usual personal injury liability coverage; and

D Claims for damages because of injury to or destruction of tangible property including loss of use resulting therefrom.

9.9 Insurance Limits. The insurance required by this Article shall be written for not less than any limits of liability specified in this Article, the RFQ, or required by Law.

9.10 Certificates of Insurance. Certificates of Insurance acceptable to DGS shall be filed with DGS prior to the commencement of on-site work. These certificates shall contain a provision that coverages afforded under the policies shall not be canceled

or changed until at least ninety (90) calendar days written notice has been given to DGS. Renewal certificates must be provided to DGS prior to the expiration of the prior policy as stated on the certificate. The insurance certificate shall also name the Commonwealth of Pennsylvania as an additional insured.

9.11 Comprehensive General Liability and Automobile Liability Insurances. The Contractor's comprehensive general liability insurance and automobile liability insurance shall be in the amounts set forth in the RFQ.

A For Subcontractors, the Contractor shall either:

1. Require each of its Subcontractors to procure and to maintain Subcontractors' comprehensive general liability, automobile liability, and property damage liability insurance of the type and in the same amounts as specified in this subsection for the life of its subcontract and/or until the acceptance of all of its on-site physical work, change order work, and/or demobilization;

OR

2. Insure the activity of its Subcontractors in its own policy.

B If required by a Special Condition, the Contractor's and its Subcontractors' liability insurance shall include additional riders providing for adequate protection against the indicated special hazards (e.g., blasting, flooding, underpinnings, etc.).

C The Contractor must submit to DGS within ten (10) calendar days from the Initial Job Conference, and prior to the beginning of on-site work, evidence that all subcontractors and sub-subcontractors are covered by insurance.

9.12 Property Insurance. The Contractor shall, until all physical on-site work is complete, including change order work, punch list work, demobilization or seasonal work, maintain insurance on all insurable work included in the Contract against loss or damage by fire and lightning and those perils covered by the extended coverage endorsement. Insurable work includes work both inside and outside of any building being constructed. The insurance (which must include Builder's Risk Insurance or an installation floater that covers all risks) must be in the names of DGS and the Contractor in full insurable value thereof as will fully protect the interests of DGS and the Commonwealth, the Contractor, Subcontractors, and Sub-subcontractors.

9.13 Risk to Construction Work. The risk of damage to the construction work is that of the Contractor and surety. No claims for such loss or damage will be recognized by DGS, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

9.14 Unacceptable Surety or Insurance Company. If the surety on the bonds or the insurance company providing the required coverage becomes unsatisfactory to DGS, the Contractor must promptly furnish such additional security or insurance coverage as may be required to protect the interest of DGS. The Contractor shall, from time to time, furnish DGS, when requested, satisfactory proof of coverage of each type of Bond and/or insurance required. Failure to comply with this provision shall result in the cessation of the Work and shall be sufficient grounds to withhold any further payments due the Contractor and/or to declare the Contractor in default.

DGS will not consider any claim for an Extension of Time, costs, or damages because of time lost due to such instance brought by the noncompliant Contractor.

9.15 Workplace Drug and Alcohol Policy.

A The Commonwealth is committed to providing a safe workplace for the workers assigned to the Project, promoting high standards of employee health and fostering productivity. Consistent with the intent and spirit of this commitment, DGS requires the Contractor to establish and enforce a drug and alcohol policy for the Project with the goal of maintaining a work environment that is free from the effects of the use of illegal drugs and alcohol. Such policies often include, but are not limited to, important features such as employee education and awareness programs, employee assistance programs and treatment options.

B DGS requires that anyone employed at the Project site will comply with the Contractor's drug and alcohol policy.

C The Contractor is responsible for ensuring that all suppliers, vendors, and visitors receive a copy of their policy and consequences for failure to comply with the policy.

D In the event of an incident and/or accident occurrence involving suppliers, vendors, and/or visitors, the same agree to submit to drug and alcohol testing at the DGS' request. Refusal to submit to drug and alcohol testing, which includes failure to take the actual test and/or the tampering or adulterating of the sample, when requested, would be grounds for DGS to have the supplier, vendor or visitor permanently barred from the Project site.

ARTICLE 10: CHANGES IN THE WORK

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

10.1 Changes. Funding Agency, without invalidating the Contract, may direct changes in the Work within the general scope of the GESA Contract, consisting of additions, deletions or other revisions. All such changes in the Work will be authorized by Change Order or Field Order.

A The Contractor agrees that payment under any method noted within this Article will be the exclusive compensation for such addition, deletion, or other revision to the original Contract, including any and all costs associated with acceleration, stacking and re-sequencing of forces required by the change in order to maintain the Project Schedule.

B If it is not possible to complete the Work in accordance with the Project Schedule by acceleration, stacking or re-sequencing, the Contractor may request an Extension of Time. Adequate information and proper form submission must be provided to validate this request. Funding Agency reserves the right to deny requests not accompanied by adequate information and proper form submissions.

C The language in this Article must be construed in conjunction with the detailed language of the Change Order Administrative Procedure.

10.2 Cost of Change Order. The debit or credit cost to Funding Agency resulting from a change in the Work shall be determined in accordance with the Change Order Administrative Procedure.

10.3 Owner-Controlled Contingency. Payment for Change Order work shall be from the project's owner-controlled contingency (contingency). Upon Closeout Inspection and submission of the Final Application for Release of Payment, as provided in the General Conditions, any remaining unused contingency shall be utilized by Funding Agency as payment for project financing funds owed by the Funding Agency.

10.4 Disagreement as to Cost or Credit. If Funding Agency and the Contractor cannot agree as to the cost or credit to Funding Agency resulting from a change in the Work, Funding Agency shall determine the cost or credit. The Contractor must proceed with the Change Order work under this Article if directed to do so. The Contractor may submit the disputed cost to the Funding Agency when the Work is completed for a re-evaluation in accordance with the Dispute Resolution Article of these General Conditions. In the Funding Agency's sole discretion, they may monitor any or all disputed cost work on a time and material force account basis. If the Funding Agency accepts the change as a force account Change Order, the Contractor would be required to show proof of incurred cost.

10.5 Unclassified Excavation.

A Excavation, if required for this Project, will be unclassified and will include all types of earth and soil, any pebbles, boulders, and bedrock, municipal trash,

rubbish and garbage, and all types of debris of the construction industry such as wood, stone, concrete, plaster, brick, mortar, steel and iron shapes, pipe, wire asphaltic materials, paper and glass. Unclassified excavation does not include unforeseen concrete foundations, walls, or slabs.

B All materials encountered which are identified as described in the previous paragraph as unclassified shall be removed to the required widths and depths to create a finished product as shown and/or noted on the drawings and as written in the specifications. No additional compensation or time shall be given to the Contractor for this unclassified excavation.

C Any unclassified items described in paragraphs b and c above that are discovered during any excavation are not concealed conditions or unknown physical conditions below the surface for purposes of the Concealed Conditions paragraph of these General Conditions.

10.6 Concealed Conditions. There are only two types of concealed conditions which might be encountered during the performance of the Work, namely:

A Concealed conditions which are unascertainable from the plans, Contract Documents, visits to the site, or reasonable investigation, and which are at variance with the conditions indicated by the Contract Documents; or

B Unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.

C The Contractor has seven (7) days after the first observance of the concealed condition to provide written notice to the Energy Consultant/DGS and the Funding Agency. If the Funding Agency decides that either of the two concealed conditions described above has occurred during construction, then the construction Contract Sum shall be equitably adjusted by Change Order. No adjustment shall be made to the Contract Sum under this paragraph, however, for concealed conditions encountered during cutting and patching of Work.

10.7 No Claims for Additional Cost or Time. No claims for increased costs, charges, expenses, or damages of any kind, except as provided in the General Conditions, shall be made by the Contractor for any delays or hindrances from any cause whatsoever, including, but not limited to, strikes, walkouts or work stoppages during the progress of any portion of the Work. Funding Agency may, however, address such non-compensable delays by extending the time for completion of the Work, as provided in the Contract, which extensions shall constitute the exclusive remedy between the parties.

10.8 Minor Changes in the Work. The Energy Consultant/DGS may direct minor changes in the Work (such as minor relocations or field revisions) that the Funding Agency and the Contractor mutually agree do not involve an adjustment in the Contract Sum or an extension of the Contract time and which are not inconsistent with the intent of the Contract Documents. Such changes may only be enacted by written Field Order, as provided, or by other written order. Such changes are binding on the Funding Agency and the Contractor. The Contractor shall carry out such Field Orders promptly.

10.9 Directive to Commence Change Order Work. DGS may direct the Contractor to commence Change Order Work prior to a fully executed Change Order. Such direction will not be given until DGS generates the scope and confirms that funding is available to complete the Change Order Work.

ARTICLE 11: NON-CONFORMING WORK AND CORRECTIONS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

11.1 Work Covered Contrary to Request. If any Work is covered contrary to the request of the Funding Agency, DGS or Energy Consultant, the Work must, if required by the Funding Agency, DGS or Energy Consultant, be uncovered for observation and replaced, at the Contractor's expense with no Extension of Time.

11.2 Uncovering of Work. If any Work has been covered which Funding Agency, DGS or Energy Consultant has not specifically requested to observe prior to being covered, Funding Agency, DGS or Energy Consultant may request to see such Work and the Work shall be promptly uncovered by the Contractor.

A If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement shall be paid to Contractor by appropriate Change Order.

B If such Work is found to be not in accordance with the Contract Documents, the Contractor shall pay costs to make the Work conform and the cost of replacement.

11.3 Acceptance of Nonconforming Work. If the Funding Agency knowingly elects to accept nonconforming work, it may do so instead of requiring its removal and correction. If nonconforming work is accepted, a credit Change Order shall be issued to reflect an appropriate reduction in the Construction Contract Sum, or, if the amount is determined after final payment, it shall be paid by the Contractor and/or the Contractor's surety.

ARTICLE 12: PAYMENTS AND COMPLETION

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

12.1 Contract Breakdown. The language in this Article must be construed in conjunction with the detailed language of the applicable Administrative Procedure.

12.2 Energy Consultant Payments.

A The Energy Consultant selected by DGS shall be entitled to receive funds as proposed in the Energy consultant's response to the RFQ and at a sum no greater than as listed below:

1. 4% of the of the GESA Contract value for projects equal to or greater than $18 million; or
2. 5% of the GESA Contract value for projects equal to or greater than $13 million but less than $18 million; or
3. 6% of the GESA Contract value for projects equal to or greater than $8 million but less than $13 million; or
4. 7% of the GESA Contract value for projects less than $8 million.

B Payments shall be in accordance with the following schedule:

1. 10% upon fully executed contract with ESCO;
2. 20% upon approval of all plans and specifications by both DGS and Labor & Industry, to the extent L&I has jurisdiction over the project based upon the scope of the project;
3. 60% divided into equal monthly payments based upon the duration of construction;
4. 10% upon completion of the three years of Measurement and Verification of post-construction services.

C Payments can be released to the Energy Consultant based upon two-line items in the GESA Contractor's Contract Breakdown:

1. 5% of the total Contract Value upon approval of an acceptable Contract Breakdown (GSC-30), which occurs after a fully executed contract between the Commonwealth and the GESA Contractor.
2. 5% of the total Contract Value upon the Commonwealth's approval of plans and specifications.

12.3 Application for Progress Payments.

A During the progress of the Work, the Contractor shall submit to the Energy Consultant and DGS itemized Applications for Progress Payment on the form specified in the Administrative Procedures. The Energy Consultant and DGS will

review the application for validity, and if the Work is acceptable, shall approve the release of funds to the Contractor.

B If, upon the determination by the Energy Consultant and DGS as to reasonableness, payments are to be released to the Contractor on account of materials or equipment which are not incorporated in the Work, but are delivered and suitably stored at the site, or at some other location agreed to in writing, such release of payment shall be conditioned upon submission by the Contractor of Bills of Sale forms to establish Funding Agency's title to such materials or equipment as well as the compliance with the requirements in the Administrative Procedures. The Contractor shall remain responsible for all losses of materials and equipment that remain under its custody and control, regardless of the exclusions in insurance policies. Warranties do not begin until the date of Final Inspection.

C **Non-Approval of Payment**. If the Funding Agency fails to approve release of payment to the GESA Contractor within forty-five (45) days after receipt of an acceptable Application for Progress Payment, the GESA Contractor may file a claim for interest. The GESA Contractor is not entitled to stop work in any event, unless the Funding Agency exercises its right to suspend the work, as provided in the Contract Documents.

12.4 If Work Cannot Be Completed Through No Fault of Contractor. If, after Final Inspection, items of Work cannot be completed because of any of the following conditions:

A Unseasonable considerations, such as bituminous paving, landscaping, etc.; or

B Funding Agency agrees that particular items need not be completed until a subsequent date; or

C Funding Agency delays the approval of the Final Application for Payment for any unreasonable length of time;

1. Then the Funding Agency may agree to release payment to the GESA Contractor. The payment shall be deducted by one and one-half (1-1/2) times the dollar value of items on the punch list.

ARTICLE 13: PROJECT CLOSEOUT

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

13.1 Project Closeout consists of a Final Inspection, through which DGS, the Funding Agency, and/or the DGS Energy Consultant (if applicable) will determine whether the Project is substantially complete.

A It shall be the GESA Contractor's responsibility to request Final Inspection for a Project. The Final Inspection should be completed within 15 days of request by the GESA Contractor. Final Inspection shall be conducted by the DGS Energy Consultant, DGS, and/or the Funding Agency. The GESA Contractor or its authorized representative must be present throughout the duration of the Final Inspection. The DGS Energy Consultant or DGS has the sole authority to determine whether parts or the whole of the Project are ready for a Final Inspection.

B DGS, the Funding Agency, and/or the DGS Energy Consultant (if applicable) have the sole authority to determine whether the Project is ready for Final Inspection and will conduct the Final Inspection. The GESA Contractor or an authorized representative must be present throughout the duration of the Final Inspection.

C The GESA Contractor shall be required to obtain required occupancy permits from L&I prior to Final Inspection

D If DGS, the Funding Agency, and/or the DGS Energy Consultant (if applicable) all concur that the Project is at substantial completion, a certificate of completion and final certificate for payment shall be issued to the GESA Contractor. In such case DGS, the Funding Agency, and/or the Consultant shall provide the GESA Contractor at the Final Inspection with a list of uncompleted items, referred to herein as a Punch List.

E The GESA Contractor shall complete all Punch List items within 30 calendar days of the Final Inspection.

F The Funding Agency will approve release of payment in full within 45 days of the submission of the final application. Payment of any amount withheld for the completion of the Punch List shall be paid upon completion of the items.

G The GESA Contractor shall verify at Final Inspection that a complete set of As-Built Record Documents have been provided as described in Part II, Section 2, Item G above.

H If the GESA Contractor does not complete all Punch List items or show just cause to the satisfaction of the Funding Agency why they cannot be completed, the Funding Agency may take action, including but not limited to correcting items and

deducting the cost of completion from the amount retained or default the Contractor and pursue its surety for completion of the Work.

I If work is completed in accordance with the Contract Documents, a report of the Final Inspection shall be prepared by the DGS Energy Consultant, DGS, or the Funding Agency in accordance with the Administrative Procedures. After successful Final Inspection, the Funding Agency may utilize the project and the warranty period shall commence.

ARTICLE 14: DISPUTES

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

14.1 Contractor Must Carry on Work During the Dispute Process. In the event of a controversy/dispute or claim arising from this Contract, the GESA Contractor may note its performance of the Work under protest and may keep records of costs during the below dispute resolution process, but the GESA Contractor shall not refuse to perform as directed by the Commonwealth. The GESA Contractor must maintain the Project Schedule unless otherwise agreed to by the Energy Consultant, DGS and/or the Funding Agency. If the GESA Contractor fails or refuses to perform as directed, this action will constitute a breach of contract and the Commonwealth may default the GESA Contractor and/or proceed to suspend and/or debar the GESA Contractor.

14.2 Dispute Resolution is a 3-Step Process. The GESA Contractor, the Funding Agency and DGS agree that any and all disputes arising out of this Contract are subject to a 3-step resolution process described in this Article. The Contractor, The Funding Agency and DGS agree that participation in each preceding step is a condition precedent to the GESA Contractor's right to pursue any and all unresolved disputes to the next step.

14.3 Step 1: Field Dispute Review Meetings. The Field Dispute Review Meeting is the initial step in identifying and attempting to reach a timely and equitable resolution of the variety of issues that arise on any construction project. The nature and structure of each Field Dispute Review Meeting shall be flexible and consist of an informal, good-faith discussion of the current status of the Project, and identification of potential and actual disputes.

A Project Intervals: A Field Dispute Review Meeting ("FDR Meeting") will be scheduled by the Energy Consultant/DGS to discuss issues arising as of the following intervals of the Project:

1. 50% of the Contract Duration has elapsed; and
2. 100% of the Contract Duration has elapsed; or
3. At any time deemed necessary by DGS or Funding Agency.

B Location: The Energy Consultant/DGS will schedule a mutually convenient date and time for each FDR Meeting. If possible, the FDR Meeting should be convened at the Project site.

C Attendees: The Contractor and Funding Agency shall attend each Field Dispute Review Meeting. The DGS Energy and Resource Management Office shall attend each Field Dispute Review Meeting. The Energy Consultant/DGS will chair the Meeting.

D Procedure: As the Project progresses and the time for an FDR Meeting approaches, the Energy Consultant/DGS should establish the date for the meeting during the discussion at a bi-weekly Job Conference.

1. The Contractor must fill out a Field Dispute Review Meeting Form, a sample of which appears in the Disputes Administrative Procedure. This Form should be submitted to the Energy Consultant/DGS approximately 1 week prior to the FDR meeting. The information on this Form should provide sufficient information to allow attendees to research potential disputes, review the Contract Documents, review the Project Schedule and examine site conditions prior to the Meeting. In all cases of misunderstanding and disputes, allegations that verbal instruction was given will not be considered. The Contractor must produce written documentation in support of its contentions and shall advance no claim in the absence of such written documentation or use or attempt to use any conversation with any parties against DGS or Funding Agency in prosecuting any claim.
2. The Energy Consultant/DGS shall convene the Field Dispute Review Meeting.
    a The FDR Meeting shall not be subject to 2 Pa. C.S. (relating to administrative law and procedure).
    b Neither audio recording nor videotaping will be allowed during the FDR Meeting.
    c No transcripts will be taken but attendees are free to take their own notes.
    d The Meeting may be moved out to the field for visual inspection of the condition if necessary to understand and resolve the issue.
    e The Energy Consultant/DGS will allow all parties a reasonable time to present and discuss the disputes raised in the Contractors' FDR Meeting Form.
3. The Contractor's representative (an employee in the field familiar with the day-to-day work on this Contract) shall present a description of:
    a The Work performed since the last Field Dispute Review Meeting; and
    b The Work to be performed in the near future; and
    c The status of disputes raised at the previous FDR Meeting; and
    d New disputes that have arisen since the previous FDR Meeting. For each new dispute:
        (1) Set forth the schedule impacts, which may only be presented using the current Project Schedule; and
        (2) Set forth a proposed solution to the dispute, including:
            (i) Days needed in any Extension of Time; and/or
            (ii) Damages attributed to the dispute.
4. The Energy Consultant's/DGS representative shall present a description of:
    a their understanding of the Work performed since the last FDR Meetings; and
    b the Work to be performed in the near future; and

c status of disputes raised at the previous FDR Meeting; and

d a response to the new dispute(s) raised by the Contractor

5. Within two weeks of the FDR Meeting, the Energy Consultant/DGS will render a written decision on the issues raised during the FDR Meeting. The decision will be issued to all attendees. The decision is not binding upon any party.

6. If any party is dissatisfied with the decision reached at the FDR Meeting, they may appeal the decision to the second step in the dispute process.

7. Any issue or dispute arising on the Project must be presented at the first FDR Meeting after the dispute arose. If the Contractor fails to raise an issue at the appropriate FDR Meeting then the Contractor is deemed to have waived the issue (e.g., an issue arising during first 25% of contract duration must be presented at the 25% FDR Meeting and may not be presented at any subsequent FDR Meeting).

8. Only claims raised during an FDR Meeting may be appealed to the Claim Settlement Conference stage.

14.4 Step 2: Claim Settlement Conference. The second step in the dispute resolution process is a Claim Settlement Conference, which is a more formal step in the process and is described in general in §1712.1 of the Commonwealth Procurement Code.

A Time to File a Claim: Under this second step of the process, the Contractor may appeal the FDR Meeting decision by submitting a written claim to the Deputy Secretary for Property and Asset Management, 401 North Street Room 414, Harrisburg, PA 17125.

1. Any issue or dispute arising on the Project that is not mutually resolved at the FDR Meeting stage may only be appealed to the Claim Settlement Conference stage. If the Contractor fails to pursue any unresolved FDR Meeting issue to a Claim Settlement Conference within the 6-month time frame set forth below, then the Contractor is deemed to have waived the issue.

2. A claim accrues upon the date of Energy Consultant's/DGS written decision in Step 1. If the Contractor decides to appeal the decision reached at the FDR Meeting, the Contractor must file an appeal of the decision to the Deputy Secretary within six months of the date of the Energy Consultant's/DGS written decision. If the Contractor fails to file a written request within this time period, the Contractor is deemed to have waived its right to assert the claim in any forum. The Deputy Secretary will disregard untimely claims.

B Contents of the Claim: The claim filed by the Contractor with the Deputy Secretary shall state all grounds upon which the Contractor asserts a controversy exists. The claim must contain, at a minimum:

1. The Claim Settlement Conference request form set forth in the Disputes Administrative Procedure; and

2. The documentation submitted by the Contractor to the Energy Consultant/DGS during the FDR Meeting to substantiate the Contractor's view of the issue; and

3. The Energy Consultant's/DGS decision.

C Date of the Claim Settlement Conference: The Deputy Secretary or a designee will schedule a mutually convenient date and time for the Claim Settlement Conference.

D Attendees: All parties identified in the Claim Packet or deemed necessary by DGS shall attend the Claim Settlement Conference. At a minimum, the Contractor, Funding Agency and a representative from DGS' Energy and Resource Management Office shall attend the Claim Settlement Conference.

E Procedure: The Deputy Secretary or a designee will convene the Claim Settlement Conference.

1. The Claim Settlement Conference shall not be subject to 2 Pa.C.S. (relating to administrative law and procedure).

2. Neither audio recording nor videotaping will be allowed during the Claim Settlement Conference.

3. No transcripts will be taken but attendees are free to take their own notes.

4. The Deputy Secretary or a designee will allow all parties a reasonable time to present and discuss the issues.

5. The Contractor's representative shall present a description of the issue, including:

   a the factual background of the issue;

   b the schedule impacts, which may only be presented using the current Project Schedule; and

   c the proposed solution to the dispute, including:

      (1) days needed in any Extension of Time; and/or

      (2) damages attributed to the dispute.

6. The Energy Consultant/DGS shall present a description of:

   a a response to the dispute(s) raised by the Contractor, including:

   b the view of the schedule impact, which may only be presented using the current Project Schedule; and

   c the Contractor's proposed solution; and

   d the identity of the party the Energy Consultant/DGS believes is responsible for creating the dispute.

7. The Deputy Secretary will render a final determination on the issue(s) raised during the Claim Settlement Conference within 120 days of the receipt of the claim. The parties may, during the 120-day period, mutually agree to extend the 120-day deadline. If extended, the DGS will issue written confirmation of the extension. If no decision is rendered within the 120 days, the claim is

deemed to be denied on the 120th day. The determination of the Deputy Secretary shall be the final order of DGS with regard to the issue(s).

14.5 Step 3: Filing a Claim at the Board of Claims. The third step in the dispute resolution process is filing a Statement of Claim with the Board of Claims, which is a more formal step in the process and is described in general in §1712.1 and §1721 et seq. of the Commonwealth Procurement Code.

A Time to File a Statement of Claim. Within fifteen (15) days of:

1. The mailing date of the Deputy Secretary's final determination denying a claim; or
2. Within 135 days of the date the Contractor files a claim with the Deputy Secretary if no final determination has been rendered and no extension has been agreed to, whichever occurs first, the Contractor may proceed to the third stage of the dispute resolution process by filing a claim with the Board of Claims in Harrisburg.

B Only claims that were raised during an FDR Meeting and a Claim Settlement Conference may proceed to the Board of Claims.

ARTICLE 15: MISCELLANEOUS CONDITIONS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

15.1 Project Sign. No signs of any kind shall be placed anywhere on the project site without the explicit written permission of the Funding Agency. Signs for safety instruction, direction of traffic, instruction of visitors to the site and site restrictions shall be fabricated, erected and maintained by the Contractor as required at no additional cost to the Funding Agency. Upon Completion of the work, or when directed by the Funding Agency, the Contractor shall remove signs.

15.2 Foundations for Mechanical Equipment. The Contractor shall furnish and install foundations and supports for all equipment installed under the GESA Contract. Foundations and supports shall include isolation mounting for noisy and vibrating equipment.

15.3 Sanitary Facilities. The Contractor shall, at its cost, provide and maintain in a clean and sanitary condition adequate and approved sanitary facilities in accordance with O.S.H.A. requirements. All facilities shall be screened against insects. Portable chemical toilets approved by the Pennsylvania Department of Health are acceptable. Under temporary field conditions, provisions shall be made to assure not less than one toilet facility is available.

15.4 Hoisting Facilities. The Contractor shall erect, maintain and operate at its cost, hoisting facilities. All hoisting facilities must comply with the safety regulations of the Department of Labor and Industry.

15.5 Temporary Ventilation. The Contractor shall provide temporary ventilation to remove from the structure any excessive heat and/or humidity in enclosed portions of the Work, resulting from its construction operations so that the Work may be carried on without interruption and under correct conditions, including required dryness for installation of the various materials. Removing any dangerous or noxious fumes or particles suspended in the air is the responsibility of the Contractor. Temporary equipment used for this temporary ventilation shall produce no hazard to the Work or to any person in or near it. The Contractor shall furnish all such temporary equipment; pay all costs for it and for its operation, including fuel and power supplies during operation both in and out of normal working hours. The Contractor shall remove the equipment when it is no longer required, or when so directed by DGS.

15.6 Work Beyond Limit of Contract. For purposes of performing the Work, the site is defined by the Limit of Contract lines shown on the drawings. The Contractor is responsible for any work performed beyond the limit of Contract.

15.7 Advertising. No advertising is permitted within the Work area or adjacent area. This does not apply to corporate vehicles or attire.

15.8 Federal and A.S.T.M. and Other Specifications. Reference to Federal, A.S.T.M. and other standard specifications references and designations means those in effect at the date of bid. Basic codes and regulations incorporated by reference, standard regulations and codes refer to editions in effect at the date of Quotes,

including current addenda or errata. The most stringent section of each code applies.

15.9 Storage and Stockpiling on Roofs. No materials of any type may be stored or stockpiled overnight on roofs.

15.10 Reduction of Noise. The Contractor must take reasonable steps to minimize noise and shall perform work in accordance with local noise ordinances. The Contractor shall perform noise-producing work in less sensitive hours of the day or week as directed by Funding Agency, DGS or the Energy Consultant. The Contractor shall maintain noise-producing work at or below the decibel levels and within the time periods specified and shall perform construction activities involving repetitive, high-level impact noise only between 8:00 a.m. and 6:00 p.m. unless otherwise permitted by Funding Agency and permissible by local ordinance.

15.11 Visible Dust Emissions. No person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless appropriate measures are sufficiently implemented to limit Visible Dust Emissions (VDE) to 20% opacity and comply with the conditions for a stabilized surface area when applicable. The Contractor shall apply sufficient water to building exterior surfaces, and/or unpaved surface areas where equipment will operate to limit VDE to 20% opacity throughout the duration of razing and demolition activities or handling, storage, and transport of bulk materials on-site or off-site. The Contractor shall apply sufficient dust suppressants to unpaved surface areas within 100 feet where materials from razing or demolition activities will fall in order to limit VDE to 20% opacity. The Contractor shall also apply sufficient dust suppressants to unpaved surface areas where wrecking or hauling equipment will be operated in order to limit VDE to 20% opacity.

ARTICLE 16: LEGAL MATTERS

The following is in addition to any ITQ language on the matter. Where there are discrepancies between the ITQ and these General Conditions, these General Conditions take precedence.

16.1 No Estoppel or Waiver of Legal Rights. DGS is not precluded or estopped by the measurements or the release of Applications for Payment made or given by DGS from showing the true and correct amount and character of the Work performed and materials and equipment furnished by the Contractor. DGS may show, at any time, that any such measurements or approvals of release of Applications for Payment are untrue or incorrectly made in any particular, or that the Work or materials, equipment or any parts thereof do not conform to the specifications and the Contract. DGS may reject the whole or any part of the aforesaid Work or materials and equipment if the measurements or approval of release of Applications for Payment are found or become known to be inconsistent with the terms of the Contract, or otherwise improperly given. DGS may, notwithstanding any such measurements or approval of release of Applications for Payment, demand and recover from the Contractor, its surety, or both, such damages as DGS may sustain by reason of the Contractor's failure to comply with the terms of the specifications and the Contract, or on account of any overpayments made on any approved for release Application for Payment. Neither the acceptance by DGS nor any certificate accepted for payment of money, nor any approval for release of payments, nor acceptance of the whole or any part of the Work by DGS nor any Extension of Time, nor any position taken by DGS operates as a waiver of any portion of the Contract or any power herein reserved by DGS or any right to damages. A waiver of any breach of the Contract will not be held to be a waiver of any other or subsequent breach.

16.2 Law of the Place. The GESA Contract shall be governed by the Laws of the Commonwealth of Pennsylvania.

16.3 Successors and Assigns. This GESA Contract shall be binding on the parties hereto, their heirs, executors, administrators, successors and assigns. No part of this GESA Contract may be assigned by the Contractor without the prior written consent of DGS.

16.4 Written Notice. Written notice is duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or mailed to its post office box address, if any, or addressed to the Contractor at its place of business as set forth in the GESA Contract. Wherever the term "notice" is used, such notices, to be effective, shall be in writing and, if to DGS, shall be mailed by Certified or Registered mail, postage and fees prepaid, or shall be delivered, in person, to the Deputy Secretary for Facilities Management, Department of General Services.

16.5 Claims for Damages: Legal Relations and Responsibilities. The GESA Contract covered by these General Conditions is not to be construed as being made for the benefit of any person or political subdivision not a party to this GESA Contract, nor shall this GESA Contract be construed to authorize any person or political subdivision, not a party to this GESA Contract, to maintain any lawsuit hereunder,

nor shall this GESA Contract be construed to constitute the basis for the maintenance of any lawsuit by any person, or political subdivision not a party hereto.

16.6 Tobacco Use on Project Site. Use of tobacco products (smoke and smokeless) shall be restricted on site after the building has been enclosed (with permanent or temporary enclosures). Personnel found in noncompliance with this directive may be removed from the site upon discovery of this noncompliance.

16.7 Right-to-Know Law.

A The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this Contract. For the purpose of these provisions, the term "the Commonwealth" shall refer to the contracting Commonwealth agency.

B If the Commonwealth needs the Contractor's assistance in any matter arising out of the RTKL related to this Contract, it shall notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Commonwealth.

C Upon written notification from the Commonwealth that it requires the Contractor's assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor shall:

1. Provide the Commonwealth, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Commonwealth reasonably believes is Requested Information and may be a public record under the RTKL; and

2. Provide such other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this Contract.

D If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Contractor must notify the Commonwealth and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

E The Commonwealth will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Commonwealth determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Commonwealth determine that the Requested Information is clearly not exempt from disclosure, the Contractor shall provide the Requested Information within five (5) business days of receipt of written notification of the Commonwealth's determination.

F If the Contractor fails to provide the Requested Information within the time period required by these provisions, the Contractor shall indemnify and hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm

that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth.

G The Commonwealth will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

H The Contractor may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Contractor shall indemnify the Commonwealth for any legal expenses incurred by the Commonwealth as a result of such a challenge and shall hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth, regardless of the outcome of such legal challenge. As between the parties, the Contractor agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.

I The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

16.8 Non-Appropriation Clause. The Commonwealth's obligation to make payments during any Commonwealth fiscal year succeeding the current fiscal year shall be subject to availability and appropriation of funds. When funds (state and/or federal) are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year period, the Commonwealth shall have the right to terminate the Contract or a Purchase Order. The Contractor shall be reimbursed for the reasonable value of any nonrecurring costs incurred but not amortized in the price of the supplies or services delivered under the Contract. Such reimbursement shall not include loss of profit, loss of use of money, or administrative or overhead costs. The reimbursement amount may be paid for any appropriations available for that purpose.

APPENDIX I

Administrative Procedures for GESA Contract

pennsylvania
DEPARTMENT OF GENERAL SERVICES

ADMINISTRATIVE PROCEDURES FOR GESA CONTRACTS

February 2025 EDITION

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DEPARTMENT OF GENERAL SERVICES

ENERGY AND RESOURCE MANAGEMENT OFFICE

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ADMINISTRATIVE PROCEDURE #1

CORRESPONDENCE

1.1 Identification of Correspondence

A. The term “correspondence” includes letters, transmittals, and memoranda, but does not include forms.

B. All correspondence must be identified by the GESA Project Number, including Name of Facility, Project Description and Project Location.

C. Following is an example of proper identification:
Project #GESA- XXXX-X (R)
Betty Hall
Tomlinson University
Hatcher County, Grand City, PA

1.2 Addressing and Distribution of Correspondence

A. Correspondence shall be addressed to the following in the following manner with the minimum distribution as indicated: If agreed to send by electronic methods, the following entities shall all be included

<u>If to the DGS Energy and Resource Management Office Director:</u>

Director of Energy and Resource Management Office
403 North Office Building
Harrisburg, PA 17120

cc: Energy Consultant
GESA Contractor
GESA Contractor’s Professional,
Funding Agency, as required

<u>If to the Energy Consultant</u>

cc: Director, Energy and Resource Management Office
Funding Agency, as required
GESA Contractor
GESA Contractor Professional

<u>If to the GESA Contractor:</u>

cc: Director, Energy and Resource Management Office
Energy Consultant
GESA Contractor Professional
Funding Agency, as required

ADMINISTRATIVE PROCEDURE #2

ORIENTATION MEETING

2.1 Scheduling of Orientation Meeting

A. The Energy Consultant and/or DGS will contact the GESA Contractor by letter within ten days after the GESA Contractor's contract effective date to schedule the meeting. The purpose of the Orientation Meeting is to familiarize the GESA Contractor with DGS' procedures and forms to be used during design and construction and to review the Department's requirements for design services, design progress meetings, submissions, regulatory and other approvals, construction phase meetings, and other items including the project schedule. Personnel from the GESA Contractor's office, such as the principal of the firm, Project manager and Project superintendent, the GESA Contractor's Professional and its consultants, and the GESA Contractor's HVAC, plumbing and electrical subcontractors must attend since instructions will be given on completion of forms. DGS will provide copies of required forms either with the scheduling letter for the meeting or at the meeting.

B. During the Orientation Meeting, the Energy Consultant and/or DGS shall conduct the order of business and discuss specific requirements and particulars of Project.

C. The Energy Consultant and/or DGS shall appoint a person to take minutes of the Job Conferences. Prior to the next Job Conference, the appointed individual shall distribute a copy of the minutes, known as the Conference Report, to each addressee listed on the record.

2.2 Agenda for Orientation Meeting

A. Introduction of personnel by the Energy Consultant and/or DGS.

B. Brief overview of DGS Administrative Procedures and forms.

C. Overview of the Project Scope and Schedule.

D. Review of design, submission and approval requirements.

E. Question and answer period.

ADMINISTRATIVE PROCEDURE #3

DESIGN PROGRESS MEETINGS AND JOB CONFERENCES

3.1 General Information Regarding Job Conferences and Design Progress Meetings

A. Design Progress Meetings are held to address and document Design Phase activities and progress on the Project.

B. Job Conferences are held to address and document Construction Phase activities and the progress on the Project.

C. The Initial Job Conference will be held prior to the Initial Design Progress Meeting. The subsequent Job Conferences will be scheduled by the Energy Consultant and/or DGS subsequent to the commencement of on-site work by the GESA Contractor.

D. In the event that site development construction work begins prior to the completion of the Design Phase, both Job Conferences and Design Progress Meetings will be scheduled as required. The GESA Contractor's Professional and the Energy Consultant and/or DGS may elect to schedule these meetings on the same date.

3.2 General Information Concerning Job Conferences

A. The following persons are required to attend Initial, Regular, and Special Job Conferences:

GESA Contractor's Project Manager or equivalent
GESA Contractor's Professional
Energy Consultant,
Funding Agency representatives
Energy and Resource Management Office or designee

B. The Energy and Resource Management Office or Energy Consultant in its discretion schedules Special Job Conferences and will specify the required attendees.

C. The following representatives are permitted, but not required, to attend any Job Conference:

Funding Agency representatives
Facility representatives
Testing Laboratory Technicians
Other representatives, as appropriate (determined by DGS)

D. The Energy Consultant and/or DGS shall appoint a person to take minutes of the Job Conferences. Prior to the next Job Conference, the appointed individual shall distribute a copy of the minutes, known as the Conference Report, to each addressee listed on the record.

E. Failure of any required GESA Contractor representative to attend any Job Conference is a violation of the GESA Contract.

3.3 Initial Job Conference

A. **Notice and attendance**

1. The Energy Consultant and/or DGS will set a time, date, and place for the Initial Job Conference (IJC), which will be no later than the fifteenth day following the effective date of the contract.

2. The Notice initiating the IJC shall be addressed to the GESA Contractor with copies of the notice to the following:

GESA Contractor's Professional
Director of Energy and Resource Management Office
Funding Agency
Facility
DGS GESA Project File

3. The date of the Initial Job Conference is the Contract Start Date for purposes of calculating the Contract Completion Date.
4. During the IJC, the Energy Consultant and/or DGS shall conduct the order of business and discuss specific requirements and particulars of Project design and construction.
5. The Energy Consultant shall attach a separate sheet to the IJC Report, indicating the names, addresses and telephone numbers of the GESA Contractor, the GESA Contractor's Professional, the DGS Director of Energy and Resource Management Office and the Energy Consultant.
6. The Energy Consultant and/or DGS will distribute (email) the IJC Report as follows:

   DGS Director of Energy and Resource Management Office
   GESA Contractor
   GESA Contractor Energy Consultant
   Funding Agency
   All in attendance

7. Agenda for Initial Job Conference
   a. Introduction of attendees.
   b. Permits, Notices
   c. Establishment of date, time and location of the Initial Design Progress Meeting
   d. Establishment of GESA Contractor's projected start of on-site construction work.
   e. Establishment of date, time and location of the first Regular Job Conference
   f. Brief overview of General Conditions
   g. General Comments

B. **Design Meetings**

1. General Information Concerning Design Progress Meetings
   a. The following persons are required to attend Design Progress Meetings:

      GESA Contractor's Project Manager or equivalent
      GESA Contractor's Professional and its consultants
      Energy Consultant
      Funding Agency representatives
      Facility representatives

   b. The GESA Contractor schedules Design Progress Meetings in accordance with the requirements of the RFP and will specify additional required attendees.
   c. The GESA Contractor's Professional shall take the minutes of Design Progress Meetings. Within ten days of the meeting or not less than two days prior to the next Design Progress Meeting, whichever occurs first, the appointed individual shall distribute a copy of the minutes to each addressee listed on the record and to others as required by the RFP.
2. Initial Design Progress Meeting

a. At the Initial Job Conference, the GESA Contractor shall set a time, date, and place for the Initial Design Progress Meeting, which will be no later than the tenth day following the Initial Job Conference.

b. The Notice initiating the Design Progress Meeting shall be addressed to the Energy Consultant with copies of the notice to the following:

GESA Contractor
GESA Contractor's Professional
Energy and Resource Management Office
Funding Agency
Facility
Energy Consultant
Project Manager / Coordinator
DGS Project Coordinator

c. During the Design Progress Meeting, the GESA Contractor's Professional or its designee shall conduct the order of business.

d. Agenda for Initial Design Progress Meeting

(1). Introduction of attendees.

(2). A website link to the GESA Project Design Manual will be provided at the meeting.

(a). Meeting minutes and correspondence

(b). Project schedule, submissions and reviews

(c). Project scope and changes

(d). Required Funding Agency and Department approvals

(e). Pre-design activities

(i). Site visit and existing conditions verification

(ii). Available existing documents acquisition and review

(iii). Code analysis verification

(iv). Proprietary and restricted products

e. Preliminary and Final Submission requirements

f. Drawing, specification and design standards to be met.

3. Review and verification of materials included with the RFP, as applicable:

a. Scope of work and technical requirements

b. Site drawings, utilities and interferences

c. Environmental, archaeological and related impacts

d. Facility prototype drawings

e. Identified adjustments or corrections required to prototype

f. Structural criteria including geotechnical report impacts

g. HVAC, plumbing, fire protection and electrical criteria

h. Telecommunications and data criteria

i. Security criteria

j. Outline, and other, specifications

k. Codes, regulatory approvals and permits

l. Summarize determinations regarding site and facility criteria.

4. Other discussion
5. Establishment of date, time and location of the next Design Progress Meeting

C. **Regular Design Progress Meetings**

1. The GESA Contractor will hold Regular Design Progress Meetings as often as deemed necessary, however, in no case less than bi-weekly unless a longer interval is approved, in writing, by the Energy Consultant.
2. The GESA Contractor Professional, or designee, shall determine the required agenda, notify all required participants and conduct the meeting among all those concerned with Project design
3. The agenda of a Regular Design Progress Meeting shall include the following:
   a. General Review of minutes of the previous Design Progress Meeting
   b. Progress on Action Items, as noted on previous Design Progress Meeting minutes, must be noted. The manner in which the item was addressed should also be noted. Action Items will be included in each report until resolved.
   c. Presentation of current drawings and specifications
   d. Discussion of progress and identification of new Action Items
   e. Review of Design Progress Schedule
   f. Special attention will be given to items that are behind schedule.
   g. Projected work for the next bi-weekly period
   h. Delays
   i. The GESA Contractor should pay special attention to identifying any outstanding Action Item that may delay the completion of the construction documents.
   j. Information to be incorporated into completed minutes should include percentage of elapsed design time and estimated percentage contract document completion; date, time and place of the next Design Progress Meeting; and the name of the person who prepared the minutes.
4. The GESA Contractor Professional or designee will distribute Design Progress Meeting minutes to the following:

   GESA Contractor
   GESA Contractor's Professional
   Energy and Resource Management Office
   Funding Agency
   Facility
   Energy Consultant
   Project Manager / Coordinator
   DGS Project Coordinator

D. **Construction Job Conference**

1. The GESA Contractor will hold bi-weekly Job Conferences unless DGS agrees to a longer interval. If needed DGS may direct for these meeting to be held weekly.
2. The agenda of a Regular Job Conference shall include the following:
   a. General Review of Previous Report
      (1). Unsatisfactory conditions and/or workmanship, as noted on previous Job Conference Reports, must be noted when corrected and accepted on first report following correction. The manner in which the correction was made should also be noted. The unsatisfactory item will be included in each report until correction is made.

b. General discussion of Job Conditions

c. Review of past due Shop Drawings

d. Review of outstanding Change Orders

e. Review of Progress Schedule

f. Special attention will be given to items that are behind schedule.

g. Projected work for the next bi-weekly period

h. Delays

(1). The GESA Contractor should pay special attention to ensure that any delays are documented on the Job Conference Reports, since Extensions of Time will be determined from the information provided at the Job Conference.

i. Information to be incorporated into completed Job Conference Reports may include, but is not limited to, percentage of elapsed Project time; percentage of Project payment; percentage of Project job completion (based upon physical inspection); date, time and place of the next Project job conference; and the name of the person who prepared the report.

3. The Energy Consultant will distribute Regular Job Conference Reports to the following:

GESA Contractor
GESA Contractor's Professional
Energy and Resource Management Office
Funding Agency
Facility
Energy Consultant
Project Manager / Coordinator
DGS Project Coordinator

E. **Special Job Conferences**

1. The Energy and Resource Management Office or Energy Consultant may call a Special Job Conference to consider any emergency or unusual job condition. Only the subject(s) mentioned in the notice of the Special Job Conference shall be discussed.

ADMINISTRATIVE PROCEDURE #4

CONTRACT BREAKDOWN SHEET

4.1 The GESA Contractor shall prepare and submit, the Contract Breakdown Sheet to Funding Agency for its approval within 45 days of the effective date of the contract and prior to submission of the GESA Contractor's first Application for Release of Payment. The GESA Contractor will use the Cost Proposal form completed in response to the RFQ as the basis for the Contract Breakdown Sheet. Funding Agency will require at least ten working days to review and approve the breakdown sheet or any Supplemental breakdowns.

4.2 The GESA Contractor may request a meeting with the Funding Agency or Energy Consultant, for the purpose of reviewing a work copy of the Contract Breakdown Sheet. The GESA Contractor shall prepare the Contract Breakdown Sheet work copy prior to the requested meeting.

4.3 Following review of the Contract Breakdown Sheet work copy, the GESA Contractor shall transmit the original and one copy of the final Contract Breakdown Sheet by letter to the Funding Agency and Energy Consultant.

4.4 The Energy Consultant shall, within five days of receipt, review and recommend approval or disapproval of the Contract Breakdown Sheet based on items indicated in this Administrative Procedure and the reasonableness of costs. The Energy Consultant should then sign and date the Contract Breakdown Sheet and forward it to the Funding Agency, by letter of transmittal, along with any comments or discrepancies noted. The Contract Breakdown Sheet is not to be returned to the GESA Contractor for correction.

4.5 The Energy Consultant shall not approve any Application for Release of Payment until Funding Agency has approved the Contract Breakdown Sheet.

4.6 The Funding Agency-approved Contract Breakdown Sheet will be the basis for the GESA Contractor's Applications for Release of Payment. Funding Agency may also use the Contract Breakdown Sheet to determine the cost or credit to DGS resulting from changes in the work.

4.7 General Information

A. The GESA Contractor shall show the Contract Bond as the first item. The bond cost shall not exceed two percent of the contract award amount.

B. If a Roof Bond/Guarantee is required, it must be listed separately as the second item.

C. Temporary heat is required to maintain a minimum temperature. All cost and equipment will be the responsibility of the ESCO contractor

D. The GESA Contractor must list items according to Energy Conservation Measures and break the ECMs into buildings or floors.

E. The GESA Contractor shall not show temporary services and/or equipment furnished at the GESA Contractor's cost. The GESA Contractor must pro-rate the cost of these items (with the exception of temporary heat) throughout the items of work, material and/or equipment to which the cost pertains.

F. The GESA Contractor shall include a single line item for mobilization in its Contract Breakdown Sheet, limited to include only those items listed in the General Conditions of the GESA Contract. The total for mobilization shall not exceed 1.5 % of the contract award amount, nor shall it exceed $90,000 for contracts where the total contract amount

is $6,000,000 or less. For contracts exceeding $6,000,000, mobilization costs will be determined by negotiation prior to submission of the Contract Breakdown Sheet.

G. The GESA Contractor shall show excavation and backfill as separate items. If hand excavation is required, it must also be separately listed. All excavation and backfill quantities shall be indicated in cubic yard units. If there is no backfill, an explanation must be provided.

H. Concrete for structures is to be indicated in cubic yard units. Concrete sidewalk and concrete paving may be indicated as square yard units. All unit prices for concrete work shall include forming. Forming may not be indicated as a separate line item.

I. Painting must be a separate item, listed in square feet. DGS will not accept lump sum painting costs.

J. The GESA Contractor shall not use the terms “furnish” or “install” as part of the description of a line item. Procurement and installation costs must be included in the line item of work. The only exception shall be in cases where materials or equipment are furnished by the Department, the Funding Agency or another Commonwealth of Pennsylvania entity for the GESA Contractor’s use in the Project.

K. “Demolition” shall include, in parentheses, the specific item(s) to be demolished.

L. The GESA Contractor shall include scaffolding in the item with which it is associated, not as a separate line item.

M. The GESA Contractor may show sheet metal work as two items, i.e., (a) Sheet metal shop drawings and (b) Sheet metal fabrication and installation. Shop drawings must be shown at actual cost, as a “lump sum” item. The GESA Contractor shall obtain DGS’s approval of the shop drawings prior to Application for Release of Payment. If a subcontractor is used for shop drawings, a copy of the subcontractor’s invoice must be attached to the Application for Release of Payment when the GESA Contractor requests payment for the shop drawings.

N. When balancing of heating and ventilating systems is required by the specifications, the GESA Contractor shall show it as a separate item.

O. Lump Sum items cannot be released for payment until the item is finished, inspected, and accepted by DGS.

P. The GESA Contractor may submit a supplemental breakdown for those items listed as Lump Sum on the original approved Contract Breakdown Sheet at a later date, indicating quantity, unit price and extensions for all items to be furnished and installed under each Lump Sum item. Lump Sum items should be kept to a minimum. Supplemental breakdowns are not permitted for items where partial payment has been made.

Q. The GESA Contractor’s initial Contract Breakdown Sheet must designate any work to be subcontracted by noting such in parenthesis after the scope of work, such as “Painting (subcontracted)”. The line item for subcontract work may be broken into as many sub-items as necessary, including building, area or floor.

R. A separate line item is required for each purchase order or subcontract issued to a Small Diverse Business and/or Veteran Business Enterprise Supplier. The line item for the purchase order or subcontract may be broken into as many sub-items as necessary, including building, area or floor. The value for the purchase order or subcontract line item (or the sum of the sub-items) shall be identical to the value of the purchase order or subcontract.

S. Descriptions shall be clear and concise for each item of work, material, or equipment, using the same designation as the specifications. The GESA Contractor shall list all items (examples: concrete masonry units, conduit, pipe fittings, wire, cable, etc.) by type and size to be installed.

T. The GESA Contractor shall list operation and maintenance manuals as one line item. The value shall be not less than 1% of the contract award amount and is subject to the approval of the DGS Director of Energy and Resource Management Office or Energy Consultant.

U. The GESA Contractor shall list Record Drawings (as-built drawings) as one line item. The value, which is subject to the approval of the Director of Energy and Resource Management Office or Energy Consultant, shall be at least 2% of the contract award amount.

ADMINISTRATIVE PROCEDURE #5

PROJECT SCHEDULE

5.1 Project Schedule

The Project Schedule shall be developed using the Critical Path Method. The schedule shall be developed, prepared, and submitted in accordance with the same requirements and time frames as required by the General Conditions of the GESA Contract and the requirements of this Administrative Procedure, in addition to the following:

A. The CPM Schedule is to be created by the GESA Contractor.

B. The GESA Contractor shall complete all work in accordance with the accepted Project Schedule. The Project Schedule will reflect the decisions of the GESA Contractor as to sequence, duration, construction logic and all means and methods of construction.

C. The Project Schedule shall be reviewed at the Initial Job Conference. No Application for Release of Payment beyond #1 will be approved by DGS until the Project Schedule is submitted by the GESA Contractor and accepted by DGS.

D. DGS will not automatically grant an extension of time due to activity time delays. As a contract modification or delay may result in only absorbing a part of the available total float that may exist within an activity or chain of activities, the modification or delay may not affect existing critical activities or interim milestone dates or cause non-critical activities to become critical.

E. Total float is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every activity in the Project Schedule. Float is not for the exclusive use or benefit of either DGS or the GESA Contractor. DGS will consider extensions of time to interim milestone dates or the Contract Completion Date only to the extent that equitable time adjustments to the activity or activities affected by the contract modification or delay exceeds the total float of the affected or subsequent paths and extends any interim milestone date or the Contract Completion Date.

F. If the time limits set for preparation and submission of the Project Schedule are not met, DGS will prepare the schedule which the GESA Contractor must adhere to. The costs DGS incurs in preparing the schedule will be assessed to the GESA Contractor by credit change order.

G. General Information

1. The GESA Contractor shall list design activities, indicating Required Submissions dates and required review time.

2. The GESA Contractor shall list items of construction as they will be installed, listing each ECM separately The GESA Contractor shall also include in its schedule submissions of shop drawings for approval, approval of shop drawings, placing of material orders, and delivery of materials.

3. The GESA Contractor is responsible for assuring that any/all subcontract work as well as work performed by its own forces, is included in the schedule.

4. The Project Schedule shall reflect Early Start/Early Finish Dates, Late Start/Late Finish Dates, and available float or slack time for each and every activity.

5. The GESA Contractor shall identify and incorporate construction progress milestones into the Project Schedule in accordance with the General Conditions of the GESA Contract. The milestones shall signify the start date or completion date of a specific activity that is critical to the completion of the project on schedule.

ADMINISTRATIVE PROCEDURE #6
REQUEST FOR APPROVAL OF MATERIALS
AND/OR SUBCONTRACTORS

6.1 The GESA Contractor shall prepare and submit the submissions as required by the General Conditions of the GESA Contract, and this Administrative Procedure.

6.2 The GESA Contractor shall number each submission and each page within each submission consecutively and shall give resubmissions the same number as the original submission.

6.3 The GESA Contractor shall submit a copy of the Certification for Welders and a copy of the License for Blasters.

6.4 If the GESA Contractor has a financial interest in a Subcontractor, Sub-subcontractor or Supplier, it must disclose its relationship to the Subcontractor, Sub-subcontractor or Supplier in accordance with the General Conditions of the GESA Contract.

6.5 Prior to the commencement of work by any Subcontractor, Sub-subcontractor or Supplier, the GESA Contractor must submit a copy of the Subcontractor/Supplier Agreement, in accordance with the General Conditions of the GESA Contract to the Energy Consultant. The Energy Consultant shall retain this copy for the Field Office files The GESA Contractor shall also submit a copy of every Agreement with a Small Diverse Business and/or Veteran Business Enterprise (MBE, WBE, VBE, or SDVBE) to the Department's Bureau of Small Business Opportunities.

6.6 The GESA Contractor shall specifically identify the Subcontractor, Sub-subcontractor or Supplier on a separate line on the Contract Breakdown Sheet (if known prior to approval), or on the Application for Release of Payment as described more completely elsewhere in the Administrative Procedures.

6.7 The Energy Consultant will review the submission for compliance with the RFP and notify the Energy and Resource Management Office of his/her findings. If any discrepancies are found, the Energy Consultant shall notify the GESA Contractor's Professional in writing.

6.8 It is the GESA Contractor's Professional's responsibility to check each item for conformity with the requirements of the specifications and design performance. The GESA Contractor's Professional will indicate by stamp whether each item is approved, disapproved (with the reason), or that approval is withheld, pending submission of additional qualifying material or information (catalog cuts, engineering data, test data, etc.) from the GESA Contractor.

6.9 The GESA Contractor's Professional will make distribution of the approved submission as follows:

A. One copy to the DGS Director of Energy and Resource Management Office

B. One copy to the GESA Contractor

C. One copy to the Energy Consultant

D. One copy to the Funding Agency

ADMINISTRATIVE PROCEDURE #7
MATERIALS TESTING AND BALANCING

7.1 Materials and Concrete Testing (General Requirements)

A. The GESA Contractor shall:

1. Give the funding agency timely notice of its readiness and of the date arranged, so Energy Consultant/Funding Agency may observe such inspection or testing.

2. Bear all costs of inspections and tests, unless otherwise specified. All expenses incurred in the collecting, packing, and delivering of samples of materials or equipment to or from the Project site or laboratory will be paid by the GESA Contractor, unless otherwise noted in the General Conditions, Specifications, or Contract Drawings.

3. The contractor shall inform the Energy Consultant, Funding agency and/or DGS of test a minimum of 7 days before test.

4. For concrete cylinders, each cylinder shall be numbered consecutively and prefaced for design mix tests, precast concrete, and prestressed concrete. The type of cylinder shall be noted on the form as follows:

DM - Design Mix
PC - Precast Concrete
PS - Prestressed Concrete

5. Cylinders for concrete other than these types will not be prefaced. Approved samples to be incorporated into the work shall be returned to the site by the Testing Laboratory.

B. The GESA Contractor's Professional shall:

1. Secure from the Testing Laboratory an original and four copies of the test reports and distribute as follows:

2. The Original must be sent to the DGS Director of Energy and Resource Management Office, with copies to the Energy Consultant and Funding Agency.

3. Any reports showing deficiencies in test results will be immediately communicated by the GESA Contractor's Retained Professional to the GESA Contractor, Energy and Resource Management Office, Funding Agency, and Energy Consultant.

7.2 Concrete Testing (Approval of Mix Computations)

A. The GESA Contractor (or testing laboratory) shall prepare Forms, Concrete Mix Computation, in an original and four copies for each type of design mix to be used. Forms shall be forwarded to the GESA Contractor's Professional for review and approval. All information required by the form must be provided.

B. The GESA Contractor's Professional shall review the Forms for compliance with the Contract Documents and approve/disapprove as appropriate. It shall forward all copies to the Energy Consultant for review and distribution.

C. Upon receipt of the approved forms from the Energy Consultant, the GESA Contractor shall instruct the testing laboratory to pick up samples for mix design testing from either the batch plant or the site. An original of Forms, Laboratory Sample or Field Test Identification,

must accompany each sample to be tested. A separate form must be submitted for each test. These forms may be obtained from the Energy Consultant.

7.3 Manufacturer's High Voltage Cable Test Report (Birth Certificate)

A. The GESA Contractor will ensure the Cable Test Report (Birth Certificate) complies with the Contract Documents. The GESA Contractor shall submit a copy of this report to the GESA Contractor's Professional, with copies to the Energy Consultant.

B. The GESA Contractor's Professional will review the report for compliance with the Contract Documents, affix a stamp of approval directly to each copy of the report, and forward all copies to the Energy Consultant. Only a stamp as indicated in the sample provided in Administrative Procedure #8 will be accepted.

C. High Voltage Cable may not be installed until DGS approves the Manufacturer's Cable Test Reports.

D. If the GESA Contractor's Professional disapproves the report, the GESA Contractor's Professional shall return all copies to the GESA Contractor with a letter of explanation. Copies of this correspondence must be sent to the Energy and Resource Management Office and Energy Consultant.

7.4 High Voltage Cable Field Test Report

A. The GESA Contractor shall, by letter of transmittal, submit an original of the report to the GESA Contractor's Professional, with a copy of the transmittal letter and report to be sent to the Energy and Resource Management Office and Energy Consultant.

B. The GESA Contractor's Professional shall, upon receipt from the GESA Contractor, review the Field Test Report for compliance with testing procedures and Contract Documents. If the report is approved, the GESA Contractor's Professional will affix its stamp of approval directly to each copy of the report and forward all copies to the DGS Director of Energy and Resource Management Office and Energy Consultant.

C. DGS will consider approving the release of payment for High Voltage Cable only after (a) the Manufacturer's Test Report is approved, and (b) the cable is installed, and (c) the Field Test Report is approved by the GESA Contractor's Professional and (d) reviewed by DGS.

D. If it disapproves the report, the GESA Contractor's Professional shall advise the GESA Contractor of the appropriate corrective action to assure compliance with the Contract Documents. When it approves the Field Test Report, the GESA Contractor's Professional will distribute the report in accordance with Paragraph "B" of this section.

7.5 HVAC Systems Balancing Report

A. The GESA Contractor shall submit an original of the HVAC Systems Balancing Report to the GESA Contractor's Professional. The Energy and Resource Management Office and Energy Consultant must be copied on the transmittal letter and the Report.

B. The GESA Contractor's Professional shall review the Balancing Report for compliance with balancing procedures and the Contract Documents. If approved, the GESA Contractor's Professional shall affix its stamp of approval directly to each copy of the report and forward all copies to the Energy Consultant and/or DGS. Only a stamp as indicated in the sample provided in Administrative Procedure #8 will be accepted. The Director of Energy and Resource Management Office must be copied on the transmittal letter.

C. If the report is disapproved, the GESA Contractor's Professional shall advise the GESA Contractor of the appropriate corrective action to assure compliance with the Contract Documents. The GESA Contractor's Professional must notify the Energy Consultant that the report has been disapproved and state the proposed method of correction. When the report is approved the GESA Contractor's Professional shall proceed in accordance with Paragraph "B" of this section.

D. If the Energy Consultant and/or DGS disapproves any report or concurs with a "qualified" approval by the GESA Contractor's Professional, the GESA Contractor's Professional shall verify that the GESA Contractor has completed any required remedial action. The GESA Contractor's Professional shall notify the Director of Energy and Resource Management Office and Energy Consultant, in writing, that the GESA Contractor has completed the required remedial action. The GESA Contractor shall be responsible for the retesting and rebalancing of any and all zones affected by the corrective action. The GESA Contractor shall then resubmit a Balancing Report for these areas to the GESA Contractor's Professional in accordance with paragraph "A" of this section. The GESA Contractor's Professional shall review, approve, and distribute this Balancing Report in accordance with the requirements of paragraph "B" of this section.

E. Payment for test and balancing will not be made until the report(s) are approved by the DGS.

ADMINISTRATIVE PROCEDURE #8

SUBMITTALS

8.1 The GESA Contractor's Professional, Energy Consultant and/or DGS will review and approve all submittals in accordance with the applicable paragraph of the GESA General Conditions by stamping with an approval stamp. Only a stamp as indicated in the sample provided at the end of this section will be accepted.

8.2 The GESA Contractor shall make any corrections the GESA Contractor's Professional, Energy Consultant and/or DGS may require and resubmit the required number of corrected copies of shop drawings or new samples until approved. The GESA Contractor's Professional, Energy Consultant and/or DGS shall act on the resubmission within ten (10) days of its receipt, unless DGS approves a different period of time. The resubmission of submittals by the GESA Contractor and the subsequent review shall be in accordance the General Conditions of the GESA Contract.

8.3 The GESA Contractor shall distribute the Final Shop Drawings or Catalog Data by Email as follows:

A. GESA Contractor

B. Energy Consultant

C. Energy and Resource Management Office or Energy Consultant

D. Funding Agency

8.4 The GESA Contractor must maintain at the Project site one copy of all Project drawings, updated daily to indicate as-built conditions.

8.5 Any work commenced by the GESA Contractor prior to final approval of the submittals is performed at the GESA Contractor's own risk.

8.6 The box below is a sample of the "Approval Stamp" to be utilized by the GESA Contractor's Professional in the review and approval process of all submissions. **Only a stamp with the language as indicated in this sample will be accepted**.

☐	APPROVED	☐	NOT APPROVED
☐	APPROVED AS NOTED	☐	REVISE AND RESUBMIT

SIGNATURE/TITLE DATE

A note may be added to: Advise the GESA Contractor that quantities have not been verified. Advise the GESA Contractor that all materials must meet the requirements of the specifications.

ADMINISTRATIVE PROCEDURE #9

APPLICATION FOR PAYMENTS

9.1 General Information

A. The GESA Contractor's Applications for Release of Payment shall be prepared, submitted, and processed in accordance with the General Conditions of the GESA Contract and this Administrative Procedure.

B. DGS will not process an Application for Release of Payment until the Contract Breakdown Sheet, has been approved.

C. If the GESA Contractor submits an incorrect Application for Release of Payment, DGS will authorize release of payment for all items which are correct and notify the GESA Contractor, within fifteen days of the submittal, of the deficiencies in the Application. DGS will return Applications for Release of Payment to the GESA Contractor only if there is missing or incomplete paperwork.

D. When DGS receives an Application for Release of Payment, the Energy Consultant shall date and initial the Forms in the upper right corner. The Energy Consultant has three days, from the date of receipt to review, correct, and approve the Application for Release of Payment and forward the Application to the Energy and Resource Management Office.

E. The Energy and Resource Management Office shall review the copy of the Application for Release of Payment and notify the Energy Consultant of any required adjustments or changes within seven calendar days of receipt, with a written copy of any comments sent to the GESA Contractor.

F. The GESA Contractor will make any adjustments or changes required as a result of the DGS' review on the next Application for Release of Payment submitted after receipt of the Energy Consultant comments.

9.2 Prevailing Minimum Wage Certificate -

A. The GESA Contractor must attach a completed Form to each Application for Release of Payment to certify compliance with the payment of Prevailing Minimum Wages as required by the Contract Documents.

B. The GESA Contractor and its subcontractors are required to submit Form LLC-25 (formerly LIPW-128) or, if Davis-Bacon Wage Act applies to the contract, Form WH-347, to the Energy Consultant on a weekly basis.

9.3 Recapitulation of GESA Contractor's Application for Release of Payment

A. The GESA Contractor must number each application consecutively and complete the heading information.

B. The GESA Contractor must note "Final" when requesting release of final payment of the contract amount. If the GESA Contractor is revising a request for release of the final payment application, the "Post Final" must be noted.

C. The Amended Contract Amount is the Total Contract Award, plus or minus all DGS-approved change orders (debit or credit).

9.4 Application for Release of Payment of Labor, Materials/Equipment Incorporated

A. The GESA Contractor must provide a true and correct list, according to the item number(s) on the approved Contract Breakdown Sheet, of the Project work performed for each pay period.

B. The GESA Contractor shall list all items in numerical sequence, as shown on the Contract breakdown sheet, and carry all items on each Application for Release of Payment.

C. The GESA Contractor shall individually list all completed debit and/or credit change order work previously approved by Funding Agency under the heading “Executed Change Orders”.

D. Funding Agency may authorize payment of an approved change order on a percentage basis as the work is completed, upon the request of the GESA Contractor.

E. The GESA Contractor shall individually list all pending debit and/or credit change orders, which have received DGS scope authorization under the heading “Pending Change Orders”.

F. The GESA Contractor shall refer to the Administrative Procedures for information concerning the processing of Change Orders.

9.5 Stored Materials

A. The GESA Contractor may invoice stored materials when materials are ordered in advance and stored at the Project site pending their installation. Material scheduled for installation in fewer than forty-five days from the date of procurement is not eligible for payment as stored material.

B. The GESA Contractor must submit invoice for the materials with the Application for Release of Payment.

C. Prior DGS approval to store materials is not required. The signatures of the GESA Contractor and the Energy Consultant will signify that the material and amount have been reviewed and are correct.

D. The GESA Contractor is responsible for proper storage of the materials at the Project site. Materials shall be stored off the ground and properly protected from the elements.

E. The GESA Contractor shall submit separately for each Supplier.

F. The description of line items on the GESA Contractor’s Supplier invoice should be identical to the description on the GESA Contractor’s breakdown. If an item description on the Supplier’s invoice is not identical to the items on the breakdown sheet, the GESA Contractor must clearly describe, either on the invoice or an attachment, how the invoiced item(s) relate to the items on the breakdown sheet.

G. The GESA Contractor’s Supplier invoice must also show the Unit Wholesale Price and the Extended Unit Wholesale Price. The GESA Contractor may add information to the Supplier’s invoice for the purpose of clarity.

H. If items that are being submitted as stored material are combined with other items on a GESA Contractor’s Supplier invoice, the claimed stored items must be clearly identified.

I. When a Supplier’s invoice lists two or more separate items that are component parts of a previously submitted single line item on the breakdown sheet, a “Supplemental Cost Breakdown Sheet” must be submitted and approved prior to payment for the individual items. Line items with differing unit prices must be shown as separate items on the

Supplemental Cost Breakdown Sheet. Each component part must be shown as an individual item.

J. The GESA Contractor's submittal for each Application for Release of Payment, must also have the following documents attached:

1. Supplier's Invoice

2. Fire and theft insurance policy rider for the materials

3. Evidence of payment, or when payment has not been made, a letter on the GESA Contractor's letterhead authorizing payment to be made jointly to the GESA Contractor and the Supplier.

4. Power of Attorney (from bonding company)

9.6 Payroll Affidavit, GESA Contractor's Affidavit and Statement of Surety Company. Power of Attorney

A. The GESA Contractor must submit a Final Application for Release of Payment.

B. The GESA Contractor need not complete the Payroll Affidavit section if the prevailing minimum wage scale does not apply. However, the GESA Contractor must make a statement on the reverse side of the Payroll Affidavit indicating that the prevailing minimum wage scale does not apply.

C. The GESA Contractor should forward an original and two copies with the Application for Release of Payment, with a copy of the Power of Attorney attached to each.

9.7 For Each Application for Release of Payment

A. Prior to the Energy Consultant's submission and distribution of the Application for Release of Payment packets, they shall be assembled in the following order:

1. Application for payment

2. Application for Release of Payment of Labor, Materials/Equipment

3. Stored Materials

   a. Power of Attorney (from bonding company)
   b. Supplier's Invoice
   c. Fire and theft insurance policy rider
   d. Evidence of payment, or when payment has not been made a letter on the GESA Contractor's letterhead authorizing payment to be made jointly to the GESA Contractor and the supplier.

4. Payroll Affidavit, GESA Contractor's Affidavit and Statement of Surety Company. Power of Attorney (if Final Invoice)

5. Notarized LLC-25 (formerly LIPW-128) or WH-347 for federal funded projects (if Final Invoice)

B. Upon completion of the Energy Consultant's assembly of the Application for Release of Payment packets, the Energy Consultant will submit the original and two complete copies to the Energy and Resource Management Office. The Energy Consultant will complete the entire "Invoice Transmittal" and place it on top of the entire submission to the Energy

and Resource Management Office. It is not necessary to attach a transmittal to other copies. The Energy Consultant will attach two additional copies of the application for payment, without attachments, followed by the Invoice Correction Letter, to the back of the entire submission.

C. Upon Final Inspection, DGS will adjust the retainage to reflect the actual amounts withheld as set out in the General Conditions of the GESA Contract. The Application for Release of Payment packet will include the pertinent pages of the Final Inspection Report, including DGS's certificate detailing the incomplete items and value, pending credit change orders, liquidated damages, claims, and other pertinent information. To receive payment, the GESA Contractor must have completed or settled the open items listed on DGS's certificate. As individual paperwork items are completed, DGS may approve proportionately reduced retainage amount. The Energy Consultant shall attach the pertinent pages of the Final Inspection Report to the Application for Release of Payment noting items which have been resolved and shall calculate, insert, and highlight the adjusted retained amount on each copy of the Final Inspection Report attached to the Application for Release of Payment packets.

ADMINISTRATIVE PROCEDURE #10

Changes in Contract Work

10.1 General Information - Any change to the GESA Contract must be documented by either a Field Order or a Change Order according to the conditions for each as defined below.

A. Field Order - this condition can be defined as any change to the Contract which meets both of the following criteria:

1. The GESA Contractor and Energy Consultant and/or DGS agree that the change constitutes neither a net additional nor deductible cost to the Contract; and

2. The change consists of a minor relocation, substitution, or revision to quantity of contract items which does not constitute a significant design change and does not need to be documented by revision to Project Drawings and/or Specifications.

3. Field Orders are issued by the Energy Consultant and/or Funding Agency. The GESA Contractor shall request a Field Order in writing to the Energy Consultant and/or Funding Agency.

B. **Change Order** - this condition can be defined as any change to the Contract which does not meet all of the Field Order criteria. A change order may only be requested by GESA Contractor or Funding Agency.

4. **The Funding Agency will only issue a debit change order for unforeseen conditions. No change order other than unforeseen conditions will be issued unless it is for a credit.**

a. An unforeseen condition is defined as a site condition discovered that could not have been determined by the GESA Contractor during the site investigation or a condition that did not occur until after the project was awarded.

C. Emergency - If a change order condition is an emergency, it is essential that the Funding Agency issue the Change Order and authorize the GESA Contractor to begin work as soon as possible.

10.2 Step By Step Instructions - The following table lists actions comprising the total beginning to end route for a Change Order. All actions are to be performed chronologically.

STEP NO.	RESPONSIBLE FOR ACTION	ACTION
1	Funding Agency or GESA Contractor	Identify Unforeseen Condition.
2	GESA Contractor	Submit a request for Change Order with cost and scope and signed by Professional. Attach itemized cost breakdown for review and verify that costs are within remaining project contingency. Forward to Energy consultant and/or DGS.
3	Energy Consultant and/or DGS	Review to verify unforeseen condition. If cause correct, review breakdown for completeness and arithmetic accuracy. If correct, forward to the Funding Agency.
4	Funding Agency & DGS	Review completed Change Order Packet for accuracy and completeness.
5	Funding Agency& DGS	Review C/O for accuracy and validity. Forward to Energy Consultant for final review.

6	Energy Consultant and/or DGS	Review packet for validity and impact, if any, upon ECMs. Also verify costs within project contingency. If acceptable, sign and forward to Funding Agency for signature.
7	Funding Agency	Review and approve.
8	GESA Contractor	Perform Change Order work upon receipt letter. Upon completion of work, the GESA Contractor may invoice for work performed in an amount equal to the final determined cost.

10.3 General Comments as to Processing C/O.

A. **GESA Contractor and Professional** - The GESA Contractor shall describe in detail the unforeseen condition that constitutes a change from original contract. The description should include all reference drawings, sketches, specification sections, GESA Contractor's Professional scoping letters necessary to define the scope of work. GESA Contractor must provide a detailed cost breakdown of the actual costs. DGS will consider this cost to be the final binding cost for this Change Order unless an unforeseen change in scope occurs during the performance of the Change Order work. If any new work is being requested in lieu of specified contract work, the GESA Contractor should clearly define both the requested (new) and the superseded (specified) work. The description should also make reference to any Energy Conservation Measure impacted by the proposed change order.

B. **Cost Breakdown** - The Energy Consultant and/or DGS shall check the detailed cost breakdown and verify its accuracy. Any inaccurate information discovered in the cost breakdown that may be corrected by the Energy Consultant and/or DGS (such as math errors, incorrect application of overhead and profit, burden, and/or bond rate adjustment) should be adjusted in lieu of returning it to the GESA Contractor for correction by marking up a detailed breakdown and generating a cost to support the revised cost. Any missing, incomplete, or improper information that cannot be corrected t should be referred back to the GESA Contractor for correction. The resulting alternate cost basis should be forwarded to the Energy and Resource Management Office with copies to the GESA Contractor.

C. **Director Energy and Resource Management Office** - The Director of Energy and Resource Management Office shall review all components of the Change Order packet for completeness and accuracy. If the Energy Consultant's/DGS recommended cost is different from the GESA Contractor's, the Energy Consultant and/or DGS must include an alternate cost basis and listed in SECTION 4 of the GSC-1 Form.

10.4 Change Order Breakdown

A. The breakdown shall contain separate sections detailing materials, labor, equipment, subcontractors and a total cost.

1. **Material** - The Cost Breakdown shall list, as a minimum for each material item used, the material description, the unit and the quantity. The Cost Breakdown shall then include the total of all the individual cost totals which is defined as the pre-mark-up cost total. Any freight charges for specific materials listed must be included in the unit cost for the particular material. The Funding Facility will not authorize payment of any separate line items in the Cost Breakdown for such freight charges. The GESA Contractor may claim 5% mark-up for material.

2. **Labor** - The Cost Breakdown shall include for each labor classification listed, the number of workers, duration of work for each worker, the total labor hours, the classification description, the hourly base wage rate paid (BR), the total hourly wage rate paid (WR), the base rate individual cost (H x BR) and the wage rate individual cost (H x WR). The Cost Breakdown shall then include the total of all the individual base rate costs (TBR) and the total of all the individual wage rate costs (TWR). The hourly base wage rate (BR) is defined as the rate of wages paid by the employer

directly to the employee. The total hourly wage rate (WR) is defined as the total rate of wages paid by the employer including wages paid directly to the employee (BR) plus any employer participation or contribution to employee benefits paid on behalf of the employee. The GESA Contractor may claim 5% mark-up for labor. The Funding Facility will not authorize reimbursement of line items in the GESA Contractor's or Subcontractor's Cost Breakdown for items such as travel, lodging and per-diem.

3. **Equipment** - The Cost Breakdown shall include for each piece of equipment used to perform the work, the description of the piece of equipment used, the quantity of that particular piece used, the duration the piece of equipment was used, the rental rate for the duration used and the total rental cost. DGS expects the GESA Contractor to procure/provide the most economical rental rate available over the duration of the work performed. For example, if the piece of equipment was used over a four-week period, DGS will expect a monthly rate in lieu of a daily or weekly rate, if the monthly rate is more economical than the other two rates. The Funding Facility will not authorize payment of equipment costs for any piece of equipment not specifically identified, or for any tools such as hand tools used in the everyday performance of contract work. The GESA Contractor may claim sales tax paid for any piece of equipment rented from an outside (non-GESA Contractor owned) rental agency provided that a receipt showing the sales tax paid amount accompanies the cost breakdown. DGS will disallow sales tax for any rental item without such proper verification. The GESA Contractor may claim mark-up for overhead, general support and profit equal to 5% times the sum of the total rental costs plus the total applicable sales tax. The total rental costs are the sum of all the individual rental costs. The total applicable sales tax is the sum of all the individual verified sales taxes.

4. **Subcontractors** – A detailed cost breakdown from the Subcontractor is required from the GESA Contractor showing any Change Order work being performed by a Subcontractor. Include any costs for the GESA Contractor's Professional as subcontract work. For those breakdowns containing work performed by one or more Subcontractors, the GESA Contractor is responsible for clarifying somewhere in the breakdown, the exact scope of work being performed by each Subcontractor. The GESA Contractor may claim mark-up for overhead, general support and profit equal to 5% times the sum of the total costs realized by the GESA Contractor's Subcontractor in performance of the work.

5. **Summary** - At the end of the detailed cost breakdown, the GESA Contractor shall list individually the total costs of material, labor, equipment, sub-contracts and deductions. The GESA Contractor shall then apply the adjustment to contract bond which is equal to the GESA Contractor's bond rate times the Change Order cost subtotal. DGS considers the appropriate bond adjustment rate to be equal to the percentage rate used by the GESA Contractor to establish the contract bond amount shown on the GESA Contractor's original cost breakdown GSC-30 previously approved by DGS.

6. **Change Order Approval Letter** (see example format provided in this manual section) will be issued to the GESA Contractor by the Funding Agency upon review and approval of every Change Order not disputed by DGS. This letter authorizes the GESA Contractor to perform the subject work, and upon completion of work, invoice for that work in a cost amount equal to the final determined cost which has been agreed to by the GESA Contractor and the Funding Agency.

7. **Disputed Change Order** - A Disputed Change Order Approval Letter (see example format provided in this manual section) will be issued to the GESA Contractor by the Funding Agency on any Change Order which contains a GESA Contractor's cost proposal being disputed. The letter authorizes the GESA Contractor to perform the work, and upon completion of work, invoice for that work in a cost amount equal to the final cost as determined by the Funding Agency and in conflict with the GESA Contractor's proposed cost. The letter will establish DGS' determined cost and the

GESA Contractor's rejected proposed cost. If the GESA Contractor disputed the Funding Agency's cost, additional compensation may be pursued after completion of the Change Order work by pursuing a Field Dispute Resolution.

pennsylvania
DEPARTMENT OF GENERAL SERVICES

GESA CHANGE ORDER

Project: GESA _____
Agency: _____
Locale: _____

GESA Contractor: _____

CHANGE ORDER #: _____

FINAL DGS APPROVED C/O COST $ _____ (To be filled out by DGS)

SECTION 1 GESA Contractor's Professional's Scope of Work (Complete and forward to Funding Agency)

The description of this construction change (including reference to drawings/sketches to define scope) is as follows:

GESA Contractor agrees to furnish and or delete labor and materials in order to complete the construction included within the scope of this Change Order to contract plans and specifications for the net additional or deductible cost amount of :$ _____ in accordance with the attached cost breakdown. GESA Contractor further agrees that the completion date for construction as contained in the contract shall not be changed by approval of this Change Order without the submission of a request for an extension of time to the DGS of General Services on forms provided for such purposes.

GESA Professional Signature: _____ Date _____

GESA Contractor Signature: _____ Date _____

SECTION 2-RECOMMENDATION OF Energy Consultant and/or Funding Agency

Check one box only:

☐ GESA Contractor's breakdown costs have been checked and are recommended.

☐ GESA Contractor's breakdown costs are not recommended. Energy Consultant and/or Funding Agency cost of $ _____
I have enclosed a separate breakdown.

Approval of this Change Order:

☐ Recommended ☐ Not recommended

APPROVAL OF FUNDING AGENCY:

Signature _____ Date _____

Funding Agency

APPROVAL OF ENERGY CONSULTANT (if applicable):

Signature _____ Date _____

Energy Consultant

EXAMPLE COMPLETED COST BREAKDOWN

GESA Contractor'S NAME

MATERIAL

QTY. (Q)	UNIT (U)	DESCRIPTION	UNIT COST (MU)	COST TOTAL (Q x MU)	LABOR HOURS (OPTIONAL) HOURS/UNIT (HU)	TOTAL HOURS (Q x HU)
8000	S.F.	1/2" GYPSUM WALL BOARD	$0.15	$1,200.00	.008	64
15	EACH	DOUBLE HUNG WINDOWS	$120.00	$1,800.00	.800	12
		PRE-MARK-UP MAT'L. COST TOTAL		$3,000.00	TOTAL LABOR HRS.	76
		6% SALES TAX		$180.00		
		SUBTOTAL		$3,180.00		
		10% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)		$318.00		
		TOTAL MATERIAL COST		$3,498.00		

LABOR

NUMBER OF WORKERS	DURATION	HOURS (H)	CLASSIFICATION	HOURLY BASE RATE (BR)	TOTAL HOURLY WAGE RATE (WR)	BASE RATE COSTS (H x BR)	WAGE RATE COST (H x WR)
2	38	76	CARPENTER	$20.27	$30.59	$1,540.52	$2,324.84
TOTAL LABOR HOURS		76		TOTAL BASE RATE COST (TBR)		$1,540.52	
					TOTAL WAGE RATE COST (TWR)		$2,324.84

RATE	MANDATED BURDEN		
7.65%	SOCIAL SECURITY (ON TOTAL TBR)	$117.85	
12.39%	UNEMPLOYMENT TAXES (ON TOTAL TBR)	$190.87	
8.90%	WORKMEN'S COMP. INS. (ON TOTAL TBR)	$137.11	
2.46%	PUBLIC LIABILITY INS. (ON TOTAL TBR)	$37.90	
	TOTAL MANDATED BURDEN (TMB)	$483.73	$483.73
	SUBTOTAL LABOR COSTS (TWR + TMB)		$2,808.57
	15% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)		$421.29
	TOTAL LABOR COST		$3,229.86

EQUIPMENT

DURATION	QTY.	EQUIPMENT	RENTAL RATE FOR DURATION	RENTAL COST
N/A	1	N/A	N/A	N/A
			% SALES TAX (IF RENTED)	
			SUBTOTAL EQUIPMENT COST	
			10% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)	
			TOTAL EQUIPMENT COST	$0

SUBCONTRACTORS (IF APPLICABLE)

COMPANY	*Total Cost From Attached Subcontractor's Detailed Breakdown	*TOTAL COST
XYZ Paving		$31,973.26
	SUBTOTAL	$31,973.26
	10% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)	$3,197.33
	TOTAL SUBCONTRACTS	$35,170.59

SUMMARY

TOTAL MATERIAL	$3,498.00
TOTAL LABOR	$3,229.86
TOTAL EQUIPMENT	N/A
TOTAL SUBCONTRACTS	$35,170.59
LESS DEDUCTS (Explain Separately)	N/A
SUBTOTAL	$41,898.45
2.0% BOND COST ADJUSTMENT(ON SUBTOTAL)	$837.97
TOTAL PROPOSAL	$42,736.42

GESA Contractor's Signature

XYZ PAVING (SUBCONTRACTOR)

MATERIAL

QTY. (Q)	UNIT (U)	DESCRIPTION	UNIT COST (MU)	COST TOTAL (Q x MU)	LABOR HOURS (OPTIONAL) HOURS/UNIT (HU)	TOTAL HOURS (Q x HU)
4900	S.Y.	3" BITUM. ASPHALT PAVING	$4.50	$22,050.00	.0196	96
			PRE-MARK-UP MAT'L. COST TOTAL	$22,050.00	TOTAL LABOR HRS.	96
			6% SALES TAX	$1,323.00		
			SUBTOTAL	$23,373.00		
			10% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)	$2,337.30		
			TOTAL MATERIAL COST	$25,710.30		

LABOR

NUMBER OF WORKERS	DURATION	HOURS (H)	CLASSIFICATION	HOURLY BASE RATE (BR)	TOTAL HOURLY WAGE RATE (WR)	BASE RATE COSTS (H x BR)	WAGE RATE COST (H x WR)
1	8	8	LAB. FOREMAN	$16.91	$24.80	$135.28	$198.40
7	8	56	LABORER	$16.16	$24.05	$904.96	$1,346.80
4	8	32	OPERATOR	$21.03	$31.69	$672.96	$1,014.08
TOTAL LABOR HOURS		96		TOTAL BASE RATE COST (TBR)		$1,713.20	
					TOTAL WAGE RATE COST (TWR)		$2,559.28

RATE	MANDATED BURDEN		
7.65%	SOCIAL SECURITY (ON TOTAL TBR)	$131.06	
11.91%	UNEMPLOYMENT TAXES (ON TOTAL TBR)	$204.04	
10.23%	WORKMEN'S COMP. INS. (ON TOTAL TBR)	$175.26	
3.17%	PUBLIC LIABILITY INS. (ON TOTAL TBR)	$54.31	
	TOTAL MANDATED BURDEN (TMB)	$564.67	$564.67
	SUBTOTAL LABOR COSTS (TWR + TMB)		$3,123.95
	15% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)		$468.59
	TOTAL LABOR COST		$3,592.54

EQUIPMENT

DURATION	QTY.	EQUIPMENT	RENTAL RATE FOR DURATION	RENTAL COST
1 DAY	1	ASPHALT PAVER 130 H.P.	$1200.00/DAY	$1,200.00
1 DAY	2	STEEL WHEEL ROLLERS	$230.00/DAY (EACH)	$460.00
1 DAY	1	PNEUMATIC WHEEL ROLLER	$225.00/DAY	$225.00
			6% SALES TAX (IF RENTED)	$113.10
			SUBTOTAL EQUIPMENT COST	$1,998.10
			10% OVERHEAD, GEN. SUPT. & PROFIT(ON SUBTOTAL)	$199.81
			TOTAL EQUIPMENT COST	$2,197.91

SUMMARY

TOTAL MATERIAL		$25,710.30
TOTAL LABOR		$3,592.54
TOTAL EQUIPMENT		$2,197.91
LESS DEDUCTS (Explain Separately)		N/A
	SUBTOTAL	$31,500.75
1.5% BOND COST ADJUSTMENT(ON SUBTOTAL)		$472.51
	TOTAL PROPOSAL	$31,973.26

CHANGE ORDER APPROVAL LETTER

Date: _____

GESA Contractor Name
GESA Contractor Address

Re: Change Order No._____
Project GESA - _____
Title_____
Location_____

To Whom it May Concern:

The [FUNDING AGENCY] has issued the subject Change Order to your firm in the approved debit/credit amount of $_____ to perform the following work scope:

This letter serves as the formal authorization and approval to perform the subject work and invoice for payment upon completion of the work. Enclosed is a copy of the approved Form GSC-1.

Sincerely.

[TITLE OF FUNDING AGENCY GESA

PROJECT

COORDINATOR/PERSONNEL]

cc: Director of Energy and Resource Management Office
Energy Consultant
Funding Agency

DISPUTED CHANGE ORDER APPROVAL LETTER (EXAMPLE FORMAT)

pennsylvania
DEPARTMENT OF GENERAL SERVICES

Date: _____

GESA Contractor Name
GESA Contractor Address

Re: Change Order No._____
Project GESA -_____
Title_____
Location_____

To Whom it May Concern:

The [FUNDING AGENCY] has issued the subject Change Order to your firm in the approved debit/credit amount of $_____ to perform the following work scope:

FA determined that your original cost breakdown amount of $_____ is too high. The discrepancy in cost is due to _____.

This letter serves as the formal authorization and approval to perform the subject work and invoice for payment upon completion of the work. Enclosed is a copy of the approved Form GSC-1.

If you disagree with this assessment and feel that the work involved is worth more than $_____, you may pursue a claim through the Field Dispute Review process.

Sincerely.

[TITLE OF FUNDING AGENCY GESA
PROJECT COORDINATOR/PERSONNEL]

cc: Director of Energy and Resource Management Office
Energy Consultant
Funding Agency

ADMINISTRATIVE PROCEDURE #11

REQUEST FOR EXTENSION OF TIME

All Requests for an Extension of Time shall be prepared and processed by the GESA Contractor and DGS in accordance with the General Conditions of the Contract, and this Administrative Procedure.

11.1 General Information

A. The DGS will furnish to the GESA Contractor the Request for Extension of Time form if requested. The GESA Contractor may copy the form if it needs more of them.

B. The GESA Contractor must verbally inform the DGS at the first Job Conference after any alleged delay it has encountered. No forms or correspondence are required at this time, however, the GESA Contractor should verify that the verbal notification of the alleged delay has been noted in the Job Conference Report. Within ten (10) days after the end of the alleged delay, the GESA Contractor must submit the form to the Energy Consultant and/or DGS. Failure to submit the form within ten days may result in the denial of the request.

C. The front of the form is for the GESA Contractor's use. The GESA Contractor must enter all required information and answer all questions to the best of its ability. Omission of data or failure to answer any of the questions will result in the form being returned to the GESA Contractor for completion (Please note that the Request Number will be assigned by the Energy Consultant and/or DGS). The GESA Contractor or its authorized representative is required to sign the Form in attestation of the submitted facts.

D. Only one delay shall be submitted on a Form, multiple delays must be submitted on separate forms.

E. If explanation of the delay is lengthy and/or the GESA Contractor wishes to attach additional documentation, it is permissible to indicate "see attached" in any appropriate area of the form. It is mandatory, however, that as much of a factual synopsis as possible be included on the form itself.

F. Claims for weather related delays must be substantiated by Weather Data, which may be secured from local weather records and/or the National Oceanic & Atmospheric Administration, National Climatic Center, Asheville, North Carolina 28801.

G. The GESA Contractor will keep one (1) copy of the Form and forward the original to the Energy Consultant and/or DGS.

H. Upon receipt of the Form, the Energy Consultant and/or DGS will review the form to assure the GESA Contractor has provided the required information, answered all questions and signed the form. If the information is incomplete the Energy Consultant and/or DGS will return the original form, with an appropriate explanation, to the GESA Contractor for correction and resubmission. If the form is in order the Energy Consultant and/or DGS will assign a sequential number, enter the received date and acknowledged date and return a copy to the GESA Contractor for its files. A request number will not be assigned until a properly completed form is received.

I. Within five days of receipt, the Energy Consultant and/or DGS shall review the extension request, GESA Contractor's supporting documentation, field documentation and all other sources of information required for evaluation by the DGS. Energy Consultants'/DGS recommendation shall be appended directly to the form in the appropriate area.

Additional sheets may be attached as required. The Energy Consultant and/or DGS shall also attach all pertinent information and documentation required to justify and support the recommendation. The form shall then be signed and dated by the Energy Consultant and/or DGS. A complete copy of the Form and all supporting documentation should be retained by the Energy Consultant and/or DGS. A copy of the transmittal letter only, shall be provided to the GESA Contractor and the Director of Energy and Resource Management Office.

ADMINISTRATVIE PROCEDURE NO. 12

SUBMISSION GUIDELINES FOR STEEL CERTIFICATIONS PURSUANT TO THE STEEL PRODUCTS PROCUREMENT ACT 73 P.S. §1881, ET SEQ.

12.1 GENERAL INFORMATION CONCERNING THE STEEL PRODUCTS PROCUREMENT ACT AND STEEL CERTIFICATIONS

A. The GESA Contractor shall submit Steel Certification forms to the Funding Agency. Only one fully executed certification form for each product is required to be submitted.

B. According to Section 1886 of the Steel Products Procurement Act (the Act), cast iron products are considered to be steel products. The appropriate certification form, therefore, is required to be submitted for cast iron products.

C. Aluminum and brass products are not steel products; therefore, steel certification forms are not required for such items.

D. Pursuant to Section 1884(b)(2) of the Act, DGS has created a list of exempt machinery and equipment steel products, which is posted on the DGS website at www.dgs.pa.gov If a product to be utilized on the project appears on the exemption list, steel certification forms are not required.

E. Modification or alteration of the Steel Certification forms is strictly prohibited.

F. Questions regarding steel certification submissions and/or compliance with the Act shall be submitted **in writing** to the Funding Agency as soon as possible after the Initial Job Conference. The Funding Agency will investigate and render a response in a timely fashion.

G. Nothing in this Administrative Procedure should be construed as relieving the GESA Contractor, Subcontractor, supplier, or fabricator from complying with the requirements of the Act. Steel Certification forms must be submitted and approved by Funding Agency personnel before a steel product arrives on site. If the GESA Contractor enters into a purchase order for a "steel product" prior to submitting acceptable steel certification, the GESA Contractor does so at its own risk and faces penalties which include, but are not limited to, nonpayment, and/or replacement costs, and/or debarment. If steel products are incorporated into the Project prior to the submission of proper certification, the GESA Contractor assumes the full risk of nonpayment, replacement costs and/or debarment if the products are not certifiable.

H. No Application for Release of Payment containing steel products will be processed until the appropriate steel certification form(s) has been approved by the Funding Agency.

I. Domestic availability will be determined as of the date the ST-4 form is submitted to the Funding Agency for approval.

J. The forms that follow ST-1 through ST-4 - have been developed by the Funding Agency of General Services for use on DGS projects. The DGS assumes no responsibility or liability for any use of these forms on the public works projects of any other entity subject to the Act.

K. The North American Free Trade Agreement (NAFTA) does not supersede or preempt the Act.

ST-1 GUIDLINES

FORM ST-1 MUST BE FILLED OUT FOR EACH "STEEL PRODUCT" ON THE PROJECT UNLESS OTHERWISE NOTED.

SECTION A

Line #1 This is the GESA Contractor's formal business name. If a sub's name appears on this form, the form must be rejected and resubmitted.

Line #2 This is the GESA Contractor's business address.

Line #3 This is the GESA Contractor's business phone number.

Line #4 This is the date the ST form is submitted to Funding Agency.

Line #5 This is the contract number for the project.

Line #6 This is the project description.

Line #7 This is the "steel product" being certified, such as an I-beam, angle, bolt, channel, etc. The GESA Contractor may not fill in the line with a description like "structural steel", heating unit" or "air conditioning system".

LINE #7 IS THE MOST CRITICAL PART OF THE FORM.
FAILURE TO PROPERLY FILL OUT LINE #7 ON EACH ST FORM
MAKES THE ENTIRE FORM INVALID AND A NEW FORM MUST BE SUBMITTED.

NOTE: The GESA Contractor does not have to submit a form for each **piece** of steel which is being put into the project. The GESA Contractor only has to submit an ST form for each **type** of steel product. For example, if the project needs 56 I-Beams of varying lengths, the contractor must submit **1 ST form** for "steel I-Beams" with a listing of the various sizes covered by that ST form. The contractor **does not** submit 56 ST-1 forms. If, on the other hand, only 30 of the I-Beams are identifiable (stamped) structural steel, the contractor submits an ST-1 form with Section B(1) marked off. The other 26 I-Beams are non-identifiable structural steel, so the contractor must also submit an ST-1 with Section B(2) marked off and attached the appropriate supporting documentation.

If the contractor is using different suppliers, each supplier must submit the appropriate steel form.

Line #8 This is the fabricator or supplier of the product listed on Line #7.

SECTION B

ONLY ONE OF THESE ITEMS CAN BE CHECKED AS APPLICABLE

_____1. Identifiable Steel Product

This type of steel product is limited to products which are stamped "made in the USA" or otherwise identifiable as U.S. Steel.

a) supporting documentation: GESA Contractor only needs to submit the ST-1 form. Funding Agency field personnel will verify the markings when product arrives on-site.

_____2. Non-identifiable Structural Steel Product

This type of steel product is limited to items of structural steel which are not marked as made in USA.

a) supporting documentation: GESA Contractor must also submit, attached to the ST-1 form, bills of lading, invoices and mill certificates.

_____3. Non-identifiable, Non-structural Steel Product

This type of steel product is every product which is non-structural steel, including, but not limited to, doors, door frames, windows, machinery and equipment.

a) supporting documentation: Fully executed ST-2

b) NOTE: A steel product may not appear on any Invoice until such time as the ST-1 and ST-2 are accepted by Funding Agency.

SECTION C

1. Language – **No modifications, cross-outs or alterations of any type may be made to the language of this certification paragraph.**

2. Signature – Two signatures are required on the ST-1 form. The GESA Contractor's President/Vice President must sign on one line **and** the Secretary or Treasurer must sign as a witness. The names should be typed or printed beneath the signature lines. Failure to type in the names **does not** invalidate the ST form.

FORM ST-1
STEEL ORIGIN CERTIFICATION

This form must be executed by the GESA Contractor and submitted to the Funding Agency. No steel product may be delivered on-site unless the Funding Agency has received an ST form. A completed form is required for each type of steel product (e.g., beams, columns, stairways, etc.), from each supplier but not for each piece of steel product.

A. TO BE COMPLETED BY THE GESA CONTRACTOR:

1. Name of Contractor's firm_____
2. Firm's address:_____
3. Firm's phone number:_____4. Date submitted:_____
5. Contract No._____6. Contract Title_____
7. Steel Product Certified:_____
8. Name & Address of Supplier:_____

B. **TYPE OF STEEL PRODUCT** (Check and complete one (1) applicable category):

9. _____ **Identifiable steel product**: 100% of the steel in the product is identifiably marked as manufactured in the United States.
   a. Other documentation required: **NONE**
   b. Manner in which steel product is identifiable:
      (1) _____ Stamped "Made in U.S.A."
      (2) _____ Stamped "Made in _____."
      (3) _____ Other: Explain:_____

10. _____ **Non-identifiable structural steel**: Less than 100% of the steel contained in the product is identifiable as provided above. Structural steel is defined as steel products used as a basic structural element of a project (i.e., steel beams, columns, decking, stairways, reinforcing bars, structural lintels, pipes, etc.)
    a. Other documentation **required:** Bills of lading, invoices and mill certificates that certify that the steel contained in the product was melted and/or manufactured in the United States.

11. _____ **Non-identifiable non-structural steel**: all other steel products including door and window frames, machines, equipment, etc.
    a. Other documentation **required**: Executed Form ST-2

CERTIFICATION: I, the undersigned office of the Contractor, do certify that, to the best of my knowledge, the steel product listed above complies with the provisions of the Steel Products Procurement Act (73 P.S. § 1881, et seq., as amended). I understand that by signing this document I certify that the facts contained herein are true. I further understand that this document is subject to the provision of the Unsworn Falsification to Authorities (18 P.S. § 4904) and the Steel Products Procurement Act, which provides penalties including, but not limited to, debarment from bidding on any Commonwealth of Pennsylvania public works project for a period of five years. I agree to provide documentation supporting these facts if requested by the Commonwealth. The Commonwealth reserves the right to pursue any action deemed necessary to protect the Commonwealth's interest and ensure compliance with the laws of the Commonwealth.

WITNESS:

_____ _____(Seal)

Name: Name:
Secretary or Treasurer President or Vice President

ST-2 GUIDELINES

FORM ST-2 MUST BE FILLED OUT FOR NON-IDENTIFIABLE, NON-STRUCTURAL STEEL PRODUCTS.

SECTION A **To be filled out by the Purchaser, the firm that pays the Fabricator**

Line #1 This is the name of the firm that is dealing directly with the Fabricator

Line #2 This is the purchaser's mailing address.

Line #3 This is the purchaser's business phone.

Line #4 This is the date the ST-2 form is sent to the fabricator.

Line #5 This is the Funding Agency contract number or the project.

Line #6 This is the Funding Agency project description.

Line #7 This is the "steel product" being certified, such as a chiller, condenser, hollow metal doors. The GESA Contractor may not fill in the line with a description like "structural steel", "heating unit" or "air conditioning Unit". The model number, if any, of the steel product must be listed as indicated.

LINE #7 IS THE MOST CRITICAL PART OF THE FORM.
FAILURE TO PROPERTY FILL OUT LINE #7 ON EACH ST FORM MAKES THE ENTIRE FORM INVALID AND A NEW FORM MUST BE SUBMITTED.

SECTION B **To be filled out by the Fabricator, the firm that assembles the product listed on Line #7.**

Line #1 This is the Fabricator's name.

Line #2 This is the Fabricator's mailing address.

Line #3 This is the Fabricator's business phone.

Line #4 This is the date the Fabricator receives the ST-2 from the Purchaser.

Line #5 This is the Fabricator's Federal I.D. number.

SECTION C

1. Language – **No modifications, cross-outs or alterations of any type may be made to the language of this certification paragraph.**

2. Signature – Two signatures are required on the ST-1 form. The GESA Contractor's President/Vice President must sign on one line and the Secretary or Treasurer must sign as a witness. The names should be typed or printed beneath the signature lines. Failure to type in the names **does not** invalidate the ST form.

FORM ST-2
STEEL ORIGIN CERTIFICATION:
NON-IDENTIFIABLE, NON-STRUCTURAL STEEL

This form must be executed by the Purchaser and the Fabricator of any item containing steel that is not structural steel. This form must be submitted to the Funding Agency. No steel product may be delivered on-site unless Funding Agency has received the ST form. Structural steel is defined as steel products used as a basic structural element or a project (i.e. steel beams, columns, decking stairways, reinforcing bars, pipes, etc.). Purchasers of structural steel products (contractors or subcontractors) **must** provide bills of lading, invoices **and** mill certifications that the steel was manufactured in the United States instead of this form. The Fabricator shall be herein defined as the firm that assembles the component parts of the product to be purchased. The Funding Agency of General Services will accept the certification of firms that are earlier in the chain of purchase (i.e. manufacturers of components, steel suppliers) in lieu of the Fabricator.

A. TO BE COMPLETED BY THE PURHCASER:

1. Name of purchasing firm:_____
2. Firm's address:_____
3. Firm's phone number:_____ 4. Date submitted to Fabricator: _____
5. Contract No. Funding Agency_____ 6. Contract Title:_____
7. Steel Product Certified:_____

Model:_____

B.TO BE COMPLETED BY THE FABRICATOR/MANUFACTURER:

1. Name of firm:_____
2 Address of firm:_____
3. Firms phone number:_____ 4. Date Received:_____
5. Federal Employer ID. No:_____

CERTIFICATION: I, the undersigned officer of the Fabricator/Manufacturer, do certify that our firm assembled/fabricated the components to the steel products listed in Section A, Item 7, and that all steel components therein are comprised of steel that is melted and/or fabricated in the United States. I understand that, by signing this document, I certify that I have received assurances from the suppliers/manufacturers of the components that said components do not contain foreign manufactured steel. I further understand that this document is subject to the provisions of the Unsworn Falsification to Authorities Act (18 P.S. § 4904). I also understand that I am subject to the provisions of the Steel Products Procurement Act (73 P.S. § 1881, et. seq.) which provides penalties including, but not limited to, debarment from supplying any products for Commonwealth of Pennsylvania Public works projects for a period of five (5) years for violations therein. I agree to provide documentation supporting these facts if requested by the Commonwealth. The Commonwealth reserves the right to pursue any action deemed necessary to protect the Commonwealth's interest and ensure compliance with the laws of the Commonwealth.

WITNESS:

_____ _____(Seal)

Name: Name:

Secretary or Treasurer President or Vice President

ST-3 GUIDELINES

2-STEP ELIGIBILITY ANALYSIS:

BEFORE A GESA CONTRACTOR CAN SUBMIT AN ST-3, THE FOLLOWING ANALYSIS MUST BE SATISFIED

STEP #1: The GESA Contractor must establish that the "product" **contains BOTH**:

• Steel melted in the USA

AND

• Foreign Steel

Note: Step #1 focuses upon the **content** of the "product".

Note: The % need not be close; it can be 99-1, so long as there is both foreign and domestic steel in the "product".

STEP #2: The GESA Contractor must establish that 75% of the **cost** of the "product" has been mined, produced or manufactured in the USA.

Note: Step #2 focuses upon the cost of the entire "product", not just the steel within it.

SECTION A

Line #1 This is the GESA Contractor's name.

Line #2 This is the GESA Contractor's business address.

Line #3 This is the GESA Contractor's phone number.

Line #4 This is the date the ST-3 is submitted to the fabricator.

Line #5 This is the contract number for the project.

Line #6 This is the project description.

Line #7 This is the "steel product" being certified, such as a chiller, condenser, hollow metal doors. The GESA Contractor may not fill in the line with a description like "structural steel", "heating unit" or "air conditioning unit". The model number, if any, or the steel product must be listed as indicated.

LINE #7 IS THE MOST CRITICAL PART OF THE FORM.
FAILURE TO PROPERLY FILL OUT LINE #7 ON EACH ST FORM MAKES THE ENTIRE FORM INVALID AND A NEW FORM MUST BE SUBMITTED.

SECTION B **To be filled out by the Fabricator/Manufacturer, the firm that fabricates the product listed on Line A7.**

Line #1 This is the Fabricator's name.

Line #2 This is the Fabricator's business address.

Line #3 This is the Fabricator's business phone.

Line #4 This is the date the Fabricator receives the ST-3 from the purchaser.

Line #5 This is the Fabricator's Federal I.D. Number.

Line #6 The Fabricator must insert the percentage of the cost of the articles, materials and supplies which have been mined, produced or manufactured in the U.S. for the product listed on Line A7.

SECTION C

1. Language – **No modifications, cross-outs or alterations of any type may be made to the language of this certification paragraph.**

2. Signature – Two signatures are required on the ST-3 form. The Fabricator's President/Vice President must sign on one line **and** the Secretary or Treasurer must sign as a witness. The names should be typed or printed beneath the signature lines. Failure to type in the names does not validate the ST form.

NOTES on ST-3 Forms:

• It is not necessary to submit an ST-1 with the ST-3.

• The Funding Agency reserves the right to request additional documentation to support the percentage specified on Line 14. If the Fabricator/manufacturer refuses to produce such documentation and/or the Funding Agency deems it to be in the Commonwealth's best interests, the Funding Agency may request the Office of Inspector General to investigate the submission of the ST-3 form.

FORM ST-3
75% U.S. MANUFACTURE CERTIFICATION

The Steel Products Procurement Act (73 P.S. § 1881, et. seq.) allows the use of steel products with **both** foreign and domestic steel **if at least 75 percent of the cost** of the materials (including steel, rubber, wood, plastics, etc.) in the product are manufactured or produced, as the case may be, in the United States.

This form must be executed by a Fabricator of any item containing BOTH U.S. AND FOREIGN STEEL. The fabricator shall hereby be defined as the firm that assembles the component parts of the product to be purchased. The Funding Agency will accept the certification of firms that are **earlier** in the chain of purchase (i.e., manufacturers of components, steel suppliers) in lieu of the Fabricator.

This form must be submitted to the Funding Agency. No steel product may be delivered on-site unless the Funding Agency has received an ST form.

A. **TO BE COMPLETED BY THE GESA CONTRACTOR (PURCHASER):**

1. Name of Contractor:_____
2. Address of Contractor:_____
3. Phone Number:_____ 4. Date submitted to Fabricator:_____
5. Contract No. Funding Agency:_____6. Contract Title:_____
7. Steel Product Certified:_____

   Model:_____

B. **TO BE COMPLETED BY THE FABRICATOR/MANUFACTURER:**

1. Name of Firm:_____
2: Address of Firm:_____
3: Firm's Phone number:_____ 4. Date Received:_____
5: Federal Employer ID No. _____

6 Percentage of the cost of the articles, materials and supplies which have been mined, produced or manufactured in the U.S. for the product listed above on line A7:_____

CERTIFICATION: I, the undersigned Officer of the Fabricator/Manufacturer, do certify that our firm assembled/manufactured the components to the steel product listed in Section 7, that the steel in said product is both foreign and domestically manufactured, and that all the facts contained in this document are true. I agree to provide documentation supporting these facts if requested by the Commonwealth. I further understand that this document is subject to the provisions of the unsworn Falsification to Authorities Act (18 P.S. § 4904) and the Steel products Procurement Act (73 P.S. §1881, et seq.) which provide penalties including, but not limited to, debarment from supplying any products for Commonwealth of Pennsylvania public works projects for a period of five (5) years for violations therein. The Commonwealth reserves the right to pursue any action deemed necessary to protect the Commonwealth's interest and ensure compliance with the laws of the Commonwealth.

WITNESS:

_____ _____(Seal)

Name: Name:

Secretary or Treasurer President or Vice President

ST-4 GUIDELINES

This form may be submitted in circumstances where the GESA Contractor believes that the "product" on Line #7 is not made in sufficient quantities to satisfy the requirements of the contract.

The information submitted by a GESA Contractor is subject to verification by the Funding Agency. Any GESA Contractor who executes a Purchase Order or other type of purchase agreement encompassing a "steel product" prior to receiving the Funding Agency's written determination that the "steel product" listed on Line #7 of the ST-4 form is not manufactured in sufficient quantity to meet the requirements of the project does so at its own risk and faces penalties including, but not limited to, non-payment for the product; removal and replacement of the product at its own costs; and/or an Office of Inspector General investigation which may lead to debarment.

DOMESTIC AVAILABILITY WILL BE DETERMINED AS OF THE DATE THE ST-4 FORM IS SUBMITTED TO THE FUNDING AGENCY FOR APPROVAL

Line #1 this is the GESA Contractor's formal business name.

Line #2 This is the GESA Contractor's business address.

Line #3 This is the GESA Contractor's business phone.

Line #4 This is the date the ST-4 form is submitted to Funding Agency.

Line #5 This is the contract number for the project.

Line #6 This is the project description.

Line #7 This is the "steel product" being certified, such as a chiller, condenser, hollow metal doors. The GESA Contractor may not fill in the line with a description like "structural steel", "heating unit" or air conditioning unit".

LINE #7 IS THE MOST CRITICAL PART OF THE FORM. FAILURE TO PROPERLY FILL OUT LINE #7 ON EACH ST FORM MAKES THE ENTIRE FORM INVALID AND A NEW FORM MUST BE SUBMITTED FOR APPROVAL.

Line #8 These four lines, (a) through (d), are to be filled out completely by the GESA Contractor. At least four suppliers/manufacturers must be contacted by the GESA Contractor to ascertain if the "product" on Line #7 is manufactured with domestic steel.

CERTIFICATION

1. Language – **No modifications, cross-outs or alterations of any type may be made to the language of this certification paragraph.**

2. Signature – Two signatures are required on the ST-4 form. The GESA Contractor's President/Vice President must sign on one line **and** the Secretary or Treasurer must sign as a witness. The names should be typed or printed beneath the signature line. Failure to type in the names **does not** invalidate the ST form.

NOTE ON ST-4 FORMS:

•It is not necessary to submit an ST-1 form with an ST-4 form.

FROM ST-4
NOT DOMESTICALLY MANUFACTURED

This form must be executed by the GESA Contractor and submitted to the Funding Agency. No steel product may be delivered on-site unless the Funding Agency has received, reviewed and provided written approval of the ST-4 form. An ST-4 form can only be submitted for approval when a steel product is not domestically produced in sufficient quantities. The Funding Agency will verify the accuracy of the information on the ST-4 form and will contact additional suppliers/manufacturers to ascertain the availability of a domestic steel product.

1. GESA Contractor:_____ 2. Address:_____
3. Phone Number:_____ 4. Date Submitted:_____ 5. Contract No. :_____
6. Contract Title:_____ 7. Steel Product:_____

8. Suppliers/manufacturers contacted by the GESA Contractor that claimed that the above product is not produced/manufactured with U.S. manufactured steel. At least four Suppliers/Manufacturers are needed. Manufacturers listed in specifications must be contacted.

a. Firm Name:_____ Phone Number:_____
Address:_____
Person Contacted:_____ Date Contacted:_____

b. Firm Name:_____ Phone Number:_____
Address:_____
Person Contacted:_____ Date Contacted:_____

c. Firm Name:_____ Phone Number:_____
Address:_____
Person Contacted:_____ Date Contacted:_____

d. Firm Name:_____ Phone Number:_____
Address:_____
Person Contacted:_____ Date Contacted:_____

CERTIFICATION: I, the undersigned Officer of the Contractor, do certify that I have contacted the firms listed in Section 9, and was informed that said firms do not produce/manufacture the steel product listed on Line 7 with U.S. Steel in sufficient quantities to complete the above-referenced project. I understand that this document is subject to the provisions of the Unsworn Falsifications to Authorities Act (18 P.S. § 4904) and the Steel Products Procurement Act, which provide penalties including, but not limited to, debarment from bidding on any Commonwealth of Pennsylvania public works project for a period of five years. The Commonwealth reserves the right to pursue any action deemed necessary to protect the Commonwealth's interest and ensure compliance with the laws of the Commonwealth.

WITNESS:

_____ _____(SEAL)
Name: Name:
Secretary or Treasurer President or Vice President

FORM ST-4 – FOR FUNDING AGENCY USE ONLY – CONTRACTORS – DO NOT WRITE ON THIS SIDE OF ST FORM

A. Funding Agency Field Personnel Receiving Form ST-4:_____

1. Date ST-4 submitted by GESA Contractor:_____

2. Funding Agency Reviewer:_____

3. Additional Suppliers/Manufacturers Contacted to verify domestic availability:

a. Firm Name:_____ Phone:_____

Address:_____

Person Contacted:_____ Date Contacted:_____

b. Firm Name:_____ Phone:_____

Address:_____

Person Contacted:_____ Date Contacted:_____

c. Firm Name:_____ Phone:_____

Address:_____

Person Contacted:_____ Date Contacted:_____

D. Office of Chief Counsel Date received:_____ Action (Accept/Reject):_____

E. Deputy Secretary Date received:_____ Action (Accept/Reject):_____

ADMINISTRATIVE PROCEDURE #13

Inspections

13.1 Occupancy/Utilization Inspection

A. The DGS may use or permit the Funding Agency to use or occupy any completed or partially completed portion(s) of the work in accordance with the General Conditions of the GESA Contract and this Administrative Procedure.

B. The Energy Consultant and/or Funding Agency will establish the date and time for an Occupancy/Utilization Inspection and will notify the following:

1. Director of Energy and Resource Management Office
2. Energy Consultant
3. GESA Contractor
4. GESA Contractor's Professional
5. Funding Agency
6. Facility

C. The inspection will be conducted to evaluate the area(s) to be occupied or equipment to be utilized for conformity to the Contract Documents. The use and/or occupancy of the work does not constitute acceptance of any portion so taken or used. The Occupancy/Utilization Inspection must be attended by the Funding Agency, the GESA Contractor's Professional, and the GESA Contractor.

D. The GESA Contractor's Professional shall conduct the inspection unless another party is designated by the Funding Agency. A report of the Occupancy/Utilization Inspection shall be prepared and distributed in accordance with Administrative Procedure No.1, by the GESA Professional or Energy Consultant within five work days of the inspection, and shall include the following information:

1. Project Number
2. Name of Facility
3. Project Description
4. Project Location
5. Area(s) and/or equipment to be occupied/utilized
6. Attendees along with their respective title and organization
7. The responsibilities of the GESA Contractor for maintenance, heat and utilities
8. A list of all items remaining to be completed or corrected in the area(s) to be occupied or equipment to be used
9. Form GSC-46, "Certificate of Occupancy/Utilization"

13.2 Form GSC-46, "Certificate of Occupancy/Utilization"

A. The Energy Consultant and/or Funding Agency will provide a copy of the Form GSC-46 to the GESA Contractor. The form must be prepared by the GESA Contractor's Professional and submitted in an original and four copies to the Energy Consultant and/or Funding Agency.

B. At the conclusion of the Occupancy/Utilization Inspection, the attendees shall review the responsibilities of the GESA Contractor for maintenance, heat and utilities, the remaining items to be completed or corrected and shall sign Form GSC-46 to indicate their concurrence with the items.

C. The work list, prepared by the GESA Contractor's Professional, DGS and the Funding Agency shall be appended directly to the Form GSC-46, additional sheets may be attached as required. The work list shall indicate, in detail, all items requiring completion or correction. The failure to include an item on the work list will not relieve the GESA Contractor of its responsibility to complete all work in accordance with the Contract Documents.

D. The Energy Consultant and/or Funding Agency shall, within five working days after receipt, review the Certificate of Occupancy/Utilization for completeness. If properly completed, the Energy Consultant/Funding Agency shall sign, date and distribute the Form GSC-46, with any attachments, in accordance with Administrative Procedure #1.

E. The Funding Agency shall not be permitted to occupy nor utilize any portion of the work until a fully executed copy of the Form GSC-46 has been received from the Energy Consultant and/or Funding Agency.

F. The date of the fully executed Form GSC-46 shall be the start date of any warranties or guarantees associated with the occupied area(s) or utilized equipment.

G. Any damage subsequent to the inspection due solely to the use and/or occupancy of the completed or partially completed portion of the work shall not be the responsibility of the GESA Contractor.

13.3 Final Completion Inspection

A. The Final Inspection shall be requested and conducted in accordance with the General Conditions of the GESA Contract, and this Administrative Procedure. The GESA Contractor's request for a Final Inspection must be submitted, in writing, to the Energy Consultant and/or Funding Agency.

B. Within thirty days of receipt of the request, the Energy Consultant and/or Funding Agency shall establish a date and time for the Final Completion Inspection and will notify the following:

1. Director of Energy and Resource Management Office or Energy Consultant
2. GESA Contractor
3. GESA Contractor's Professional
4. Project Site
5. Funding Agency

6. Facility

C. The Final Inspection must be attended by the Energy Consultant, Funding Agency, the GESA Contractor's Professional, and the GESA Contractor.

D. The GESA Contractor shall submit, at the Final Inspection, a final Application for Release of Payment to the Energy Consultant and/or Funding Agency. The final Application for Release of Payment should be completed and submitted in its entirety and in accordance with Administrative Procedure.

E. Line numbers 9, 10, 12 and 14 of the Form GSC-17, "Recapitulation of GESA Contractor Application for Release of Payment," should not be completed until the conclusion of the Final Inspection and all items requiring funds to be retained, as provided in the General Conditions of the Contract, Article 11, have been determined. At that time the GESA Contractor and the Energy Consultant and/or Funding Agency shall review the total amount to be retained, if any, and complete the applicable portions of the Form GSC-17. The Energy Consultant and/or Funding Agency shall then prepare and submit the final Application for Release of Payment to the Fiscal Division in accordance with Administrative Procedure #9.

F. The Funding Agency and Energy Consultant shall conduct the Final Inspection. The inspection shall include all aspects of the Contract(s), including any areas or equipment previously occupied or utilized by the Funding Agency or DGS. If the work is "substantially complete", in accordance with the General Conditions of the Contract, Article 1, Section 1.45, a report of the Final Inspection shall be prepared and distributed in accordance with Administrative Procedure #1, by the Energy Consultant within five work days of the inspection, and shall include the following information:

1. Project Number and Contract Number(s)

2. Name of Facility

3. Project Description

4. Project Location

5. Attendees along with their respective title and organization

6. A detailed list of all remaining work to be completed or corrected with a reasonable cost to complete each item and a statement that all items shall be completed within thirty days from the date of Final Inspection

7. The status of any pending change orders and the status of the associated work

8. The status of payment of approved change orders to include CO#, approval date, debit/credit and amount to be released for payment.

9. The status of claims, if any, to include the request date and position within the DGS system

10. The status of Requests for Extension of Time, if any, to include request date, number and position within the DGS system

11. Liquidated damages, if any, to include the number of days overrun, amount per day and total amount to be withheld

12. Recapitulation of retained amounts to include the following:

a. Punch List Items, plus one and one-half times the aggregate value of the items

b. Credit Change Orders

c. Pending Claims

d. Liquidated Damages

13. The status of Small Diverse Business and/or Veteran Business Enterprise Commitments

14. The status of Bonds, Guarantees, Warranties, Tests and Instructions still required, to include page and paragraph of the specifications

15. The status of the as-built drawings

16. The status of GESA Contractor's papers, Form GSC-24 ($500.00 shall be retained until properly submitted)

17. General comments, if any

18. Statement regarding the start date of all warranties and guarantees

19. Statement that the Contract has been completed in accordance with the plans and specifications

20. Statement that the GESA Contractor shall continue insurance coverage pending written permission to terminate by the DGS

21. Statement that the Report as written shall be deemed acceptable to all parties in receipt, unless written notification of objections is received by the Energy Consultant within seven days of receipt of the Final Inspection Report

22. Form GSC-47, "Certificate of Final Completion and Final Payment"

G. If through the course of the inspection, it is determined by the GESA Contractor's Professional, Energy Consultant, DGS and Funding Agency that the work is not "substantially complete", in accordance with the General Conditions of the Contract, Article 1, Section 1.45, the GESA Contractor's Professional and Funding Agency shall not issue the Certificate of Final Completion and Final Payment.

13.4 <u>Form GSC-47, "Certificate of Final Completion and Final Payment"</u>

A. The Energy Consultant and/or Funding Agency will provide a copy of the Form GSC-47 to the GESA Contractor's Professional. The form must be prepared by the GESA Contractor's Professional and submitted in an original and four copies to the Energy Consultant and/or Funding Agency.

B. At the conclusion of the Final Inspection, the attendees shall review all of the remaining responsibilities of the GESA Contractor, the remaining responsibilities of the GESA Contractor's Professional, the status of all pending change orders, the status of all pending Requests for Extension of Time, the status of any pending claims against the Funding Agency and any other obligations of any party necessary to fulfill the requirements of the Contract Documents. Upon completion of this review the GESA Contractor, GESA Contractor's Professional and the Energy Consultant shall affix their signatures to the Form GSC-47, Certificate of Final Completion to indicate their concurrence with the remaining responsibilities of each party.

C. The Final Punch List, prepared by the GESA Contractor's Professional shall be appended directly to the Form GSC-47, additional sheets may be attached as required. The punch list shall indicate, in detail, all items requiring completion or correction and a reasonable cost of completion plus one and one-half times the aggregate value of the items.

D. The Energy Consultant and/or Funding Agency shall, within five working days after receipt, review the Certificate of Final Completion and Final Payment for completeness and attach the Form GSC-47 to the Final Inspection Report, as indicated in Final Completion Inspection, paragraph "E" above.

ADMINISTRATIVE PROCEDURE NO. 14

FIELD DISPUTES

14.1 General Information on Dispute Process

A. The Dispute Process is set forth in detail in the Disputes Article of the General Conditions.

B. The GESA Contractor shall use the Field Dispute Resolution Form attached to and incorporated by reference to this Administrative Procedure.

DGS Project GESA _____ _____ _____ Page _1__of _____	**Field Dispute Review** **Meeting Form**	This Section for DGS Use Only Contract No. . _____ Project %: 25 50 75 100 Other Date of FDR Meeting: _____/_____/_____ Date Received

SECTION 1 TO BE FILED OUT BY GESA CONTRACTOR:

A. General Description of Work Performed Since the Last FDR Meeting:

B. General Description of Work To Be Performed in the Near Future:

C. Status of Disputes Raised at Previous FDR Meetings:

D. New Disputes Arising Since the Previous FDR Meeting (for each, set forth the schedule impacts based upon the current Master Project Schedule and a proposed solution to the dispute, including days needed in an EOT, damages and the identity of the party the DBC believes is responsible for creating the dispute):

Field Dispute Review

Meeting Form

D. New Disputes Arising Since the Previous FDR Meeting (continued):

(For additional space to continue dispute identification, attach additional sheets as necessary, which will be incorporated by reference.)

CERTIFICATION BY GESA CONTRACTOR:

I hereby certify that this dispute is made in good faith; that the supporting documentation and data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the GESA CONTRACTOR believes the Department is liable; and that I am duly authorized to certify the dispute on behalf of the GESA CONTRACTOR.

_____ _____

Signature **Date**

_____

Name Printed Legibly

ADMINISTRATIVE PROCEDURE NO. 15

SMALL DIVERSE BUSINESS and VETERAN BUSINESS ENTERPRISE PARTICIPATION

A. **General Information:** The GESA Contractor must meet or exceed the Small Diverse Business (SDB) and Veteran Business Enterprise (VBE) participation percentages set for the project by project Final Inspection.

B. **GESA Contractor's Duty.**

a. The GESA Contractor must meet or exceed the participation percentages provided by project Final Inspection as applied to the GESA Contract sum. The meeting or exceeding of participation percentages will be tracked by the Bureau of Diversity, Inclusion & Small Business Opportunities (BDISBO) through the Department of General Services' (DGS) compliance management software, known as the PRiSM Portal. **Questions regarding PRiSM may be directed to RA-GSBDISBOComp@pa.gov or the BDISBO office.**

b. The GESA Contractor shall update its SDB and VBE payment information in the DGS' compliance management software by the 15th of the following month in which payment was made to subcontractors or suppliers.

C. **The GESA Contractor's Commitments Toward Their Participation Goal Percentages will be Calculated and Credited as follows:**

a. Only DGS-verified SDBs and DGS-verified VBEs will be credited toward satisfying participation percentages.

b. SDB or VBE subcontractors performing at least 50% of the subcontract with their own employees will be credited toward the participation percentages at 100 percent of the total dollar value of the subcontract or supply contract. Any SDB or VBE subcontract where the subcontractor performs less than 50% of the subcontract, will not be credited toward the participation percentages.

c. SDB or VBE manufacturers are credited at 100 percent of the total cost of the materials or supplies purchased from SDB or VBE manufacturers. SDB or VBE manufacturers are firms that operates or maintains factories or establishments that produce, on premise, materials, supplies, articles or equipment required under the GESA Contract and of the general character described by the project specifications.

d. SDB or VBE stocking suppliers will be credited at 60 percent of the total cost of the materials or supplies purchased. Stocking suppliers are regular dealers that own, operate, or maintain stores, warehouses, or other establishments, that materials or supplies of the general character described by the project specifications and required under the GESA Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

e. SDB or VBE nonstocking suppliers are credited at only the amount of the fee or commission charged by the SDB or VBE nonstocking suppliers for assistance in the procurement of the materials and supplies provided the fees are reasonable and not excessive as compared with fees customarily allowed for

similar services and under no circumstances will the credit, for SDB or VBE nonstocking suppliers, exceed 10% of the purchase order costs. Nonstocking suppliers do not carry inventory but order material from manufacturers, manufacturer's representatives or stocking suppliers. In order for a nonstocking supplier to receive credit, it must perform a useful business function by engaging in meaningful work (i.e., negotiating price; and determining quality and quantity; and ordering materials; and paying for the materials) and the fee or commission must be provided with the purchase order and the SDB or VBE Utilization Report in PRiSM. Industry practices and other relevant factors will be considered.

f. The GESA Contractor is only allowed to use contract amounts at the **first** tier of supply or subcontracting. Commitments from the GESA Contractor's subcontractors or suppliers to sub-subcontracts or sub-suppliers, whether SDB or VBE or non-SDB or non-VBE to a SDB or VBE will not be calculated toward the GESA Contractor's participation percentages.

g. SDBs or VBEs whose entire subcontract value is counted towards the GESA Contractor's participation percentages who subcontracts a portion of their work or supplies associated with their subcontract with the GESA Contract to lower tier SDBs or VBEs will not receive participation percentages from the dollar value of the lower tier subcontracts in order to prevent duplicate counting of SDB or VBE commitment dollars. In these cases, the dollar value of this subsequent SDB or VBE subcontract has already been included within the scope of work and dollar value of the SDB or VBE commitment already counted as a part of the GESA Contractor's participation percentages.

h. The GESA Contractor's SDB participation percentage is calculated by adding all the dollar commitments to DGS-verified SDB subcontractors the first tier, DGS-verified SDB manufacturers, DGS-verified SDB stocking suppliers, and the fee or commission paid to DGS-verified SDB nonstocking suppliers and dividing that total amount by the total contract award price.

i. A GESA Contractor's VBE participation percentage is calculated by adding all the dollar commitments (as described in this Section D) to self-certified VBE subcontractors of all tiers, DGS-verified VBE manufacturers, DGS-verified VBE stocking suppliers, and the fee or commission paid to DGS-verified VBE nonstocking suppliers and dividing that total amount by the total contract award price.

D. **Remedies**

a. If SDB and VBE Utilization Reports are not submitted in PRiSM within thirty (30) days prior to the submittal of an Invoice, the Invoice will not be able to be accepted by DGS.

b. If after the first three months following contract execution, the GESA Contractor fails to progress in achieving the SDB or VBE participation commitments for the project (based upon the data supplied in the SDB and VBE Utilization Report), DGS may withhold payments until the GESA Contractor and DGS discuss the reasons for lack of progress and achieve a resolution. The GESA Contractor will not be entitled to interest on funds withheld due to its failure to property submit information in PRiSM.

c. The GESA Contractor's compliance with the requirements of the SDB and VBE participation commitment components, including the fulfillment of any

SDB or VBE commitments in all subcontracts and purchase orders, is material to the GESA Contract between the GESA Contractor and the DGS. Any failure to comply with participation commitment requirements will constitute a breach of contract. In the event the DGS determines that the GESA Contractor has failed to comply with its participation commitment requirements, DGS may, in addition to any other rights and remedies under the GESA Contract, any bond provided by the GESA Contractor, or at law or in equity, impose available remedies as applicable on the GESA Contractor. Remedies for breach of participation commitment may include but are not limited to, withholding of payments; termination of the contract along with consequential damages; revocation of the prime contractor's SDB or VBE status; a determination that the GESA Contractor's SDB or VBE participation submittal be deemed non-responsible in future procurements; or action under the Commonwealth's Contractor Responsibility Program, including suspension and debarment from future contracting opportunities with the Commonwealth. The remedies enumerated here are for the sole benefit of DGS and the DGS's enforcement of the GESA Contract. DGS's indulgence of any contractual non-compliance will not operate as a waiver of any of the DGS's rights in connection with the GESA Contract, nor may it give rise to actions by any third parties, including any SDB or VBEs.

APPENDIX J

Sample GESA Contract between the Commonwealth and GESA Contractor

Guaranteed Energy Savings Act Contract
GESA Project Name

This Guaranteed Energy Savings Act ("GESA") Contract for the GESA project ("Project") is between the Department of General Services ("Funding Agency"), an executive agency of the Commonwealth of Pennsylvania authorized to enter into GESA contracts pursuant to 62 Pa C. S. §§3751-3758, with its principal office located at 401 North Street, 4th Floor, North Office Building, Harrisburg, PA 17120-0500 and GESA Contraactor ("GESA Contractor"), a company organized under the Laws of the State of STATE, with its principal offices located at Address.

Article 1 – Contract Documents

1.1 The Contract Documents ("Contract Documents") consists of this contract, the Request for Quote ("RFQ"), the GESA Contractor's Quote submitted in response to the RFQ, the contract bonds, the Conditions of the Contract including the General Conditions, Special Conditions, and Supplementary Conditions), all drawings created by or for the Contractor or its Retained Professional, the specifications created by or for the Contractor or its Retained Professional, the Scope of Work by ECM (Exhibit 1), all bulletins and addenda issued in relation to this contract, all change orders, the Administrative Procedures for the GESA Contract, the Installment Purchase Agreement and Payment Schedule, , the Investment Grade Audit and the Investment Grade Audit Documents.

Article 2 – Scope of Work

2.1 The GESA Contractor shall perform all the work required by the Contract Documents for the design, implementation, and construction of GESA Project Name ("Project").

Article 3 – Term

3.1 The term of this contract will commence upon the effective date of this contract and will run for NUMBER calendar days, which is the length of construction.

3.2 Time is of the essence and if the GESA Contractor fails to complete the work within the time specified above, the GESA Contractor shall pay the Funding Agency, as Liquidated Damages and not as a penalty for the failure, the sum of $4,750 (*Calculated for each project*) per day for each calendar day after the completion date until the work is completed and accepted. The Funding Agency may extend the completion date of the contract for causes stated in the General Conditions of the GESA Contract which, in fact, delay the completion of the work. In such case, the GESA Contractor is liable for Liquidated Damages only after the expiration of the extended period.

Article 4 – Contract Sum

4.1 The Funding Agency shall authorize a financing provider, procured separately, to pay the GESA Contractor for the performance of the work subject to additions and deductions by change order, as provided in the General Conditions, the contract sum of $SUM. The Funding Agency shall make payment and deductions or additions to the GESA Contractor as stated in the General Conditions. The Funding Agency is not liable for any debt due to the GESA Contractor but shall be responsible for debts owed to the Financer.

SAMPLE

Article 5 – Progress Payments and Retainage

5.1 Based upon Applications for Release of Payment that the GESA Contractor will submit to the Funding Agency, the Funding Agency shall authorize the financing provider to release progress payments to the GESA Contractor, in accordance with the provisions of the Prompt Payment Schedules found in the Commonwealth Procurement Code, 62 Pa. C.S. §3931-§3939, and the Administrative Procedures, except, where those provisions refer to the government agency, it refers to the Funding Agency. The Funding Agency will retain a portion of the amount due to the GESA Contractor to ensure the proper performance of the contract and that each Application for Release of Payment is in accordance with the provisions of retainage found in the Commonwealth Procurement Code, 62 Pa. C.S. §3921 and the General Conditions.

Article 6 – Final Payment

6.1 The Funding Agency shall approve the final payment, constituting the entire unpaid balance of the contract sum, except owner-controlled contingency, for release by the financing provider to the GESA Contractor within thirty (30) days after Closeout Inspection of the work if the GESA Contractor has fully performed the contract and has submitted a Final Application for Release of Payment, as provided in the General Conditions.

Article 7 – Small Diverse Business Participation

7.1 The Issuing Office and DGS' Bureau of Diversity, Inclusion, and Small Business Opportunities have set Small Diverse Business (SBD) and Veterans Business Enterprise (VBE) Participation Goals in the RFQ. The GESA Contractor agreed to meet the SDB and VBE Participation Goals in full or demonstrated it made good faith efforts to meet both Goals as shown in the attached Small Diverse Business (SDB) and Veteran Business Enterprise (VBE) Participation Summary Sheet Exhibit 1.

Article 8 – Warrantee and Guarantee

8.1 In addition to the contract bond, the GESA Contractor unconditionally warrants and guarantees equipment, materials and workmanship against patent defects arising from faulty equipment, faulty materials, faulty workmanship or negligence for a period of 12 months following the date of Final Acceptance of the work or beneficial occupancy, whichever comes first, unless other warranties in the Contract Documents specify or indicate longer periods. The GESA Contractor shall replace defective equipment, materials or workmanship without cost to DGS or the Funding Agency. The GESA Contractor warrants that equipment, material or workmanship furnished under this contract will be in conformance with the Contract Documents. All work not conforming to these standards may be considered non-conforming.

1. If items of equipment or material carry a manufacturer's warranty for any period more than twelve (12) months, then the manufacturer's warranty will apply for that piece of equipment or material. The GESA Contractor shall replace all defective equipment or materials, without cost to DGS or the Funding Agency, within the manufacturer's warranty period. Nothing in this paragraph relieves the GESA Contractor or its surety of its obligations under the performance bond.

2. The GESA Contractor shall assign and deliver to the Funding Agency all warranties for review. The warranty provided in this Paragraph is in addition to, and not in limitation of, any other warranty or remedy provided by law or by the Contract Documents.

SAMPLE

3. If there is a substitution of material or equipment, the GESA Contractor warrants that the installation, construction, material or equipment will perform to the standard of the item originally specified. The GESA Contractor explicitly warrants the merchantability, and fitness for use and quality of all substituted items provided for or by it.

4. DGS and the Funding Agency may bring an action for latent defects where defects are hidden or not readily apparent to DGS or the Funding Agency at the time of beneficial occupancy or final acceptance, in accordance with applicable law or the contract bond.

This section, "Warranty and Guarantee," in no way limits the applicability of the contract bond.

Article 9 – Assured Performance Guarantee

9.1 The GESA Contractor guarantees the energy and cost savings stipulated in this contract on an annual basis. The savings must be equal to or exceed the project financing payment, plus the service fees during that year for the contract duration. No credit for savings above the annual guarantee will be credited toward the performance guarantees for future years of this contract. The recovery of contract costs from energy savings over the term of this contract will not exceed Eighteen (18) years. The Assured Performance Guarantee stipulates the GESA Contractor's requirements regarding documenting and verifying the annual energy or cost savings for this Project (Exhibit 2).

Article 10 – Other Provisions

10.1 Terms used in this contract defined in the General Conditions have the meanings designated in the General Conditions.

10.2 In addition to any other guarantees or warrantees, the GESA Contractor covenants that after acceptance of the work performed under this contract, to remedy without cost to DGS or the Funding Agency, any defect in the work, provided the defects, in the reasonable judgment of the Funding Agency, or its successors having jurisdiction over the premises, are caused by defective or inferior materials, equipment, or workmanship. If the corrective work is not completed within thirty (30) days after notification by the Funding Agency to the GESA Contractor, the Funding Agency may do the work and submit costs to the GESA Contractor's surety for reimbursement.

10.3 The contract bonds provided by the GESA Contractor to the Funday Agency, conditioned upon the faithful performance of the contract and for the payment of labor, material, equipment, and public utility service claims, are attached to this contract. No third party may acquire any rights against the Funding Agency under the Contract Documents. The performance bond does not cover the Assured Performance Guarantee or guaranteed savings under the Contract Documents. However, failure to meet the Assured Performance Guarantee or guaranteed savings may be the result of defective or inferior materials, equipment, or workmanship due to the GESA Contractor's failure of faithful performance. When such cases of defective or nonconforming work occurs, the performance bond covers the defective or nonconforming work.

10.4 Nothing in this contract waives or otherwise affects the sovereign immunity of the Commonwealth and its agencies, officers, and employees, or to subject any Commonwealth party to any liability not expressly authorized by law.

SAMPLE

10.5 Any person, co-partnership, association, or corporation furnishing labor, material, equipment or renting equipment, or rendering public utility services in connection with the performance of this contract, has a right of action to recover costs from the GESA Contractor and the GESA Contractor's surety on the bond given to secure the payment of such labor, material, equipment, or equipment rental and services rendered by public utility as though such person or corporation had been named as obligee in the bond. For those who do not have a contract directly with the GESA Contractor, this right of action may not be exercised unless the GESA Contractor is notified of the claim within ninety (90) days from the last performance of labor or provision of materials. The GESA Contractor shall include in all of its subcontracts and supply contracts a provision requiring that its subcontractors and suppliers notify, in writing, their subcontractors and suppliers of this requirement. No third-party rights arise against the Funding Agency for any reason under this Article, and the GESA Contractor shall inform all subcontractors and suppliers in writing.

10.6 All the Commonwealth Standard Terms and Conditions in Appendix A apply to this contract.

10.7 If either party desires an amendment to this contract, the party seeking the amendment shall present the proposed amendment in writing to the other party. If the other party accepts the proposal, the parties shall sign amendment and shall attach the amendment to this agreement as a rider.

10.8 The GESA Contractor shall perform its respective obligations under this contract in compliance with all applicable state and federal laws.

10.9 The provisions of this contract are severable, and if any of its provisions become or are found to be unlawful, it will not be construed to impair any other provision of this contract, nor will it be construed to void the entire contract.

10.10 This contract will become effective on the date of the last Commonwealth signature. This contract is not binding in any way on the Commonwealth or DGS until it has been fully executed, as prescribed in the preceding sentence, and sent to the GESA Contractor.

10.11 The parties intend this statement of their agreement to constitute the complete, exclusive, and fully integrated statement of their agreement. As such, it is the sole expression of their agreement, and they are not bound by any other agreements of whatsoever kind or nature. The parties also intend that this contract may not be supplemented, explained, or interpreted by any evidence of trade usage or course of dealing. In entering this contract, the parties did not rely upon oral or written statements or representations not contained within the document itself.

10.12 This contract may be executed in counterparts, each of which is deemed an original and has the full force and effect as an original but all of which constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS.]

SAMPLE

The parties, through their authorized representatives, have properly executed this agreement below.

ATTEST:

_____

Name: Date
Secretary/Treasurer

ATTEST:

_____

Date

APPROVED AS FORM AND LEGALITY

_____

Office of Chief Counsel Date
Department of Funding Agency

_____

Office of General Counsel Date

_____

Office of Attorney General Date

GESA CONTRACTOR

_____

Name: Date
Title:

COMMONWEALTH OF PENNSYLVANIA
ACTING THROUGH THE DEPARTMENT OF FUNDING AGENCY

_____

Date

Deputy Secretary

COMPTROLLER OPERATIONS

I certify that funds in the amount of
$_____
Are available under Appropriation Symbol

_____

Date

(Comptroller Operations execution may be by electronic signature and does not imply verification of funds)

SAMPLE

CONTRACT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we the undersigned

_____

_____

_____

as Principal and

_____

_____

_____

as the Surety Company, a Corporation organized and existing under the Laws of the State of _____ and authorized to transact business in Pennsylvania, as surety, are held and firmly bound unto the Department of Funding Agency ("Funding Agency"), as set forth below, in the full and just several sums of:

(A)_____Dollars

($_____) for faithful performance of the GESA Contract as designated in Paragraph "A" below; and

(B)_____Dollars

($_____) for payment for labor, material equipment rental and public utility services as designated in Paragraph "B" below; and

Sealed with our respective seals and dates this _____ day of _____.

WHEREAS, the above Principal has entered into a GESA Contract with the Funding Agency dated the _____ day of _____, 20__ for _____upon certain terms and conditions in said GESA Contract more particularly mentioned; and

SAMPLE

WHEREAS, it is one of the conditions of the Award pursuant to which said GESA Contract is about to be entered into, that these presents be executed;

NOW, THEREFORE, the joint and several conditions of this obligation are such:

A. That, if the above Principal as GESA Contractor shall well and faithfully do and perform the things agreed by it to be done and performed according to the terms of said Contract Documents, including the plans and specifications referred to and made part of the contract, and such alterations as may be made in said plans and specifications as provided and which are then made part of this Bond the same as though they were fully set forth in this contract, and shall indemnify and save harmless the Funding Agency and all of their officers, agent and employees from any expense incurred through the failure of said GESA Contractor to complete the work as specified and for any damages growing out of the manner of performance of said GESA Contract by said GESA Contractor or its Subcontractors, or their agents or servants, including, but not limited to, patent trademark and copyright infringements, then this part of this obligation shall be void; otherwise, it shall be and remain in full force and effect.

B. That, if the above Principal shall and will promptly pay or cause to be paid all sums of money which may be due by the Principal or any of its Subcontractors to any person, co-partnership, association or corporation for all material furnished and labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and become component parts of the work or improvements contemplated, and for rental of equipment used, and services rendered by public utilities in, or in connection with, the prosecution of such work, then this part of this obligation shall be void; otherwise, it shall be and remain in full force and effect.

C. It is further agreed that any alterations which may be made in the terms of the GESA Contract or in the work to be done or materials to be furnished or labor to be supplied or performed, or equipment to be rented, or public utility services to be rendered, or the giving by the Funding Agency of any extension of time for the performance of the GESA Contract, or the reduction of the retained percentage as permitted by the GESA

SAMPLE

Contract, or any other forbearance on the part of either the Funding Agency or the Principal to the other, shall not in any way release the Principal and the surety or sureties or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder; notice to the surety or sureties of any such alterations, extension or forbearance being waived in this contract.

D. The Principal and Surety in this contract jointly and severally agree with the applicable Funding Agency that every person, co-partnership, association or corporation which, whether as subcontractor as a person otherwise entitled to the benefits of this Bond, has furnished material or supplied or performed labor or rented equipment used in the prosecution of the work as above provided and any public utility, which has rendered services, in, or in connection with, the prosecution of such work, and, which has not been paid in full therefore, may sue in assumpsit on this Bond in his, their, or its name and prosecute the same to final judgment for such sum or sums as may be justly due him, them, or its, and have execution thereon; provided, however, that the Funding Agency shall not be liable for the payment of any cost or expenses of such suit to a third party under any theory of law or equity.

E. Recovery by any persons, co-partnership, association or corporation hereunder is subject to the provisions of the Pennsylvania Procurement Code, 62 Pa. C.S §§101-4509, as amended, which Act is incorporated in and made a part of this contract, as fully and completely as though its provisions were fully and at length recited in this contract, except that, where said Act refers to the Commonwealth of Pennsylvania or a Department thereof, it is deemed to refer to the Funding Agency.

[Remainder of this page left intentionally blank]

SAMPLE

IN WITNESS WHEREOF, the said Principal and Surety have duly executed this Bond under seal the day and year above written.

Attest:

_____ _____

Date Principal Date
GESA Contractor

_____

Surety (Corporate Seal)

By:_____
Attorney-in-Fact Date

APPROVED AS TO FORM AND LEGALITY

_____ _____

Office of Chief Counsel Date Office of Attorney General Date
Department of Funding Agency

_____

Office of General Counsel Date

SAMPLE

Exhibit 1

Scope of Work by ECM
and
Small Diverse Business Participation

SAMPLE

EXHIBIT 1

Scope of Work by ECM
Including
Small Diverse Business Participation

Project Scope

[LIST PROJECT SCOPE / DESCRIPTION OF ECMS] EXAMPLE: Listed in the table below are the Base Project Energy Conservation Measures (ECMs) (Lighting, Building Envelope and Water Conservation), as well as, the additional "Wish List" ECMs which **[FUNDING AGENCY]** wanted to include in the project:

[INSERT TABLES OR CHART SHOWING EACH ECM & DESCRIPTION OF ECM]

[Remainder of this page left intentionally blank]

SAMPLE

[INSERT SB/SDB FORM HERE]

SAMPLE

EXHIBIT 2

ASSURED PERFORMANCE GUARANTEE
For
GESA CONTRACT

PART 1

1-1. DEFINITIONS
For purposes of this Agreement, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

Annual Project Benefits Surplus is the amount by which the Annual Project Benefits Realized exceed the Annual Project Benefits in any one year of the Guarantee Term.

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Energy Conservation Measures.

Guarantee Term will commence on the first day of the month following the Final Payment date and will continue through the duration of the M&V Services.

Installation Period is the period beginning on the effective date of the GESA Contract and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the utility savings and cost avoidance calculated in accordance with the methodologies set forth in Part 2 of this Agreement.

Project Benefits are the Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

O&M Benefits are the operations and maintenance cost avoidance savings as stipulated in Part 2 of this Agreement.

Rebate Project Benefits are the energy rebate or incentive non-recurring savings as stipulated in Part 2 of this Agreement.

Total Project Benefits are the projected Project Benefits to be achieved during the entire term of this Agreement.

SAMPLE

1-2. SCOPE

A. The Funding Agency is contracting for a full range of energy services and energy-related capital improvements at no initial capital cost for the Project. The ECMs may include but are not limited to: the design, acquisition, installation, modification, maintenance and training of funding agency personnel in the operation of existing and new equipment. The ECMs will reduce energy consumption and related costs associated with the heating, ventilation and air conditioning system, lighting systems, control systems, building envelope, the hot water systems, water consumption, sewage costs and other energy using devices. Additionally, savings which will not reduce consumption but are aimed at cost savings, such as fuel switching, demand side management, on-site generation, utility bill auditing, utility rate changes, and distribution upgrades etc. have been considered. ECMs may also include the training of facility staff with respect to routine maintenance and operation of all improvements. ECMs must result in a guaranteed minimum energy savings with payments linked to actual documented energy and cost reductions.

B. Any stipulated energy and/or operational cost savings that are attributed to this project have been rigorously reviewed and the GESA Contractor is required by this contract to thoroughly document and verify the savings, which have been approved by DGS and the Funding Agency. The Annual Project Benefits Realized by the ECMs in any year must be guaranteed to equal or exceed the Annual Project Benefits during that year for the duration of the contract. The GESA Contractor is required to guarantee energy and cost savings on an annual basis. No credit for the achievement of savings above and beyond the annual guarantee will be credited to satisfy performance guarantees in future years of the contract. Annual reconciliation of the achieved savings will be required.

1-3. MEASUREMENT & VERIFICATION

A. Measurement & Verification (M&V) services shall commence on the first day of the month following the month in which the Funding Agency releases the Final Payment to the GESA Contractor and shall continue throughout the Assured Performance Guarantee Term, subject to earlier termination of the Assured Performance Guarantee as provided in this contract. The GESA Contractor shall ensure that an approved representative from the Funding Agency is physically present for all pre-retrofit and post-retrofit measurements for each ECM as applicable to the Energy Savings Guarantee unless the Funding Agency waives their right to be present. The final completion date shall be the date when all Work is completed, including all punch list items, as evidenced by the release of the Final Payment by the Funding Agency. In the event the Funding Agency (i) cancels or terminates receipt of M&V Services, (ii) fails to fulfill any of Funding Agency responsibilities necessary to enable GESA Contractor to complete the Work and provide the M&V Services, or (iii) otherwise cancels, terminates or materially breaches this Agreement, GESA Contractor shall issue a written notice to the Funding Agency stating the nature of the alleged breach, the date upon which it arose, and the remedy sought. GESA Contractor shall provide the Funding Agency with a thirty (30) day period to cure such breach. In the event of a dispute, all parties shall act in good faith to mitigate damages with a reservation of rights as to damages.

B. If the GESA Contractor is delayed in the commencement, performance, or completion of the M&V Services by causes beyond its control and without its fault, including but not limited to inability to access property; concealed or unknown conditions encountered at the project, differing from the conditions represented by Funding Agency in the quote documents or otherwise disclosed by

SAMPLE

Funding Agency to the GESA Contractor; a Force Majeure condition; failure by Funding Agency to perform its obligations under this GESA Contract; or failure by Funding Agency to reasonably cooperate with GESA Contractor in the timely completion of the M&V Work where such failure is material, substantial and inconsistent with the terms of this GESA Contract, GESA Contractor shall provide written notice to Funding Agency of the existence, extent of, and reason for such delays and impacts. Under such circumstances, an equitable adjustment in the time for performance and the Assured Performance Guarantee shall be made, subject to the mutual written agreement of the parties.

C. Funding Agency shall provide GESA Contractor, its subcontractors, and its agents reasonable and safe access to all facilities and properties in Funding Agency's control that are subject to the M&V Services. Work to be performed by GESA Contractor in accordance with this GESA Contract shall be performed during normally scheduled staff shifts and as agreed to by both parties. Funding Agency further agrees to assist GESA Contractor, its subcontractors, and its agents to gain access to facilities and properties that are not controlled by Funding Agency but are necessary for GESA Contractor to provide the M&V Services. An equitable adjustment in the time for performance and Assured Performance Guarantee shall be made as a result of any failure to grant such access, subject to the mutual written agreement of the parties.

D. In order for GESA Contractor to perform its obligations under this Agreement with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Funding Agency shall be responsible for:

1. Providing GESA Contractor, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;

2. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;

3. Providing the utility bills, reports, and similar information reasonably necessary for administering GESA Contractor's obligations under the Assured Performance Guarantee within thirty (30) days of Funding Agency receipt and/or generation or GESA Contractor's request therefore;

4. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by GESA Contractor; and

5. Promptly notifying GESA Contractor of any change in use or condition or any other matter that may impact the Assured Performance Guarantee.

[Remainder of this page left intentionally blank]

SAMPLE

PART 2
PROJECT BENEFITS

2-1. PROJECT BENEFITS SUMMARY

A. Subject to the terms and conditions of this GESA Contract, GESA Contractor and Funding Agency agree that, upon Final Completion, Funding Agency will be deemed to achieve a total of **$** in annual increments as shown in the Maintenance Material Savings column of the Total Project Benefits table below. GESA Contractor guarantees that Funding Agency will achieve a total of **$** in Total Annual Energy Savings during the term of this Assured Performance Guarantee, for Total Project Benefits of **$** as set forth in the Total Project Benefits table below.

Table A. Total Project Benefits

[INSERT TABLE SHOWING BREAKDOWN OF ANNUAL SAVINGS HERE]

The energy cost savings provided in **Table A** above are based on the annual escalation stated in **Table A-1** below and will be applied to the unit utility rates listed in **Table B** beginning the first month following the baseline period, escalating annually throughout the Guarantee Period.

Table A-1 – Annual Escalation Rates

Energy Cost Esc./yr	**1.0%**
Labor Cost Esc./yr	**3.0%**
Maintenance Cost Esc	**1.0%**

The actual escalation of calculated savings that will be applied in the M&V Report will be the highest of:
(1) **Table A-1** above
(2) CPI (Consumer Price Index) for the geographical region, or
(3) Actual fuel rate

B. Within thirty (30) days of the commencement of the Guarantee Term, GESA Contractor will calculate the Measured Project Benefits achieved during the Installation Period and provide the Funding Agency of written confirmation of the calculations.

C. Within thirty (30) days of each anniversary of the commencement of the Guarantee Term, GESA Contractor will calculate the Measured Project Benefits achieved for the applicable year applicable to such period and provide both DGS and the Funding Agency with an annual report containing:
1. an executive overview of the project's performance and Project Benefits achieved to date; and
2. a summary analysis of the Measured Project Benefits accounting; and
3. a detailed analysis of the Measured Project Benefits calculations.

D. Funding Agency acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services, (iii) fails to fulfill any of its responsibilities necessary to enable GESA Contractor to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this GESA Contract, the Assured Performance

SAMPLE

Guarantee shall automatically terminate and GESA Contractor shall have no liability under this section.

2-2. PROJECT SAVINGS SHORTFALLS OR SURPLUSES

A. Guaranteed Savings Shortfalls: If an Annual Project Benefit Shortfall occurs for any year of the Assured Performance Guarantee Term, GESA Contractor shall, at the sole discretion of the Funding Agency, perform one or more of the following:

1. pay to Funding Agency the amount of such shortfall, or
2. subject to Funding Agency's written approval, provide to Funding Agency additional products or services, in the value of such shortfall, at no additional cost to Funding Agency.

B. Guaranteed Savings Surpluses: If an Annual Project Benefit Surplus occurs for any year of the Guarantee Term, GESA Contractor may not apply the amount of such surplus to set off any subsequent Annual Project Benefit Shortfall during the Guarantee Term.

C. Additional Energy Conservations. Where an Annual Project Benefits Shortfall has occurred, GESA Contractor may, subject to Funding Agency approval, implement additional Energy Conservation Measures, at no cost to Funding Agency, which may generate additional Project Benefits in future years of the Guarantee Term. Such improvements do not relieve the GESA Contractor from liability set forth in Paragraph 2-2(A).

D. Event of Default by GESA Contractor: If an Annual Project Benefits Shortfall has occurred and the GESA Contractor does not comply with Paragraph 2-2(A), the Funding Agency may deem this to be an Event of Default. If default occurs, the Funding Agency may place the GESA Contractor in the Contractor Responsibility Program and also pursue debarment or suspension in accordance with the Commonwealth Procurement Code.

SAMPLE

PART 3

MEASUREMENT AND VERIFICATION METHODOLOGY

3-1. MEASUREMENT & VERIFICATION PROTOCOL

A. GESA Contractor shall apply either Option A or Option B verification methodologies, as more fully detailed in the guidelines and standards of the International Measurement and Verification Protocol (IPMVP) and/or the Federal Energy Management Program (FEMP), or modified variations as outlined below, in connection with the provision of M&V Services under this section. The applicable option shall be as set forth in the Project-Specific Request for Quote submitted to and accepted by DGS and the Funding Agency. Option A shall not be accepted without DGS and the Funding Agency's prior written approval.

B. Option A: Partially Measured Retrofit Isolation

Measured Project Benefits are determined by partial field measurement of the energy use of the system(s) to which an ECM was applied separate from the energy use of the rest of the facility. Measurements will be short-term with only one-time measurements before and after the Installation Period.

Partial measurement means that some but not all parameters will be measured. Careful review of the design and installation of ECMs is intended to demonstrate that the stipulated values fairly represent the probable actual values. Agreed-upon values will be shown in the measurement and verification plan, along with analysis of the significance of the error they may introduce. Engineering calculations using short-term pre- and post-retrofit measurements and stipulations are used to calculate Measured Project Benefits for the duration of the Guarantee Term.

C. Option B: Retrofit Isolation

Savings are determined by field measurement of the energy use of the systems to which the ECM was applied, separate from the energy use of the rest of the facility. Short-term or continuous measurements are taken throughout the post-retrofit period.

3-2. CHANGES IN USE OR CONDITION

A. Funding Agency agrees to notify GESA Contractor within thirty (30) days of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Energy Conservation Measure to which this schedule applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Savings realized under this Agreement.

1. Such a change, expansion, addition, or condition would include, but is not limited to: (a) changes in the primary use of any facility, Energy Conservation Measure, or portion of the premises; (b) changes to the hours of operation of any facility or portion of the premises; (c) changes or modifications to the Energy Conservation Measures or any related equipment; (d) changes to the M&V Services provided under this GESA Contract; (e) insufficient or improper maintenance or unsound usage of the Energy Conservation Measures or any related

SAMPLE

equipment at any facility or portion of the premises (other than by GESA Contractor); or (f) additions or deletions of Energy Conservation Measures or any related equipment at any facility or portion of the premises.

B. If GESA Contractor independently learns of any such change or condition, GESA Contractor shall calculate and send to Funding Agency a Notice of adjustment to the Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose. If the Funding Agency fails to promptly provide GESA Contractor with notice of any such change or condition, GESA Contractor may make reasonable estimates as to the impact of such change or condition and as to the date on which such change or condition first arose in calculating the impact of such change or condition, and such estimates shall be conclusive.

SAMPLE

PART 4

BASELINE CALCULATIONS AND UTILITY RATES

4-1. UTILITY COSTS FOR BASELINE

A. The unit utility costs for the Baseline period are set forth below as "Base Utility Cost" and shall be used for all calculations. The Base Utility Cost shall be escalated annually by escalation rate of one percent (1%). The Base Utility Cost for electric represents the 12- month average utility costs from **[BASELINE PERIOD] EXAMPLE:** July 1, 2014 through June 30, 2015.

B. The **[BASELINE PERIOD]** energy rates used to calculate savings are **[COST/KWH]** $ / kWh for electricity, **[COST/MMBTU]** $/mmBtu for natural gas, **[COST/KBTU]** $ / KBtu for heating fuel and **[COST/KGAL]** $/kGal for water.

Baseline utility rates used for the energy savings calculations were determined according to the following methods:

Electric Rates:
Heating Fuel Rates:
Natural Gas Rates:
Water Rates:

[Remainder of this page left intentionally blank]

SAMPLE

PART 5

PRIMARY OPERATIONS SCHEDULE PRE & POST RETROFIT

5-1. PRE/POST RETROFIT

[INCLUDE CHARTS/TABLES ETC. THAT EXPLAIN PRE/POST RETROFIT LIGHTING BURN HOURS, TEMPERATURES, SETPOINTS, ETC. OF ECMS]

[Remainder of this page left intentionally blank]

SAMPLE

PART 6

6.1 MEASUREMENT & VERIFICATION SERVICES

COMMONWEALTH REPRESENTATIVE

A. **GESA Contractor shall ensure that an approved representative from Funding Agency is physically present for all pre-retrofit and post retrofit measurements, for each ECM as applicable to the Energy Savings Guarantee. Funding Agency and GESA Contractor shall mutually witness, and record said measurements and sign GESA Contractor's measurement logbook, if deemed mutually acceptable. GESA Contractor shall include all logged measurements in the annual report to be provided.**

6-2. M&V SERVICES

A. GESA Contractor will, for a period of 3 Guarantee Years (the "Reporting Period") unless earlier terminated by Funding Agency, provide the "M&V Services" set forth below in connection with the Assured Performance Guarantee. Funding Agency shall pay GESA Contractor an annual fee during the Reporting Period for such M&V Services as identified in the table below. Notwithstanding anything to the contrary, Funding Agency may choose to continue the M&V services in Guarantee Year Four (4) and beyond by notifying GESA Contractor within thirty (30) days of the end of the third Guarantee Year.

1. During the Installation Period, the GESA Contractor's Performance Assurance Engineer will track Measured Project Benefits. The GESA Contractor will report the Measured Project Benefits achieved during the Installation Period to the Funding Agency within 90 days of the commencement of the Guarantee Term.

2. Within 90 days of each anniversary of the commencement of the Guarantee Term, for a period of 3 years, GESA Contractor will provide the Funding Agency with an annual report containing:

   A. an executive overview of the project's performance and Project Benefits achieved to date;
   B. a summary analysis of the Measured Project Benefits accounting; and
   C. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.

3. During the Guarantee Term, for a period of 3 years, the GESA Contractor's Performance Assurance Engineer will monitor the on-going performance of the ECMs, as specified in this GESA Contract, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Engineer will periodically assist the Funding Agency, on-site or remotely, with respect to the following activities:

   a) Conduct one annual on-site visit to verify proper operation of the equipment installed under the project.
   b) review information furnished by the Funding Agency from the facility management system to confirm that control strategies are in place and

SAMPLE

functioning;

c) advise Funding Agency's designated personnel of any performance deficiencies based on such information;
d) coordinate with Funding Agency's designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and
e) inform Funding Agency of opportunities to further enhance project performance and of opportunities for the implementation of additional ECMs.

4. For specified ECMs utilizing "Option A" and "Modified Option A" M&V protocols, the GESA Contractor will:

a) conduct pre and post installation measurements required under this GESA Contract;
b) confirm the building management system employs the control strategies and set points specified in this GESA Contract; and
c) analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).

6-3. COST OF M&V SERVICES

Based on direction from the Commonwealth, the fees for the first three (3) years of annual M&V service has been included in the Project; refer to the project cash flow in the Investment Grade Audit. The amount to be paid annually by Funding Agency for the M&V services provided is listed in the table below. If the Funding Agency chooses to continue the M&V services in Guarantee Year Four (4) and beyond, it must notify GESA Contractor within thirty (30) days of the end of the third Guarantee Year. If the Customer wishes to continue the M&V Services past the third Guarantee Year, the pricing for each additional Guarantee Year for M&V services will be the Year 3 M&V Cost annually escalated at 3% in each additional Guarantee Year. The billing for the 1st three Guarantee Years will begin with Final Acceptance of this project.

Year	**M&V Cost**
1	$
2	$
3	$
Total	**$**

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PART 7

FUNDING AGENCY RESPONSIBILITIES

7-1. In order for GESA Contractor to perform its obligations under this GESA Contract with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Funding Agency shall be responsible for:

1. Providing GESA Contractor, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;

2. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;

3. Providing the utility bills, reports, and similar information reasonably necessary for administering GESA Contractor's obligations under the Assured Performance Guarantee within thirty (30) days of Funding Agency receipt and/or generation or GESA Contractor's request therefore;

4. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by GESA Contractor;

5. Providing and maintaining a dedicated telephone line and/or TCP/IP remote connection to facilitate remote monitoring of relevant equipment;

6. Promptly notifying GESA Contractor of any change in use or condition or any other matter that may impact the Assured Performance Guarantee.

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ENERGY EFFICIENT MEASURES
The table(s) below summarizes ECM savings and cost and simple payback.

[INSERT SUMMARY TABLE(S)]

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Appendix A

Commonwealth Standard Terms and Conditions

SAMPLE

APPENDIX K

GESA Project Design Manual

pennsylvania

DEPARTMENT OF GENERAL SERVICES

Guaranteed Energy Savings Project Design Manual

September 2019 Edition

DGS GESA PROJECT DESIGN MANUAL

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CHAPTER 1

PROJECT ADMINISTRATION

1.1 INTRODUCTION

A PURPOSE. This Manual provides the GESA Contractor with a guideline of procedures and standards for the design and construction stages of the Department of General Services' GESA projects. The Manual's organization reflects the sequence in which services and submissions will normally occur. The Department of General Services is also referred to throughout this Manual as "DGS". The GESA Contractor will seal the drawings.

The term "Professional" used hereinafter is synonymous with the term "GESA Contractor".

B EXCEPTIONS. It is not the purpose of the Manual to establish inflexible rules that hinder practical performance. If a specific situation appears to justify a deviation from the guidelines, it should be brought to the attention of Project Coordinator.

1.2 REFERENCE AND STANDARD DOCUMENTS

A MANUAL INCORPORATED INTO GESA PROJECT DOCUMENTS. This Project Procedure Manual is incorporated into the GESA Contract documents and is complimentary to that Contract and documents incorporated therein.

1.3 MEETINGS, MINUTES AND REPORTS

A MINUTES. The Professional is to furnish minutes of all meetings to DGS and the Funding Agency. The minutes are to be sent to the DGS Project Coordinator within one (1) week following the meeting. Minutes shall be emailed as set forth in the Administrative Procedures.

B PROGRESS REPORTS. The Professional is to email DGS a Monthly Progress Report during the Design Stages as part of its monthly invoice. The Monthly Progress Report must be submitted to DGS and the Funding Agency even if an invoice is not submitted for that month. The Report must include at least the following information:

1 Percentage of design/document completion

2 Significant actions taken during the period

3 Anticipated circumstances that may affect schedule or cost

C INSURANCE. No payment for any services will be made without a current certificate of Professional Liability Insurance and a current certificate of General Liability Insurance on file with the DGS Energy and Resource Management Office. It is the Professional's responsibility to provide current certificates as soon as the previous certificates expire.

1.4 APPROVALS AND COMPLIANCES

B DGS APPROVAL. The Department may choose to Approve / Conditionally Accept / or Reject a Design Submission.

C FUNDING AGENCY APPROVAL. The design submissions must, be approved by the Funding Agency at, or following, the Review Conference. The Professional is to secure the Funding Agency Head's approval in the form of a letter, prior to the Construction Documents Stage approval by DGS.

D REGULATORY AGENCIES. The Professional must obtain the design approval of all Local, State, Federal and other regulatory agencies having jurisdiction over the Work of the Project. Permits and approvals required at various stages are covered in more detail in subsequent chapters of this manual. The Project costs shall include the cost of permits, filing fees or similar approvals obtained during the Design Stages. The Professional shall obtain the necessary Building Permit from Pa. Department of Labor and Industry under the PA UCC Code. Commonwealth projects are exempted from the local building permit approval. Where other permit applications are part of the codes approval process, the Professional shall make application and obtain permits.

1 'Furnish': To supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

2 'Install': Operations at the Project site, including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.

3 'Funding Agency': The facility at which the work of the Project is located.

4 'Provide': To furnish and install, complete and ready for the intended use.

5 'Quality Assurance': Testing and inspection services provided by the Professional as additional services, and performed by an independent Consultant, retained by the Professional and acting on behalf of the Department, to ensure a quality project.

6 'Quality Control': Testing services required by the specifications and performed by an agent of the Contractor.

CHAPTER 2

INVESTMENT GRADE AUDIT ACTIVITIES

1.1 SITE VISIT

A The Professional shall visit the site during the project specific RFQ process and as needed during the investigation and preparation of the Investment Grade Audit (IGA). These visits should provide the Professional the opportunity to review with the Funding Agency's and Funding Agency's representatives the Project Description, the Funding Agency's purpose, the Project feasibility, site location, special design or construction considerations and any available program information.

1.2 SURVEY OF EXISTING CONDITIONS

A SITE VERIFICATION. The Professional shall investigate existing site conditions visually and by measurement, as well as by examining available records and drawings, to determine the location and nature of utility lines and all other manmade conditions as well as natural conditions, that may influence the project. As-Built records and any existing survey cannot be relied upon to adequately disclose the pertinent information.

B EXISTING BUILDING CONDITIONS VERIFICATION. The Professional is to survey the existing conditions as needed to determine all existing conditions affecting the GESA project ECMs. The survey shall include HVAC, Plumbing, Electrical, and all other conditions necessary for the IGA and appropriate recommendations for ECMs. As-Built drawings, if available, are only intended as a guide. DGS assumes no responsibility for the accuracy of any As-Built drawings. Surveys of existing conditions include reasonable cutting of exploratory holes and other investigations to determine the location of existing elements as necessary for coordinating the design. The Funding Agency shall determine if the exploratory hole location is acceptable, considering the facility's operation and shall assist with relocation of property and personnel, if possible and reasonable. The Funding Agency is responsible for actual cutting and patching of the holes.

C AS-BUILT RECORD DRAWINGS. DGS may have access to As-Built Record Drawings for some of the projects constructed by the Department and the Former General State Authority (GSA). The Professional should review the documents available at the Facility and determine their need for as-built drawings. If they exist, As-Built record drawings will be made available.

1.3 SECTION 202 - CODES AND PERMITS

A PROFESSIONAL'S RESPONSIBILITY. The Professional shall design the GESA Project in compliance with all applicable Federal, State and Local Codes, ordinances, laws, and regulations.

B VARIANCES. Variances to codes and ordinances are to be avoided unless necessary for the project. If a variance must be obtained, the issue must be presented and reviewed with DGS prior to submission of the variance. In no case is a variance application to be made without prior approval of DGS.

C BUILDING CODES. The Project design and construction must conform to the Pennsylvania Uniform Construction Code (UCC) adopted under Act No. 45 of 1999, as amended (35 P.S. §§ 7210.101 – 7210.1103).

1 The UCC adopts various standards and codes, including the International Building Code (IBC) for use throughout the Commonwealth of Pennsylvania. The Pa. Department of Labor and Industry will perform code enforcement and enforce the UCC. State-owned buildings are exempt from local (Municipal, Township) review of projects for a building permit.

a The PA Uniform Construction Code (UCC) is administered by the PA Department of Labor and Industry.

b All Commonwealth projects are exempted from fees for plan review and building permit application.

2 Other Building Codes and Standards (Local, State and Federal) not listed may also apply.

D ZONING. DGS is required to comply with local land use, setback, height and other local zoning restrictions. The scope of work for the Professional includes making application and obtaining zoning approval and variances prior to Construction Documents Submission at no additional cost to the project.

E SUBDIVISION AND LAND DEVELOPMENT APPROVAL. DGS will comply with local subdivision and land development ordinances. The scope of work for the Professional includes making application and obtaining those approvals if necessary.

F PERMITS. Professional shall obtain all other design approval permits, such as those issued by DEP, PHMC, Highway Occupancy permits, and permission to connect to utility systems.

1.4 LAND SURVEY

A INITIAL INFORMATION. If necessary, for the GESA Project, the Professional shall collect all available topographic and other site information available from the Funding Agency and DGS at the time of the initial site visit or shortly thereafter and review, analyze and determine completeness of Project Information.

B OBTAINING A LAND SURVEY. An existing Property/Topographic survey, if within DGS' possession will be provided by DGS. If necessary, for the GESA Project, the Professional should obtain confirmation from public records that all existing easements are shown on the land survey.

1.5 SECTION 204 - SUBSURFACE AND RELATED SITE INVESTIGATION

A INTENT. If necessary, for the GESA Project, the Professional, with a Civil/Structural Engineer, is to obtain data that will yield sufficient information for an accurate evaluation of the existing subsurface and related conditions for the following purposes:

1 Analysis, design and construction of foundation and substructure.

2 Analysis, design, and construction of site work such as embankment, slopes, retaining structures, site and subsurface drainage, roads and pavements.

3 Soil Erosion and Sedimentation Control.

4 Analysis and cost estimation of rock and soil excavation and fill.

5 Wetlands and other land use evaluation.

6 Archaeological studies.

B OBTAINING SUBSURFACE AND RELATED INFORMATION. The Professional, in collaboration with a Civil/Structural Engineer, is to gather available information from any previous studies or reports and by observing the site.

C SUBSURFACE FUEL TANK INVESTIGATIONS. There are specific regulations regarding existing and new fuel storage systems. Unforeseen fuel systems, whether discovered during design or construction, shall be addressed by the Professional in the most appropriate manner so as not to impede the project. The Professional shall use due diligence to determine the presence of or lack of underground tank systems.

D SUBSURFACE UTILITY INVESTIGATIONS. When it is necessary to locate unobservable utility lines, tanks, or other objects due to complexity or special circumstances of the Project, the Professional may obtain the necessary information using geophysical prospecting techniques.

E SOILS ENVIRONMENTAL ASSESSMENT. The Funding Agency shall alert DGS and the Professional of any previous activity which could have created soil contamination problems. Where the likelihood of contamination is real, the Department and the Professional shall jointly determine if a soils environmental assessment is appropriate. Installing improvements on top of contaminated soil is to be avoided.

1.6 DESIGN RESTRICTIONS

A STEEL PRODUCTS. Pursuant to the Steel Products Procurement Act (73 P.S. §§ 1881 – 1887), steel products including approved proprietary products must be composed of steel manufactured in the U.S. Products containing foreign steel are permitted only if 75% of the cost of the product is composed of articles or materials mined, produced or manufactured in the U.S. DGS may grant an exception to the prohibition if DGS determines that the product is not manufactured of U.S. steel in sufficient quantity for the Project. The Professional shall not knowingly specify a prohibited product.

B ENERGY SOURCE FOR SPACE HEATING. Heating systems or heating units installed in a facility owned by the Commonwealth shall be fueled by coal, consistent with Act 1990-28 (71 P.S. §650).

1 When an alternate fuel source is proposed, justification for not using coal is required. Information for the type of fuel proposed for this Project supporting the justification must be submitted to DGS for review.

2 The Professional's written justification to use an alternative fuel source should include such considerations as:

a Heating system first costs, and life cycle analysis.

b Space considerations for handling and storage.

c Space considerations for equipment.

d Manpower requirements for operation and maintenance of a coal system.

e State and Federal Air Quality considerations.

f Aesthetic appeal of the site, building and/or facility.

g Other information you consider appropriate.

h Using natural gas from wells located in PA may be an appropriate justification.

3 Information must be specific enough to present a provable argument for using the proposed fuel in place of coal. An extensive report is not required; information can be presented in letter form addressing items listed above.

C DEVIATION FROM CONSTRUCTION CONTRACT GENERAL CONDITIONS. DGS uses our standard General Conditions to the Construction Contract for all projects. The Professional may not deviate from the standard practices and procedures established in the General Conditions without specific prior written approval from DGS.

CHAPTER 3

SCHEMATIC SUBMISSION

1.1 GENERAL

A PURPOSE. The Schematic Design shall illustrate the concept, scope, scale and relationship of the project components. When the Funding Agency has accepted the IGA, the Professional shall begin to prepare the Schematic Design documents. The Design is to present the general type of construction proposed, the basic HVAC, plumbing and electrical system concepts and the relationship of the facility to the site.

B SUBMISSION TO THE DGS Energy and Resource Management Office. Applicable Schematic Submission documents are to be delivered to Energy and Resource Management Office on or before the date established in the GESA Contract, unless another date has been approved by DGS.

C SUBMISSION TO FUNDING AGENCY. The Professional is to furnish the Funding Agency with one complete set of the Schematic Submission documents to the Funding Agency main office and one complete set to the Funding Agency personnel at the Facility on the same date they are delivered to DGS.

D REVIEW CONFERENCE. A conference to review the Schematic Submission with the Professional, the Funding Agency and the Energy and Resource Management Office will be scheduled by Energy and Resource Management Office. The conference will normally occur approximately one (1) week after the submission and is held at a location identified by Energy and Resource Management Office. The GESA Contractor and the Professional must attend.

E ENERGY CONSULTANT (EC). When the Department has engaged an Energy Consultant, the Professional is to provide one (1) set of Schematic Submission documents to the EC, on the same day the submission is delivered to DGS.

1.2 SCHEMATIC SUBMISSION DOCUMENTS

A SCHEMATIC SUBMISSION PACKAGE. On the scheduled date of the Schematic Submission the Professional shall deliver a disc(s) containing the following information to the Energy and Resource Management Office: Supply if applicable:

1 Code Review and Analysis.

2 Design Drawings, including Cover Sheet in the appropriate format.

3 Estimated loads, telephone call reports, and Notification Letters to all Utility Companies (Electric, Gas, Water, Sewer, Telephone, etc. as applicable). Include utility reply letters confirming service, should be included if available.

4 Fuel Feasibility Study (with Coal Non-Use Justification).

5 Structural Engineers' Initial Subsurface and Related Site Investigation Reports.

6 Initial Report on Site Restrictions, including zoning, land development, flood plains, wetlands, hazardous materials, water table, sinkholes, endangered species, easements required, etc.

7 List of Regulatory Approvals/Permits – Status Report that the Professional recognizes as necessary for the Project.

8 Initial contact letter to Pennsylvania Historical and Museum Commission.

9 Additional Items, as applicable:

a Initial project report for flood control and/or water resources projects.

b Initial report of water supply facilities.

c Initial report on sewerage facilities.

d Copy of other additional items requested by the DGS, or otherwise determined by the Professional to be required for the Project.

B SITE PLANS. Site plans must include the following information:

1 A small-scale Overall Site Plan showing the Project's relationship to surrounding improvements and conditions.

2 Plans of adequate scale to show the work, showing site boundaries, Limit of Contract line, existing and proposed topographic contours, at maximum two (2) foot intervals.

3 Plans should show all existing and proposed underground and aboveground utility lines, points of attachment to utility lines and point of entrance into buildings (Gas, Water, Sewerage, Steam, Electric Power, Telephone, etc.).

C FLOOR PLANS. Plans are to be minimum 1/8" = 1'-0" scale, showing each floor and roof if modified. Renovations or alterations may be single line drawings superimposed on existing drawings. Floor plans shall show the relative space, size, and location of all major mechanical/HVAC, plumbing, electrical, telephone, equipment rooms, as well as all programmed space.

D ELEVATIONS AND SECTIONS. Principle building elevations and sections should be shown for clarification as needed.

E MECHANICAL AND ELECTRICAL SYSTEMS. Drawings shall indicate the general arrangements of HVAC, plumbing and electrical system being provided. Statements of reasoning justifying the selection of the proposed systems shall be provided.

F EXISTING FACILITIES. Where existing facilities are to be retained, altered, or modified, the pertinent **information** shall be indicated on site plans, floor plans and/or other diagrams.

1.3 REGULATORY APPROVALS AND PERMITS

A REQUIREMENTS. The Professional should refer to General Conditions of the GESA Contract and this Manual relative to required submittals to applicable agencies in a timely manner.

B DEPARTMENT NOTIFICATION. If any required approval is withheld by any agency, the Professional shall immediately notify the DGS Energy & Resource Office.

C LIST OF REQUIRED PERMITS. With the Schematic Submission, the Professional shall include a list of all required approvals/permits with a schedule of application dates.

Information concerning application documents and other requirements for each approval and permit is to accompany the list.

D COAL-FIRED SYSTEMS. If the Project contains Coal-Fired Boilers, and/or Incinerators, the Professional shall discuss the Project with the appropriate regional office of the DEP, Bureau of Air Quality Control. The Professional shall make application for a permit in accordance with the latest rules and regulations. One (1) copy of the approved application must be submitted with the Construction Documents Submission.

1.4 APPROVALS AND POST-CONFERENCE ACTIVITIES

A 303.1 FUNDING AGENCY APPROVAL. The Funding Agency's approval must be provided before the Department will approve the Schematic Design.

B 303.2 DGS APPROVAL. Approval of the Schematic Submission by the Department is contingent upon the Professional making all changes requested or required.

C 303.3 MINUTES. The Professional shall furnish minutes of the Schematic Review Conference to the Department, Funding Agency and Energy Consultant (if applicable) within five (5) days following the conference. Professional's post-conference comments, included with the meeting minutes, shall be identified as not a part of the meeting minutes.

CHAPTER 4

CONSTRUCTION DOCUMENTS SUBMISSION

1.1 GENERAL

A PURPOSE. The Construction Documents Submission ("CD") is to provide 100% complete final construction documents including drawings and specifications as required for construction.

B SUBMISSION TO THE DGS ENERGY AND RESOURCE MANAGEMENT OFFICE. The Construction Documents shall be submitted on disc(s) to DGS' Energy and Resource Management Office and the Funding Agency on or before the date established in the GESA Contract unless another date has been approved by DGS.

C UCC APPLICATION FOR BUILDING PERMIT. If DGS determines that the Construction Documents Submission is adequate for building permit purposes, DGS will direct the Professional i to submit all the Construction Documents to the Pa. Department of Labor and Industry with a completed UCC Application for Building Permit. Commonwealth projects are exempt from UCC Building Permit Application fees.

D REVIEW CONFERENCE. A conference to review the Construction Documents Submission with the Professional, the Funding Agency, Energy and Resource Management Office and Energy Consultant will be scheduled in a location selected by Energy and Resource Management Office, within two (2) weeks after receipt of submission. Professional, the GESA Contractor and any Consultants are required to attend the Conference.

1.2 CONSTRUCTION DOCUMENTS SUBMISSION

A CONSTRUCTION DOCUMENTS SUBMISSION PACKAGE. On the scheduled date of the Construction Documents Submission, the Professional shall deliver a disc(s) containing the following information:

1 One copy of Project Specifications with the Professional's seal and signature on the Cover Page.

2 One complete set of all Construction Drawings, including the Cover Sheet, with the Professional's seals and signatures on all drawings.

3 One copy of a Report Summarizing the Status of all Utilities required for the Project (Electric, Gas, Water, Sewer, Telephone, etc., as applicable). If applicable, provide a written estimate for the Utility Company's cost to extend service to the building.

4 G. One copy of the List of Regulatory Approvals/Permits – Status Report indicating the status of the submission/review/approval process for all required permits and approvals, with copies of all approvals/permits obtained to date. Completed applications for regulatory approvals/ permits must be submitted to appropriate agencies with copies to DGS prior to Construction Documents Submission.

5 One copy of a CPM Construction Schedule, with recommended number of calendar days of construction and temporary heat requirements

B SPECIFICATIONS. The Professional must submit the 100% complete specifications, including Cover Page, Table of Contents, List of Drawings, General Requirements, and

technical specifications of all contracts, describing the type, quality and use of materials, equipment, processes, and systems to be incorporated in the work. The Cover Page must bear the Professional's Seal and Signature.

1.3 DRAWINGS. Construction drawings are to be 100% complete dimensioned plans, elevations, sections, details, schedules, and diagrams of all architectural, landscaping, civil, structural, HVAC, plumbing, electrical and other miscellaneous contract work. The Professional's seals and signatures must appear on all drawings.

A The Professional's and respective Consultants' seals and signatures shall be affixed to all drawings.

B Bind sets as indexed, with Cover Sheet.

C All approvals from various regulatory agencies shall be noted on Cover Sheet of the drawings.

1.4 SITE PLAN DRAWING. The site development drawing should include the following:

A General Construction: The CD Submission must include a site plan sheet showing the Limit of Contract line and locate staging areas, trailer locations, and the GESA Contractor parking area. The following information shall also be included as applicable to the project:

1 Existing conditions plan with site demolition, if any.

2 New improvements plan with all surface features indicated and detail cuts, if any.

3 Site details of all conditions.

4 Layout plan of new improvements with tie to control monuments, locations of easements and property lines near the work, floor elevations and source/date of survey with location/description of benchmarks.

5 Grading and drainage plan with Stormwater Management system.

6 Profiles of drainage lines with crossover pipes indicated.

7 Common utility plan showing interrelationship of all utilities and the POC (Pennsylvania One Call System) Serial Number. Include a 'Utility Contact Table' as required by Act 287.

8 Landscape plans with details.

9 Soil erosion and sedimentation plans and details with narrative.

B After approval of the Construction Documents submission, for purposes of Land Title/Lease Confirmation by DGS Legal Unit, the Professional shall provide an electronic file of an 11" x 17" Site Plan, showing all property lines, easements, ROWs, and Limit of Contract line. Verify exact requirements with the DGS Project Coordinator.

1.5 UTILITY SERVICES. The Professional shall provide a report summarizing the status of all utilities for the Project. The report shall indicate the nominal capacity of each service and confirm that each service is adequately sized to serve the Project. The report shall indicate what documents were provided for the DGS Legal to prepare easement agreements and the dates the documents were provided. The report shall also detail what actions are required to obtain services, when the actions are required, and who is to take the necessary actions.

1.6 REGULATORY APPROVALS AND PERMITS

A CONSTRUCTION/BUILDING PERMITS. The Professional shall obtain a UCC Building Permit from the Pa/ Department of Labor and Industry. DGS requires the GESA Contractor to obtain and pay for all other necessary permits, licenses and certificates required by law for proper execution and completion of its work.

1.7 APPROVALS AND POST-CONFERENCE ACTIVITIES

A Funding Agency APPROVAL. The Professional should obtain the Funding Agency's formal approval of the Construction Documents in the form of a letter to the Director of the Energy and Resource Management Office signed by the Funding Agency's Secretary, or designee, with approval authority. This letter is required following the Construction Documents Review Conference, and prior to DGS Final Approval.

B DGS APPROVAL. Approval of the Construction Documents Submission by DGS is contingent on all changes requested or required being incorporated into the Construction Documents and approval of Funding Agency.

C MINUTES. The Professional shall furnish minutes of the Construction Documents Review Conference to the Department and Funding Agency within five (5) days following the conference. Professional's post-conference comments, included with the meeting minutes, shall be identified as not a part of the meeting minutes.

CHAPTER 5

DRAWINGS

1.1 GENERAL

A PURPOSE. This Chapter presents standards and guidelines for drawings prepared for GESA projects. Generally accepted professional practices are to be used, except where different DGS standards or practices are given.

B WORKING DRAWINGS. Original drawings must be AutoCAD-generated drawings. Lettering must be legible on half-size prints. Except where drawings are diagrammatic, all drawings shall be drawn to scale.

C INFORMATION. Final construction drawings on the disc shall contain adequate information, including schedules, details, and pertinent information necessary to perform the work.

D 'AS-BUILT' RECORD DRAWINGS. Record drawings of the construction shall adhere to the industry standard for 'As-Built' Record Drawings in AutoCAD and .pdf format drawings.

1.2 SIZE, FORMAT AND APPROVALS

A COVER SHEET. All projects shall have a Cover Sheet. The Index to Drawings shall list each drawing by name, sheet number and descriptive title. Cover Sheet shall have all pertinent regulatory approval references. List all Consultants, indicating their discipline.

B PROFESSIONAL SEAL AND SIGNATURE. For the Construction Documents Submission, the Professional Seal of the Registrant in charge of the work must appear on all drawings, specifications, plans, and reports issued by the Professional.

1.3 SYMBOLS, REFERENCES AND SCHEDULES

A SYMBOLS. A Legend showing all reference symbols and abbreviations with a clear explanation of each must be provided. Symbols utilized in the development of drawings shall be those commonly recognized by Professionals throughout the building industry as being both identifiable and universal in meaning.

B SCHEDULES. Provide accurate and complete schedules. Schedules shall include as applicable to the project:

1 Beam and column, and other structural member schedules with design and construction loads and information.

2 Fixture schedules (all contracts), including design conditions, size of service connections. Fixtures must be identified on the drawings.

3 Equipment schedules (all contracts), including design conditions, size and capacity, motor horsepower and all electrical characteristics.

4 Electrical panel schedules.

1.4 MISCELLANEOUS

A AS-BUILT CHANGES. At the completion of the Project, the Professional shall prepare and submit record ‘As-Built’ drawings as further discussed in the General Conditions of the GESA Contract. The Professional shall identify ‘As-Built’ changes using symbol and description key on the standard title block.

CHAPTER 6

PROJECT SPECIFICATIONS

1.1 PROJECT MANUAL FORMAT

A The preferred format is CSI Master Format/Section Format. The AIA 'Master Spec' or similar formats are acceptable.

B LIST OF DRAWINGS. This document is to be match numbers and names on cover sheet.

1.2 INSTRUCTIONS ON TECHNICAL SPECIFICATIONS

A EDITING. Specifications are to be created to suit the requirements of each individual project, editing specs to exclude all non-pertinent information. Procedures specified must not conflict with the GESA's General Conditions.

B QUALITY CONTROL TESTING. Quality control tests to be done by the GESA Contractor are to be included in the Project Specifications.

C BASIC CODES/REGULATIONS. Reference to an edited list of the latest edition of design codes shall be made in each appropriate section of each contract specification, as applicable. The following is a partial list, as a guide:

1 Life Safety Code – NFPA 101

2 Labor & Industry – Uniform Construction Code (UCC)

3 Pennsylvania Code – Department of Health regulations

4 National Electrical Code – NFPA 70

5 National Electrical Safety Code – ANSI C2

6 ASHRAE

7 Pennsylvania Code – Elevators, lifts, escalators, dumbwaiters, hoists and tramways – Labor & Industry 34 Code Chapters 7 and 8

8 Safety Code for Elevators and Escalators – ASME/ANSI A 17.1

9 Accessibility Codes - UCC

10 City or Local Municipal Codes

CHAPTER 7

DGS STANDARD DESIGN PRACTICES

1.1 GENERAL

A PURPOSE. This Chapter provides information concerning design and drawing standards adopted by DGS as standard for GESA projects. This section in no way limits the responsibilities of the Professional and its Consultants stated or implied elsewhere.

B ACCEPTABLE DGS PRACTICES. The practices included are both those written by DGS and standards referenced from other agencies. It is not the intent of this Manual to furnish a complete and up-to-date list of all acceptable industry standards. Questions should be discussed with the DGS Project Coordinator.

1.2 ARCHITECTURAL

A ARCHITECTURAL. Architectural design shall be by a Professional Architect, licensed in the Commonwealth of Pennsylvania.

B ROOF DECK. Metal roof decks, new or existing, shall not be used for suspension or support of ductwork, conduit, ceiling systems, lighting fixtures or any other miscellaneous equipment or items.

1 All suspended items shall be supported from the structural members or a suspension system supported by the structural members.

1.3 CIVIL/STRUCTURAL

A CIVIL. Site design shall be by a Civil Engineer Registered in the Commonwealth of Pennsylvania. Design shall comply with all codes, and federal, state, and local regulations and obtain required design approvals. Information shall include but not be limited to:

1 Drawings:

a Existing site plan with all above ground and underground improvements, property line metes and bounds if the site borders property lines and site demolition, indicated and described in detail. Locate and describe two or preferably three benchmarks and indicate the source and date of the survey. Note PA One Call design notification serial number.

b Site improvements indicating all visible surface improvements. Provide building layout dimensions from control points. Locate the Contract Limit Line and the Contractor staging and parking areas.

c Grading and drainage with existing and new contours or point grades to allow construction. Show stormwater management system. Show all drainage structures with invert and top elevations; provide profiles with pipe crossings indicated.

d Landscaping drawings.

e Soil erosion and sedimentation drawings, and narrative.

f Details of all work with section cuts on plans.

B STRUCTURAL. Structural design shall be by a Professional Engineer, licensed in the Commonwealth of Pennsylvania.

1 General: Design all primary and secondary structural elements and comply with all requirements of the Pennsylvania UCC. Commonwealth office buildings are to be designed for live load of 125 psf. Where renovating an existing building, the structural adequacy shall be analyzed for code compliance.

2 Drawings: Provide design notes with design load criteria and notes on all structural systems. Information shall be provided on drawings, which includes but is not limited to:

a Foundation Systems: Following the recommendations of the Geotechnical Engineer Consultant, provide a complete design of foundation systems. Fully define the work, providing bearing elevations necessary to establish a clear scope of work for bidding. Consider ground water conditions and accommodate foundation drain and waterproofing systems. Drilled piers requiring inspection are to be a minimum of 30” diameter.

b Concrete: Design in accordance with applicable current ACI specifications.

c Structural Steel: Design in accordance with applicable current AISC specifications.

d Steel Joists: Design in accordance with applicable current SJI specifications.

e Steel Deck: Design in accordance with applicable current SDI specifications.

f Cold-Formed Steel Framing: Design in accordance with applicable current AISI specifications.

g Masonry: Design in accordance with applicable current ACI specifications.

h Wood framing: Design in accordance with applicable current NDS specifications.

i Other Systems: Other structural systems shall be designed in accordance with requirements of stated applicable specifications required by Code or, where no code governs, by engineering judgment.

3 Specifications: Specifications, not the drawings, are to contain testing requirements. Tests and inspections to occur are to be listed.

4 Metal Stud Bearing Walls: DGS policy does not allow Commonwealth buildings to be constructed with metal stud bearing walls.

5 Slabs on Grade Within Buildings: Slabs are to be designed to allow removal and replacement, without disturbing exterior walls or the supporting structure, unless specifically authorized.

1.4 HEATING, VENTILATING AND AIR-CONDITIONING

A STEAM AND HOT WATER HEATING SYSTEMS. All equipment used for steam or hot water heating systems shall be constructed and installed in accordance with requirements of the Department of Labor & Industry, Boiler Division and ASME Boiler and Pressure Vessel Codes.

1 Steam and HWS and HWR pipes shall be steel per ASTM A 53, A 106 or A 120 Schedule 40. Condensate return pipes shall be steel per ASTM A 53, Schedule 80.

2 All valves for hot water boilers, hot water pressure vessels-, high- and low-pressure steam boilers and pressure reducing stations shall be marked in accordance with ASME, Boiler and Pressure Vessel Code indicating type of service, capacity of valve in BTU/hr. or lbs. steam per hour and operating pressure. Pressure relief valve rating shall not exceed the maximum allowable working pressure of the boiler.

3 Pipe joints for steel piping shall be threaded up to and including 2" diameter. Pipes 2-1/2" diameter and over shall be joined by welding or flanged fittings. Copper tubing shall be joined by brazing or soldering. For 3" diameter or larger, mechanical couplings may be used for low pressure hot and cold-water systems only in accessible locations. Seals for mechanical couplings shall be designed for the specified operating and type service.

4 Piping for branches to baseboard radiation, fan coiled units and such other local heating equipment which may require servicing or replacement shall be provided with a union on each side of the device.

5 Connections to pumps, circulator, hot water heater and all other equipment which may require servicing or replacement shall be provided with a union on each side of the device.

6 When specifying underground pre-insulated conduit systems, all related vaults/pits shall be equipped with sump pits, sump pumps, and high-water level alarms. Conduit jackets shall be vented to a location visible to facility staff. Cathodic protection shall be as required by manufacturer.

B INCINERATORS. Incinerators used for burning of trash or medical waste shall conform to the requirements of DEP, and/or the local Health Department. The GESA contractor must file a permit application with DEP and other regulatory agencies prior to the Construction Documents Submission.

C TESTING, ADJUSTING AND BALANCING (TAB) AGENCY. The services of a qualified TAB agency shall be provided by the GESA Contractor. Such agency shall have in its employ a Professional Engineer registered in Pennsylvania. The TAB agency shall have a minimum of five (5) years' experience in the testing, adjusting and balancing of all water, hydraulic and air systems.

1 The testing and recording of all dates shall in general conform to standards of AABC or NEBB or as may be approved by the Professional.

2 All TAB reports shall be certified by the testing agent and reviewed and approved by the Professional. The report shall make record of all deficiencies found by the testing agent prior to, during and after testing. The Professional, prior to approval, shall provide to the Energy Consultant and Energy and Resource Management Office appropriate comments regarding such deficiencies indicating how such deficiency, if any, was corrected.

1.5 PLUMBING

A BASIC REQUIREMENTS. The following provides basic requirements for the design and construction of plumbing systems. This guide does not supersede any state, municipal or other governing agency's codes and regulations.

1 Special Temperature Controls: Hot water for baths and showers in all hospitals, health care centers and other such Institutions shall be provided with temperature-pressure controllers, so that the delivered hot water temperature does not exceed 110oF.

2 Materials: Unless otherwise instructed, plumbing fixtures shall conform, as a minimum, to the following indicated standards. All fixtures shall be of a water conservation type and conform to applicable codes.

a Piping and Fittings:

I Water Service: Schedule 40 (Type A), galvanized steel per ASTM A 53 or ASTM A 120.

II Water Distribution: Copper tubing Type A or Type B per ASTM B 88.

b Sanitary Drainage System and Vents:

I Aboveground: Type A, Type B or Type D (cast iron ASTM A 74 – service weight)

II Underground: Type C (cast iron ASTM A 74 – heavy weight) (Type D).

III Vents: Galvanized steel (per ASTM A 53 or cast iron per ASTM A 74 light weight). Vents through roof shall not be less than 3" diameter.

c Rainwater Conductors: Type D (cast iron ASTM A 74 light weight).
NOTE: Downspout and roof gutters are to be within the scope of work of the General Contractor.

d Pipe Fittings: Malleable iron per ANSI B 16.3.

1.6 ELECTRICAL

A REQUIREMENTS. Electrical design shall comply with all applicable codes, regulations and good engineering practices.

B MINIMUM DESIGN CRITERIA. Electrical design shall meet or exceed the following:

1 Lighting levels shall use Illuminating Engineering Society (IES) recommendations as maximum and 80% of IES standards as minimum, unless directed otherwise by the UCC or the Department. Construction stage lighting shall meet OSHA, Standards for Light Levels.

2 Voltage drop in feeders shall not exceed 2%.

3 Voltage drop in branch circuits shall not exceed 3%.

4 All conduits, raceways, etc. shall be equipped with a green colored insulated grounding conductor. The conduit system shall not be relied upon as the only grounding path.

5 Provide 15% provisions for installation of future breakers (not just space) in all panels.

6 Panelboard schedules shall include raceway and wire size and equipment ratings.

7 Specify methods of controlling spread of fire and smoke. Specify fire-rated sealants and ‘poke through’ fittings.

1.7 VERTICAL TRANSPORTATION

A REQUIREMENTS. Elevator, escalator, dumb-waiter, chair lift, etc. design shall comply with all applicable codes, regulations, and engineering standards.

B MINIMUM DESIGN CRITERIA. Vertical transportation design shall meet or exceed the following criteria:

CHAPTER 8

CONSTRUCTION CONTRACT ADMINISTRATION

1.1 GENERAL

A GENERAL. The Professional's activities during the Construction Contract Administration Stage are presented in general terms.

B OVERVIEW OF RESPONSIBILITIES. The Construction Phase commences when DGS issues a Notice to Proceed after accepting the Investment Grade Audit (IGA). After the Project is completed and formally accepted by DGS, the Professional shall execute a Certificate of Completion and revise the original Contract Documents, reflecting all changes recorded during construction. Record As-Builts shall be delivered to DGS and be identified as "As-Built Record Drawings" in .pdf format.

C ADMINISTRATION. The GESA Contractor is the lead project administrator during the Construction Phase. The Energy Consultant/Funding Agency is the prime contact for the GESA Contractor.

D ROLE OF THE ENERGY AND RESOURCE MANAGEMENT OFFICE. The Energy and Resource Management Office should be copied on all design/construction-related correspondence, except shop drawings and product/material submittals unless agreed to receive to assist agency in making recommendations.

E JOB CONFERENCES. The Energy Consultant if on project or GESA Professional chairs regular bi-weekly Job Conferences at the site. Attendance by the GESA Contractor and the Professional is mandatory at all Job Conferences, whether it is a regularly scheduled bi-weekly conference or a special meeting called for by DGS.

1.2 PROJECT REPRESENTATION

A BASIC SERVICES. The Professional shall visit the project site at least bi-weekly during periods of construction. In addition to bi-weekly visits to project sites, the Professional is required to attend, at the request of DGS, any/all project site conferences that may be necessary to clarify the Contract Documents.

B CONSULTANTS. It shall be the duty of the Professional to have his Consultants visit the project site periodically during their respective disciplines' period of active construction, at least bi-weekly, or at such intervals as required by DGS to ensure the progress and quality of the work and to determine if work is proceeding in accordance with the Contract Documents.

C QUALIFICATIONS. The Professional's Representative (full time or not) must be qualified by training and experience to make decisions and interpretations of the Construction Documents. DGS reserves the right to request the replacement of any Project Representative assigned to the Project who is not performing satisfactorily.

1.3 DOCUMENTS

A SUBMITTALS. The Energy Consultant/Professional must promptly review and accept/reject shop drawings, samples, and other submissions of the GESA Contractor.

B SUPPLEMENTAL DRAWINGS. Interpretations of the Contract Drawings and Project Manuals must be reviewed and approved by Energy Consultant/DGS prior to being

issued to the GESA Contractor. Drawings issued to clarify the work must be marked as "SUPPLEMENTAL", followed by the date of issue.

1.4 PROJECT CLOSE-OUT

A DEPARTMENT OF LABOR AND INDUSTRY AS-BUILT RECORD DRAWINGS. The Professional is responsible for submitting to the Pa. Department of Labor and Industry a revised set of Construction Documents for approval for changes made during construction that are not in accordance with the approve Construction Documents. This revised set of Construction Documents shall be referred to as 'L&I As-Built Record Drawings' and shall be submitted in accordance with L&I UCC requirements.

B DGS AS-BUILT RECORD DRAWINGS. Within ninety (90) days from the Final Inspection of the Project, the Professional shall submit Record Drawings on disc(s) showing all changes from the Construction Documents made during construction. The Record Drawing shall indicate the vertical and horizontal alignment of concealed pipes, conduits and similar items. Recorded changes shall be obtained from clearly marked field prints provided by the GESA Contractor and field office. The As-Built Record Drawings shall be on disc(s) in AutoCAD and .pdf format and shall be identified as "Record Drawings", shall be delivered to, and shall become the sole property of, the Department and the Funding Agency.

C OPERATION/MAINTENANCE MANUAL. After Final Inspection the following should be collected from the GESA Contractor: all shop drawings, catalog data, manufacturer's operating and maintenance instructions, warranties, guaranties, certificates, test reports and other material pertinent to operating and maintaining the facility. They must be correlated and indexed, into an organized Operation/Maintenance Manual by the GESA Contractor. The Professional, Energy Consultant and DGS must review the Operation/ Maintenance Manual for completeness and accuracy. If unacceptable, it is to be returned to the GESA Contractor with specific criticisms. If accepted, forward to a copy of all discs to DGS and one copy of all discs to the Funding Agency with all the information in .pdf format.

D CERTIFICATE OF OCCUPANCY. Inspections required by the code enforcement agencies to obtain Certificate of Occupancy must be arranged by the Professional. All permits needed to permit occupancy must be obtained.

CHAPTER 9

MISCELLANEOUS INSTRUCTIONS

1.1 INTRODUCTION

A INTRODUCTION. This Chapter contains instructions to the Professional on specific topics for which the Department has standards that it wants the Professional to observe, if applicable. Applicability is determined by the nature of the GESA project.

1.2 QUALITY CONTROL AND QUALITY ASSURANCE TESTING

A GENERAL. The Professional is to adopt the DGS system for specifying Quality Control (by Contractor's Quality Control Agency) and Quality Assurance (by the Professional's Quality Assurance Agency) testing and inspection. The Professional is to adopt DGS terminology and approach, with the end result of ensuring that all materials deemed to require testing are tested or inspected to ensure a quality project and to comply with requirements of the UCC, including Special Inspections in Chapter 17 of the IBC.

1. The Department requires that Professionals follow our strict guidelines regarding testing and inspection in the interest of uniformity of administration. Professional is to include Quality Control Testing Services, and Quality Assurance Testing and Inspection Services for structural-related testing and inspections, adopt the Department's program and Project Manual format and terminology, and assign testing and inspection responsibilities to the recommended parties. Non-structural materials and systems which are to be independently tested or inspected are to have the testing specified within the appropriate technical specifications. The Department does not require shop testing during fabrication of structural components, when an appropriate trade association provides independent QC oversight, such as is provided for structural steel fabricators under the AISC Quality Certification Program. The Department does not ordinarily require testing of materials for which manufacturers can provide Certificates of Compliance from independent testing laboratories. These policies are not in conflict with IBC requirements.

B SCOPE. All testing is to be Quality Control Testing (by the GESA Contractor's QC Agent) with random check testing under Quality Assurance (by Professional's QA Agent). Quality Control tests shall be required by specific type and frequency or quantity of tests. The exception to this is soils testing which is to be Quality Control with no specified quantities. The GESA Contractor is to do whatever testing is required, without limitation, to comply with specification standards. Construction monitoring of earthwork and soils testing is by the Professional's Geotechnical Engineer, who is acting as the QA Agent for soils work.

1. All Special Inspections required by IBC Chapter 17 are to be Quality Assurance (by Professional's QA Agent).

2. When structural Quality Control Testing is required, the technical specification for all testing requirements, where types and frequencies of tests shall be listed in detail. Testing requirements shall not be stated on the Drawings, or in the technical specification sections. Detailed descriptions of testing may be included in the specifications where necessary.

3. When structural Quality Assurance Testing or Inspection is required for all testing and inspection requirements, where types of tests and inspections only shall be

listed. Testing and inspection requirements shall not be stated in the technical specification sections.

C WORK ORDER FOR QUALITY ASSURANCE TESTING AND INSPECTION SERVICES

1. If Quality Assurance Testing or Inspection is required, the GESA Contractor Professional is responsible to provide this service. Based upon Project conditions, the GESA Contractor Professional is to authorize check tests and inspection hours during construction as deemed necessary to assure the GESA Contractor Professional of contract compliance and as required to comply with the IBC, including Chapter 17 of the IBC. Tests shall be standard tests that are identified by ASTM or other designation. Include any tests that might be taken in order to establish unit prices.

2. The GESA Contractor Professional is responsible for directing the Quality Assurance program. It shall solicit advice from Consultants as it deems appropriate. It should direct the testing and inspection in accordance with need, based upon minimum documentation, Contractor performance, Quality Control Agent reports, quality of materials furnished, Project conditions and UCC requirements.

3. The Energy Consultant/ Funding Agency shall be consulted prior to implementing any action by the Quality Assurance Agent. The purpose of this consultation shall be to bring areas of concern to everyone's attention and assure that all involved parties are aware of the rationale being used. The inspection staff shall also bring to the attention of the Professional any items that may be of concern that would require further review and supplemental testing. Implementation of the Quality Assurance Agent shall be a collective effort that must be closely coordinated between the Professional and the inspection staff.

4. When unsatisfactory test results occur, the Professional and ensure that appropriate corrective action is initiated.

1.3 UTILITY REQUIREMENTS

A PURPOSE. The purpose is to outline the procedure for providing utilities on a GESA project.

B CONSTRUCTION DOCUMENTS. As soon as practical during the Construction Documents design phase, the Professional shall contact each utility company and obtain, in writing, a final scope of work for service installation, routing plan (includes right-of-way requirements), meter location, and the utility's cost to install its service. The Professional should forward this information along with the utility company point of contact to the DGS Project Coordinator for initiation of a utility agreement(s), which is reviewed and prepared as needed by DGS lawyers. Service arrangements must be completed prior to final submission of the design to DGS for review. The necessary drawings for DGS Legal to prepare easement documents shall be included.

1. Construction documents shall include any terms and conditions that the GESA Contractor must coordinate including costs to be paid to the utilities that are not incorporated in a utility agreement(s).

C UTILITY EASEMENTS/AGREEMENTS. All information must go through the Project Coordinator for tracking purposes. The Professional shall provide the GESA Project Coordinator with the final utility company information, including a written legal description of each proposed easements, along with a drawing showing the location of each easement, with the metes and bounds, as well as any other information required by DGS

Legal Unit. The Project Coordinator informs the DGS Legal Unit that a utility easement/agreement(s) must be developed and discusses details and the project schedule and transmits to Legal the utility company scope of work, the service routing plan (with right-of-way), utility company cost proposal and utility company point of contact. Using this information, Legal develops a utility easement/agreement.

D CONSTRUCTION DOCUMENTS SUBMISSION. The Professional must follow the service requirements of each utility company described in its scope of work. The Professional should show all service work required by the GESA Contractor on the contract documents, as well as work provided by the utility company.

E CONSTRUCTION. Service applications are applied for by the GESA Contractor on behalf of the Department, designating the initial payer of use charges according to requirements of the Construction Contract. The Department will authorize changing the name of the payer at the appropriate time.

1.4 SUBSURFACE INVESTIGATIONS AND GEOTECHNICAL REPORT

A SCOPE. The Professional shall obtain assistance from its Civil/Structural Engineer as set forth in these instructions and be responsible for obtaining subsurface and related data that will yield sufficient information for an accurate evaluation of the existing subsurface and related conditions for the following purposes:

1. Analysis, design and construction of foundation and substructure.

2. Analysis, design, and construction of site work, including embankments, slopes, retaining structures, underground structures, site and subsurface drainage, roads and pavements.

3. Soil erosion and sedimentation control.

4. Cost analysis and estimating of ‘Unclassified’ excavation.

5. Analysis of excavation and fill conditions.

B CONTRACTING FOR GEOTECHNICAL SERVICES. Geotechnical Services shall include test borings and other subsurface investigation, the Geotechnical Report and Construction Monitoring which shall all be included in the cost of the GESA project.

1. Specifications for Test Borings and the Geotechnical Report shall be based upon best practices and shall include a test-boring plan based upon the proposed footprint of the work and the expected foundation type to be used.

2. The Geotechnical Report shall include specific recommendations for designing structures, slabs on grade and paving.

3. The Geotechnical Consultant shall be required to submit with the Final submission a sealed statement to the effect that the design drawings and specifications are in accordance with his recommendations.

4. The Geotechnical Report shall not contain a broad disclaimer that excuses the consultant of responsibility.

C SUBMISSION OF DOCUMENTS TO THE DEPARTMENT. The Final Geotechnical Report shall be prepared, signed, and sealed by a Registered Pennsylvania Professional Engineer.

1. Upon completion of the boring contract, the Geotechnical Consultant shall submit to the Professional two (2) electronic copies of a complete report, covering the field work and laboratory testing, with complete analysis of each boring and with recommendations for soil and rock bearing capacities. The Professional shall retain one (1) copy and submit the other copy to DGS.

D CONSTRUCTION DOCUMENTS SUBMISSION. As part of the Construction Documents Submission, the Professional shall submit a letter stating that this Project was designed in accordance with the recommendations of the Geotechnical Consultant. If exceptions are taken, they must be justified.

1.5 SPECIAL SITE INVESTIGATIONS

A WETLANDS IDENTIFICATION AND DELINEATION. The Professional's responsibility in site selection and site expansion includes the determination of the presence of wetlands by a qualified wetlands delineation specialist, familiar with state and federal criteria and regulations. DGS will accept a letter from the Professional stating that wetlands are not found on the site. If wetlands are present, the Professional shall submit two (2) copies of the completed study to the Department.

B ENVIRONMENTAL IMPACT STUDIES. For all projects, the Professional shall make a preliminary Environmental Assessment (EA) to include any environmental and historic/archeological considerations for the Project. If more extensive investigation is required, then the Professional shall prepare an Environmental Impact Statement (EIS) in accordance with the requirements of NEPA. The Professional shall submit two (2) copies on disc of the completed study to the Department.

1.6 HAZARDOUS MATERIALS

A PROFESSIONAL'S RESPONSIBILITIES. The GESA Project may encompass hazardous material (Asbestos, Lead, PCB, Radon, etc.) The GESA Contractors Professional is responsible for addressing hazardous materials to the extent they may impact the Project, as more fully described in the project-specific RFP for each GESA project.

B ACT 287, UTILITIES. The Professional shall comply with the current Act 287 (amended by Act 187 of 1996), and PA One Call System provisions (73 P.S. §§176 – 186). The Professional shall contact the institutions and utility companies for location and identification of utilities on project site prior to survey. The surveyor shall identify and record PA One-Call paint marks on the survey.

1.7 SUBSURFACE UTILITY ENGINEERING

A SCOPE. The Professional shall determine if Subsurface Utility Engineering is necessary for development of the GESA Project. If needed, Subsurface Utility Engineering shall be provided by the Professional to precisely locate all underground utilities on the construction drawings.

1. Appropriate geophysical prospecting techniques, including radio frequency electro-magnetic, magnetic, acoustic emission sonics, terrain conductivity and ground penetrating radar, shall be used to provide a comprehensive horizontal map and give an indication of vertical position. Select excavation may be used to determine precise depth when the Project requires.

1.8 FUEL FEASIBILITY STUDY

A COAL FUEL NON-USE JUSTIFICATION. State Act 1990-28 (73 P.S. §650) requires that any heating system or heating unit installed in a Commonwealth-owned facility must use Pennsylvania coal as a source of fuel. The following should also be addressed and expanded when a fuel other than coal is proposed:

1. Using coal as the fuel for the heating system or heating unit would violate existing or reasonably anticipated environmental laws or regulations.

2. Using coal as the fuel for the heating system or heating unit would not be cost effective when compared to using other forms of energy.

3. Using electricity generated primarily from the combustion of coal would be more cost effective when compared to using coal as the fuel for the heating system or heating unit.

4. The principal fuel for the heating system or heating unit would be natural gas from wells located in Pennsylvania or wood from forests located in Pennsylvania, if such fuels were at least as cost effective as using coal as the fuel.

1.9 PREPARATION OF STANDARD DRAWINGS AND PROJECT MANUALS

A DRAWING STANDARDS. The Cover Sheet, Approval Blocks, and Title Blocks must have the proper names of the approving authorities, the correct names of the Professional and Consultant and the correct Project Number and Title, etc., entered in the appropriate places. Identify on the Cover Sheet the responsibilities of the Consultants.

B PROJECT MANUAL STANDARDS. The Professional shall use DGS standards for Project Manual Cover Page, Table of Contents, List of Drawings, General Requirements sections.

1.10 ARCHAEOLOGICAL AND HISTORICAL REQUIREMENTS

A PHMC REVIEW. The Pennsylvania Historical and Museum Commission (PHMC) is required to review all renovation work on State-owned buildings for historical significance and all excavation work for Archaeological significance. All costs associated with this review is to be factored into the project cost. Prior to the Construction Document Submission, the Professional is requested to contact the PHMC for their review of the location and scope of the work.

1. Inquiries shall be directed to:
2. Bureau of Historic Preservation
3. Pennsylvania Historical & Museum Commission
4. 400 North Street, Commonwealth Keystone Building, 2nd Floor
5. Harrisburg, Pennsylvania 17120-0093
6. Telephone: (717) 783-9926
7. Upon completion of their evaluation, PHMC will provide a response letter to the Professional, either indicating a finding of no significance, or requesting additional information.

B ARCHAEOLOGICAL. For their archaeological review process, PHMC generally needs a map (preferably a portion of a geological survey map) showing the project location and a brief description of any ground-disturbing activity. Even an activity such as parking lot construction can be significant enough to disturb archaeological resources.

1. If PHMC's evaluation indicates a potential for archaeological resources, they may ask for a Phase I survey to identify any archaeological resources at the project location. The survey must be done by a person or persons whose qualifications meet certain requirements. PHMC has a list of some qualified people, but this list is not exclusive.

2. Based on the results of the Phase I survey, PHMC may ask for a more intensive Phase II survey to evaluate the archaeological resources at the project location. In some cases, PHMC may then ask for a Phase III survey to mitigate adverse effects to the site.

C HISTORICAL. After initial contact with the applicant, PHMC checks whether the building is on or is eligible for the National Register. A survey form is used to determine eligibility. The Professional shall complete the form to the best of their ability; a historical analysis or survey is not required for this.

1. If National Registry eligibility is determined, PHMC reviews the Project based on the Secretary of the Interior's Standards for Rehabilitation. Each step in the review process may take up to thirty (30) days.

CHAPTER 10

DGS SPECIFICATIONS REQUIREMENTS

1.1 INTRODUCTION

A PURPOSE. This Chapter contains technical guidelines and requirements documents for reference or use by the Professional. Follow the instructions preceding each document on the specific recommendations or requirements for use of that document.

1.2 EARTHWORK SPECIFICATIONS

A DGS REQUIREMENTS. There is to be only one earthwork specification in the Project Manual. Where Site work or other General Construction specifications require earthwork, it should be specified by requiring compliance to the main earthwork specification. If there are any special earthwork or concrete work requirements not covered by the Earthwork specification, they should add these special requirements to their sections without nullifying the requirements of the Earthwork specification.

1. BASIS OF CONTRACT

   a. Excavation for this Project shall be considered unclassified and shall include all types of earth and soil, any pebbles, boulders, and bedrock, municipal trash, rubbish and garbage and all types of debris of the construction industry such as wood, stone, concrete, plaster, brick, mortar, steel and iron shapes, pipe, wire, asphaltic materials, paper, and glass. Unclassified excavation does not include unforeseen concrete foundations, walls, or slabs. All such materials encountered which are identified by this paragraph as unclassified shall be removed to the required widths and depths to create a finished product as shown and/or noted on the drawings and as written in the specifications. No additional compensation shall be made to the contractor for this unclassified excavation. The materials defined by this paragraph as unclassified will not be considered to be concealed conditions or unknown physical conditions below the surface of the ground for purposes of interpreting the language in the General Conditions of the Construction Contract.

2. SUBSURFACE INFORMATION

   a. Any available data concerning subsurface materials or conditions based on soundings, test pits or test borings, has been obtained by the Department for its own use in designing this Project. The Test Boring logs contained within the Geotechnical Report are incorporated into the construction contract as a Contract Document. The remainder of the Geotechnical Report, with all other exhibits, is available for informational/guidance purposes only.

   b. Test Boring logs reflect the conditions at the specific locations of each Test Boring only. The Department will not be responsible in any way for the consequences of failure to conduct such investigation. Excavation for the Project is “Unclassified”, as fully described in the Earthwork Section.

3. APPROVAL OF BEARING STRATA

   a. The GESA Contractor shall furnish adequate advance notification to the Professional of times when footing excavations are to be completed, so that the

bearing quality of bottoms may be inspected and/or tested and approved. Formwork and concreting shall follow only after this approval.

b. If the bearing at the levels indicated be found by the Professional to be inadequate, they may order the excavation carried down to sound bearing. If suitable bearing is found at a lesser depth than indicated, the Professional may order the reduction of excavation specified or shown on the drawings.

4. QUALITY CONTROL TESTING

a. The GESA Contractor shall perform all necessary Quality Control tests and procedures for the performance of the work to produce end results specified. The GESA Contractor shall maintain clear and orderly records of such tests and procedures and make them available for field review and approval of the Professional.

b. Quality Control tests shall include tests on fill material, optimum moisture content and maximum density and field density tests of fill layers. The Q.C. Testing agent shall comment on the suitability of all subgrades, and the subgrades shall be acceptable to the Q.A. Agency.

c. Handwritten copies of field test reports shall be provided to the Contractor. They shall be given to the Contractor and inspector within two (2) hours of completion, but in no event shall the technician leave the site without providing the Contractor and inspector with a copy of the test results. This shall include density, % moisture, plan location, elevation, comments, and any other relevant data. Comments shall include any condition that might have an adverse effect on the operations, including weather, drainage, etc.

d. The GESA Contractor shall request consultation with the Consulting Geotechnical Engineer on any problems that arise during construction. Copies of the daily in-place soil density tests shall be emailed to the consultant by the Contractor through the testing agency within twenty-four (24) hours of the time the tests are made.

e. The GESA Contractor shall approve each subgrade and each fill layer before proceeding to the next layer. Any area which does not meet density, % moisture or other requirements at any time, shall be suitably reworked and retested by the Contractor at his own expense.

f. The Professional a will perform Quality Assurance tests if deemed necessary for the assurance of the Professional. This does not relieve the Contractor of his responsibilities.

5. Compaction standards are to be based on Modified Proctor standards, as defined by ASTM D1557.

1.3 CAST-IN-PLACE CONCRETE SPECIFICATIONS

A DGS REQUIREMENTS. The cast-in-place concrete specification should be based upon requirements of ACI 301, except samples are to be taken and broken by the Quality Control Agent for each 50 cy. Slump tests and recording of temperature is to occur for each truckload. Air tests are to occur with each sampling that contains air. As with earthwork, there is to be only one Cast-In-Place Concrete specification in the Specifications. Also, we want to include a penalty for accepted under-strength concrete. Include the following language in the cast-in-place concrete specification:

"If the structural members are accepted based on tests other than the original cylinder tests, the Contractor shall compensate DGS for the Contractor's failure to meet specified strength requirements by paying to DGS one hundred ($100) dollars per cubic yard for each one hundred pounds per square inch below the specified strength. The original laboratory- cured 28-day test cylinder results only shall be used to determine the difference between specified and furnished strengths."

1.4 UNIT MASONRY ASSEMBLIES SPECIFICATIONS

A DGS REQUIREMENTS. To avoid the requirement in Chapter 17 – Special Inspections of the IBC for "continuous" inspection of grout placement in CMU cores, the specifications shall require that the GESA Contractor mark in an approved manner the location of filled cores for the QA Agent to verify the presence of reinforcing steel using a rebar locator and the presence of grout using an ultrasound device.

1.5 STRUCTURAL STEEL SPECIFICATIONS

A DGS REQUIREMENTS. To avoid the requirement in Chapter 17 – Special Inspections of the IBC for "continuous" inspection of high-strength bolting in slip-critical connections, the Professional shall require the GESA Contractor to use Direct Tension Indicator Washers or Twist-Off bolts or other systems providing visual verification of proper tightening. Require the GESA Contractor's QC Agent to provide field proof of appropriate tightening methods and calibration of the Contractor's equipment as necessary to ensure compliance. This shall be approved by the Professional and its QA Agent.

1.6 ARCHITECTURAL SPECIFICATIONS

A PURPOSE. To specify construction materials, methods and/or contract requirements, required to be included on project. The following provisions are to appear in all specifications, unless obviously inapplicable.

B ROOFING WARRANTY. The Professional shall include the following paragraphs in the Roofing Section for roofing work.

1. Quality Assurance:

   a. Manufacturer Qualifications: The manufacturer shall have a minimum of ten (10) years of experience in the production of the type of roofing herein specified and shall be able to show experience with projects of similar size and complexity.

   b. The Installer Qualifications: The installer shall have a minimum of five (5) years of experience installing the type of roofing herein specified, on projects of similar size and complexity.

2. GESA Contractor's Warranty:

   a. GESA Contractor's Responsibility: The Contractor shall take, or cause to have taken, all corrective measures necessary to keep the roofing system free of all defects, to the satisfaction of the Department, and to maintain the roofing system in a watertight condition. The Contractor shall have the responsibility for said corrective measures for two (2) years after the date of Final Inspection acceptance. The Contractor shall be responsible for the removal and replacement of the roofing system, to maintain the roofing system in a watertight condition. The Contractor shall also repair, or remove and replace, any part of

the building, including the interior, damaged because of leaks in the roofing system. The interior of the building includes, but is not limited to, the furnishings and fixtures. There shall be no limit to the Contractor's liability for fulfilling the aforementioned responsibilities.

(1). Final Inspection shall include a statement, supplied by the Contractor, and signed by an authorized representative of the roofing manufacturer, attesting to the fact that the roofing installation and finished condition is acceptable for warranty by that manufacturer.

b. Exclusions: The GESA Contractor shall not be responsible for repairs to, or replacement of, the roofing system, if repairs or replacement is necessary due to a natural disaster, such as lightning, flood, tornado, or earthquake.

c. Notification: The Department/Funding Agency will notify the GESA Contractor, as soon as reasonably possible, after it has knowledge of defects in the roofing system. Should the Contractor fail to promptly take corrective measures, the Department/Funding Agency may undertake corrective measures. The GESA Contractor shall be responsible for any and all expenses incurred by the Department/Funding Agency in undertaking the necessary corrective measures. In addition, undertaking of corrective measures shall in no way relieve the Contractor of any of the aforementioned responsibilities.

3. Manufacturer's Warranty:

a. The GESA Contractor shall provide the Funding Agency with a twenty (20) year warranty, furnished by the manufacturer, which shall warrant that the said manufacturer will repair any leaks in the roofing system, not to exceed the original cost of the installed roof over the life of the warranty, installed by an applicator authorized by said manufacturer.

b. Leaks from the following causes shall be covered by the manufacturer's warranty:

(1). Defects in the roofing system material.

(2). Workmanship of the authorized applicator.

c. The following exclusions are permitted in the manufacturer's warranty:

(1). Natural disasters such as lightning, hail, floors, tornadoes, or earthquakes.

(2). Damage from traffic or storage of materials on the roof.

(3). Structural failure of roof deck, parapet or coping.

(4). Infiltration of moisture in, through or around walls, coping or building structure.

(5). Movement or deterioration of metal counterflashing or other metal components adjacent to the roof.

(6). Damage to the building (other than roofing and insulation) or its components adjacent to the roof.

d. The warranty shall provide that in the event a leak should occur within the warranty period, and if such leak is within the coverage of the warranty, the warrantor will, at no expense to the Funding Agency, make or have made, all necessary repairs to put the roof membrane, base flashing, and roof insulation in a dry and watertight condition, using the same materials and specifications as the original application. There will be no limit to the warrantor's liability for making such repairs over the period of the warranty.

e. The warranty shall provide that if, upon proper notification, the warrantor fails to promptly repair the roof, the Funding Agency may make temporary repairs to avoid damage to the facility. Such action shall not be considered a breach of the provisions of the warranty.

f. The Funding Agency shall be permitted to make alterations, additions, and repairs to the roof, within the written approved guidelines of the warrantor without jeopardizing the unexpired portion of the warranty's original term.

g. Metal roofs and exposed fasteners shall be warranted against rust. Also, on metal roofs, the manufacturer, upon completion, inspection, and written acceptance of the roof installation, shall furnish a warranty covering paint finish against cracking, checking, blistering, peeling, flaking and chipping for a period of twenty (20) years.

1.7 HVAC SPECIFICATIONS

A PURPOSE. To provide information to assist the Professional in the preparation of contract drawings and specification for the Heating, Ventilating and Air Conditioning systems, and to assure consistency in contract documents to reduce errors of omission and/or commission.

B GENERAL. The Professional shall follow these general guidelines in designing and documenting the HVAC work for all DGS projects.

1. The Professional shall comply with the latest applicable codes, standards, and regulations:

a. ASHRAE Handbooks to be used as Industry Standards

b. ASHRAE Published Standards, as appropriate

c. ASHRAE 62 – Ventilation for Acceptable Indoor Air Quality

d. ASHRAE 15 – Safety Code for Mechanical Refrigeration

e. ASHRAE 34 – Number Designation and Safety Classification of Refrigeration

f. ASHRAE 90.1 – Energy Design New Buildings

g. Life Safety Code – NFPA 101

h. NFPA Published Standards, as appropriate

i. SMACNA Standards for Ductwork

j. International Energy Conservation Code

k. PA Air Quality Act, Title 5 (DEP)

l. Pennsylvania L&I Boiler Code

m. Pennsylvania Code – Health Department

n. PA UCC

o. City and Local Codes, as applicable

p. Other codes and regulations determined to be applicable.

2. Vibration and Sound Controls: The Professional is to design HVAC systems with vibration and sound controls as appropriate for the spaces involved. The ASHRAE HVAC Application Manual shall be used as a guide for Vibration and Sound Design Criteria. Use of air-conditioning system condensers, especially air-cooled units, are to be discussed with the Funding Agency and the Department relative to sound and vibration criteria. Professional is to monitor design and field changes during construction with the effect of changes on sound and vibration distribution. Contractor shall perform measurements and provide report to Professional for approval.

   a. NOTE: The Professional shall consult with the Funding Agency and/or Funding Agency to determine requirements for special usage areas. Special attention shall be taken for such areas as auditoriums, conference rooms, classrooms, and hospital patient rooms.

3. Seismic and Wind Restraint Design is required by Code and is to be designed using ASHRAE HVAC Application Manual for guidance.

4. The Professional shall present in his documents flow diagrams for all air systems, indicating hot and chilled water distribution, outside air, exhaust air, supply air and air movement within buildings and spaces. An air flow diagram is to be included in Construction Documents and all subsequent Submissions.

C HVAC SPECIFICATION GUIDE. Guide information and direction may be distributed to the Professional by the Energy and Resource Management Office during design.

1. A complete HVAC specification outline shall be provided with the Construction Documents Submission.

2. All engineering analysis and computations, drawings, specifications, and other documents shall be prepared by a Registered Professional Engineer, or under the responsible supervision of a Professional Engineer, and must bear the Professional seal and signature of the Engineer.

3. The Professional is to design to good engineering practices. The Department reserves the right to direct the Professional to use materials, systems, performance characteristics, or equipment that it determines to be in the best interest of the Funding Agency, Project, and/or Department even if beyond the code requirements.

D BALANCING AND ADJUSTING HVAC SYSTEMS. The following paragraphs are intended to guide the Professional in preparing the Testing and Balancing (TAB) specifications.

1. The balancing firm's report shall include a section which will provide all information regarding all problems encountered prior to, during and remaining after test and what action should be taken to correct the problem(s).

2. The Professional must review and approve the final test report. Should problems remain to be resolved, the Professional shall submit the reports for Funding Agency/DGS review, with comments as to the nature of the problem and acceptability of the system(s) and/or action which may need to be taken.

3. No Final Reports shall be submitted which indicate that the system(s) is incomplete, inoperative or that unresolved problems exist.

4. Specification for the testing shall include:

   a. The GESA Contractor shall provide as part of this contract the services of an independent testing and balancing firm as listed by the Associated Air Balance Council (AABC), NEBB or a qualified firm as approved by the Department or the Professional. The GESA Contractor will be responsible for all balancing work.

   b. The GESA Contractor and its selected and approved balancing firm shall report to and review the work required with the Professional prior to beginning of work. At least two (2) 1-day inspections of the Hydronic and Air Systems at appropriate times during construction shall be made by the balancing firm and it shall report its findings to the Professional and DGS in a written report. The Professional shall impose upon the GESA Contractor that all openings, pressure taps, wells and closures required, over and above those shown on the drawings, to perform the required test and adjustments shall be installed during or after construction at no additional cost to the Funding Agency.

   c. The GESA Contractor shall furnish all services for a minimum of two (2) complete adjustments of water systems and air handling and exhaust systems, water and air distribution and controls, for the first cooling season and for the first heating season after the job is in complete operation under load conditions.

   d. During all tests, it shall be demonstrated that the systems are free from leaks and that all parts of the system will operate correctly. The Balancing Firm shall make final adjustments to all equipment and controls as may be required for proper operation, maintaining correct temperatures in all parts of the building. Controls shall be adjusted by the control manufacturer's mechanics, on the advice of the balancing firm.

   e. The final test report shall include appropriate reference to all problems regarding the system(s) encountered prior to, during and after testing and what action should be taken to correct the problem(s), including noise and vibration.

   f. The following work shall be included in the project by the GESA Contractor:

      (1). Supervise the balancing of all water circulation systems and parts thereof installed under this contract to obtain the water quantities and temperature drops in all parts of the system specified in the plans and in the specifications.

      (2). Supervise the balancing of the air conditioning and ventilating systems to achieve the air quantities specified at each air inlet, outlet and damper shown on the plans at the proper conditions of static pressure and temperature differential. Conduct all leakage tests on ductwork in a manner acceptable to

the Professional and the Department. Leakages shall not exceed 3% of total air to be delivered.

(3). Study and report on noise and vibration problems, which may develop during system balancing.

(4). Submit reports on the cooling and heating water circulating systems, ATC system, and heating and ventilating systems. These reports shall certify test methods and instruments used, all readings obtained, temperature and pressure drops, rpm of equipment, amperage of all motors, air quantities at each outlet supply, return and air balancing problems encountered and suggestions. Reports to be submitted to the Professional and the Department shall include data on all tests in the form normally used by AABC and NEBB. The reports must, however, be varied to suit these specifications. Reports shall include fan and pump curves for the final speeds developed from the fan manufacturer's performance test data for all major equipment, and schematics for ALL systems tested.

(5). Perform tests on heating systems when the outside temperature is averaging less than 30oF and on cooling systems when the outside temperature is above 80oF.

(6). Instruct the building maintenance employees for all shifts as required during the adjusting and balancing period. Obtain signed statements from each employee verifying this instruction has been received by each.

(7). Carry out the 'start-up' of the various systems with the Contractor and with any necessary assistance of the equipment manufacturer's representative.

(8). Furnish all instruments and provide all instrumentations required to perform the above work. The equipment and instrumentations shall remain the property of the balancing Subcontractor; however, all equipment must be first approved by the Professional before being used on the Project.

E PIPE AND DUCT PENETRATIONS. In compliance with the requirements of NFPA 90A, it is essential that the Professional determine and indicate locations of all horizontal and vertical fire separations and the hourly requirement of the separation on the contract floor plans and building services.

1. The GESA project plans shall show where ducts, pipes and conduits pierce required fire rated separations with standard symbols for:

   a. Duct penetration of vertical separation.

   b. Duct or shaft penetrations of horizontal separation.

   c. Ceiling dampers for opening protection in a floor-ceiling or roof-ceiling assembly.

   d. Location of duct fire dampers.

   e. Location of duct smoke detectors.

2. A duct access door shall be specified at each fire damper, and ATL sensor location, for inspection and resetting the fire damper. Typical detail(s) shall be shown on the drawings.

3. There may be occasion where ceiling or wall access panels need to be provided to reach duct access doors or above ceiling pipe valves. All access panels shall be shown on the construction drawings and the GESA Contractor shall provide the access panels.

4. Duct smoke detectors shall be furnished, installed, and wired by the GESA Contractor.

5. When dampers and detectors are to be controlled by a Central Fire Management System, including sprinkler system monitoring, the GESA Contractor shall install the dampers and detectors.

6. Approved fire and smoke sealant shall be used at all pipe penetrations of fire rated walls, floors and ceilings.

F ELECTRICAL EQUIPMENT WIRING.

1. Wiring for Heating, Ventilating and Air-Conditioning:

   a. All equipment for the heating, ventilating and air conditioning systems shall be furnished and installed under the GESA Contract, including furnishing all labor and materials required for the installation and connection of all electrical power wiring to and for this equipment.

   b. In general, all special control equipment required for the heating, ventilating and air conditioning equipment will be furnished and installed under the GESA contract.

2. Temperature Control Wiring:

   a. All interlocking control wiring in connection with the temperature control system for all heating and air conditioning systems shall be furnished, installed and connected under the GESA contract, including providing a source of power and making final power connections at each air handling unit and at each apparatus control panel location where noted on the plans.

G ABOVEGROUND STORAGE TANKS (AST) AND UNDERGROUND STORAGE TANKS (UST). The Pennsylvania Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101 – 6021.2104) dictates all installation, modification, removal, and inspection activities related to regulated aboveground and underground storage systems. Therefore, the Professional shall prepare associated specifications and drawings to assure that such storage tanks comply with this Act.

1. All removal, installation and repair operations shall employ DEP certified Contractors as required.

2. Upon the discovery of fuel contamination, notify The Professional for direction.

3. All utility and regulatory permits, certifications and fees must be addressed and satisfied by the Contractor.

4. Adhere to the following requirements as a minimum:

   a. Underground storage tank installation procedures shall in general conform to API recommended practices as well as DEP and PA Labor and Industry codes and regulations.

b. API Recommended Practice No. 1615 – Installation of USTs.

c. API Recommended Practice No. 1604 – Removal and Disposal of USTs.

(1). NOTE: Installation in Philadelphia County and Allegheny County shall further conform to their respective codes and regulations.

d. Provide STAGE I and STAGE II vapor recovery for gasoline.

5. Tank Requirements:

a. USTs shall be double-wall steel, 360o containment meeting the requirements of STI-P3 and UL 58 or double-wall fiberglass conforming to UL 1316, and be provided with a remote emergency shut off switch, corrosion protection of all ferrous components, vehicle protection, spill containment, and overfill protection and impervious surfaces at fill and dispensing ports.

b. All ASTs shall conform to UL 142 as a minimum and be provided with a remote emergency shut off switch, product line anti-siphon valves, vehicle collision protection, spill containment, protection fence, and overfill protection.

c. Steel USTs shall be protected from exterior corrosion with 125 mils of fiberglass reinforced polyester resin meeting the requirements of ACT 100 or ACT 100U.

d. USTs shall be anchored to an adequately sized reinforced concrete hold-down pad.

e. Containment sumps will be utilized on all UST's with submersible pumping systems.

f. Inventory and leak detection for USTs and piping shall be done electronically.

g. All product lines shall be non-metallic, sloped back to the sump and have secondary containment. Include a provision for leak detection and flow restrictors.

h. The UST interstitial space and dispenser sumps shall be monitored for leaks.

i. Provide drop tube overfill protection and spill containment at fill port.

6. Drawing Requirements – As a minimum, the following information shall be indicated:

a. Site Plan:

(1). Topographic survey of site must conform to the PA Labor and Industry's area requirement stated in the Application for Approval. The plan must further indicate the location of all physical features and utilities, both aboveground and underground, relevant to the design, installation, and demolition of the fuel facility.

(2). Indicate all USTs, associated piping/conduit systems and island/site facilities scheduled for removal or demolition.

(3). If a site assessment is necessary, develop an Environmental Boring Plan, from a copy of the Site Plan, indicating the location, depth, and soil/ground sample tests for each environmental boring around the existing USTs.

(4). Adequate vehicle accessibility, stack-up and entrance/egress patterns must be demonstrated for all anticipated truck types, Commonwealth fleet vehicles and the fuel delivery truck.

(5). Indicate the location, size and content of each UST/AST and the associated excavation/foundation.

(6). Stormwater management must be accommodated with the area affected by excavation or facility construction.

(7). Property lines must be clearly represented.

(8). Indicate the location of any required existing or desired monitor/recovery wells.

(9). UST manholes and sumps should be out of the normal path of vehicle traffic, protected from surface water flooding and designed to be immune from snowplow damage.

(10). The extent and characteristics of all paving work shall be exhibited and defined.

(11). Identify and label all piping/conduit routes.

(12). Indicate all fencing modifications, gate installations and vehicle collision protection features.

(13). Identify apron/canopy size and dispenser island equipment. Slope apron to prevent surface water accumulation.

(14). Indicate the location of all ancillary equipment and systems required to support the location of the fuel facility.

(15). Identify the intended location of Contractor parking, equipment/material storage and excavated soil storage/remediation operations.

(16). Indicate a means for isolating escaped product within the stormwater system.

b. Detail Drawings:

(1). Provide an elevation detail of pipe/conduit penetration of wall/foundation/sumps; specify cross-over intersection and backfill requirements.

(2). Provide an elevation detail of excavation cross-sections indicating all dimensional and shoring/cutback requirements.

(3). Provide uniform pea gravel backfill around USTs with a minimum 12” between the UST and the hold-down pad.

(4). Provide elevation details of any required monitor/recovery wells.

(5). Provide clear and precise details for canopy structure and island foundation.

(6). Indicate accommodation for canopy rainwater runoff.

(7). Provide elevation details of UST/hold-down pad attachment and pump sumps.

(8). Provide an elevation section indicating fill, vent inventory/leak sensor locations, arrangement and interface without the UST/AST.

(9). Locate the inventory sensor at the UST/AST midpoint.

c. Site Assessment Program: After accurate topographic and subsurface survey information is gained and integrated onto the Site Plan, the Professional may be asked to perform a site assessment, utilizing the results from laboratory analysis of soil/ground water samples, to determine the extent and constituents of soil/ groundwater fuel contamination. The site assessment program may consist of the following tasks as requested:

(1). Development of an Environmental Boring Plan for the Department's review and approval.

(2). On-site placement, direction and drilling of the environmental borings to ascertain the extent of soil and ground water contamination.

(3). Professional on-site representation during the boring operations with the ability to perform additional discretionary environmental borings and monitor/recovery wells.

(4). Applicable laboratory analysis of soil/ground water samples for specific constituents, existing MTBE and lead concentration from former leaded gasoline USTs. Consider full range target pollutant tests at the locations of new USTs.

(5). Samples are not to be homogenized or taken at recurrent boring depths.

(6). All results are to be recorded and submitted to the Department to serve as a baseline reference for the site.

(7). Evaluation of current and seasonal high ground water elevations, gradient and soil recharge rates.

(8). Provide a site assessment program summary report to include the results of the environmental tests, the testing methodology and an assurance plan from the testing laboratory.

(9). If necessary, develop DEP required Site Characterization Report and/or Remedial Action Plan based on contamination after report is complete.

(10). Interim remedial actions shall be executed upon the confirmation of reportable contamination.

(11). The specifications/drawings will direct the Contractor to dispose or remediate a finite amount of contaminated soil.

(12). Dewatering the excavation and proper disposal of any captured water, whether contaminated or not, is the Contractor's responsibility.

(13). The removal and disposal of contaminated soil and ground water will be supervised by the Professional.

(14). Any contamination of an extensive nature, or from other sources, not covered by the drawings or specifications, shall be considered outside the scope of the project. The Professional shall notify the Department and the Funding Agency of the results.

7. Procedure Information:

a. Requirements:

(1). Design Stage Procedure:

(a). If applicable the Professional shall have the local or L & I Fire Marshal review and comment on proposed UST design and installation procedure with respect to Fire and Safety requirements. File Form SP-FP2 with Plan.

(b). Such reviews and comments shall be filed with DGS.

(c). Such comments shall be incorporated into the contract documents.

(2). Responsibility:

(a). Professional may submit to Labor and Industry for review and comment, the proposed UST/AST design and installation procedure. Include in contract document complete requirement for UST/AST, regarding installation/ removal/registration, etc.

(b). Contractor shall file for permit, for the Owner, with the Labor and Industry. The Owner is defined as the Funding Agency on whose property the UST will be installed.

(c). Register UST removal, installation and upgrade with DEP and obtain a registration number for each UST.

(d). Provide registered certification from tank fabricator.

(e). Install/Remove USTs by a certified UST installer/remover.

(f). Have inspected, tested and certified by a certified UST Installation Inspector.

(g). Submit certified statement regarding compliance with requirements for the proper disposal of tanks required to be removed.

8. Specification Guide Information – The following information shall be incorporated into the UST specifications. The Professional shall review and modify, as necessary, to suit the specific project requirements.

   a. The Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101 – 6021.2104):

      (1). The Pennsylvania Storage Tank and Spill Prevention Act regulates all installation, modification, removal and inspection activities related to aboveground and underground storage systems.

      (2). Each Contractor shall comply with the requirements of the Storage Tank and Spill Prevention Act as it applies to this project.

      (3). Each Contractor, prior to commencement of any work, regulated by the Act, shall provide to the Department proof of certification by the Department of Environmental Protection as a certified installer or remover.

      (4). Each Contractor, prior to commencement of any work, regulated by the Act, shall provide to the Department proof of certification by the Department of Environmental Protection for the required certified Inspector on this project.

   b. Regulatory Submittals:

      (1). The certified tank installer shall be responsible for notification and/or submittals required by the Pennsylvania Department of Environmental Protection. All notifications and submittals shall be copied and turned over to the Funding Agency, which shall file copies with project records and forward copies to the Funding Agency for record keeping required by DEP regulations.

      (2). The Pennsylvania Department of Environmental Protection, Bureau of Water Quality Management Regional Office for this project site is:

   c. Soil Testing:

      (1). The DEP certified installer shall conduct soil testing after removal of the storage tank(s) and pipe systems to measure for contamination which may have occurred during the operation of the system.

      (2). The soil testing shall be conducted in compliance with all DEP and local regulations.

      (3). The certified installer shall take separate samples of the soil and test for specific constituents.

      (4). Samples shall be tested for presence of specific petroleum hydrocarbons, MTBE and lead at former leaded gas UST.

      (5). The certified installer shall submit to DGS the laboratory test results, along with a copy of the methodology of testing, and a quality assurance plan from the testing laboratory.

      (6). All analysis shall be conducted by DEP and EPA Methodology when available.

d. Contaminated Materials:

(1). The certified installer shall notify DEP and obtain approval for disposal of contaminated materials. Materials shall be disposed of in accordance with DEP requirements.

(2). The landfill area used for disposal of materials shall be certified to receive and bury materials contaminated by petroleum products. The Contractor shall obtain from DEP, a list of certified landfill sites. The certified installer shall make arrangements with and obtain approval from landfill manager prior to hauling material.

(3). Disposal of contaminated water, sludge, or unusable product (fuel, oil, gasoline) shall be done by a method approved by DEP and the EPA.

(4). The certified installer shall submit copies of all DEP permits, approvals and letters of notification to the Department.

1.8 PLUMBING SPECIFICATIONS

A PURPOSE. The purpose is to provide guide information to assist the Professional in the preparation of contract drawings and specification.

B GENERAL INFORMATION. The work covered by this specification includes the Plumbing work including all labor, material, equipment, and services and performing all operations in connection with the plumbing installation complete, in strict accordance with this specification and the applicable drawings.

1. The Professional shall comply with the latest applicable codes and regulations:

   a. PA UCC – Pennsylvania Uniform Construction Code.

   b. Fire Protection Systems – NFPA

   c. Sprinklers NFPA 13

   d. Life Safety Code – NFPA 101

   e. Pennsylvania Code – Health Department as applicable

   f. Other codes, standards, and regulations, as applicable

2. The Professional is to design to good engineering practices. The Department reserves the right to direct the Professional to use materials, systems, or equipment that it determines to be in the best interest of the Funding Agency, Project, and/or Department even if beyond the code requirements.

1.9 ELECTRICAL SPECIFICATIONS

A PURPOSE. To specify construction materials, methods, and contract requirements, determined to benefit DGS included in all applicable projects.

B APPLICABLE CODES AND REGULATIONS. Electrical design shall comply with the latest applicable codes:

1. National Electrical Code – NFPA 70

2. National Electrical Safety Code – ANSI C2

3. Life Safety Code – NFPA 10 1

4. Pennsylvania UCC

5. Pennsylvania Code, Department of Health Regulations - as applicable

6. City or Local Codes, as applicable

7. Other codes, as applicable

C SPREAD OF FIRE, OR PRODUCTS OF COMBUSTION. The design and specifications shall be developed in accordance with the following.

1. All lighting, power, control, and fire alarm wiring shall be run in rigid metal conduit, intermediate electrical conduit, electrical metallic tubing, flexible metallic conduit, liquid tight flexible metal conduit, surface metallic raceways, or metal wireways within the parameters established by the National Electrical Code.

2. Plastic conduit, which may produce toxic smoke or contribute to the spread of fire, shall not be used without permission from DGS. Plastic conduit installed underground or in concrete encasement will be acceptable.

3. Non-metallic sheathed cable or armored cable is not to be used, except with permission.

4. All telephone, television, electronic data processing, sound and other telecommunication cables shall be run in conduit as specified above, except as follows:

   a. Data processing cables installed under raised floors shall comply with NEC Article 645.

   b. Plenum conductors shall be listed as having adequate fire resistant and low smoke producing characteristics. Conductors insulated with materials that produce toxic smoke are not acceptable. The manufacturer of the cable shall certify that its product complies with the above.

D SURGE PROTECTION. All electrical systems susceptible to damage by lightning or other surges shall incorporate surge protection to protect the equipment. The equipment shall be protected from surges on the downstream side of the equipment as well as from surges on the incoming lines. Surge protection shall be specified as factory installed on all input and output terminals where the transmitting control panel is interconnected with other buildings for remote annunciation, alarm or data interface.

E INSTALLATION OF EMERGENCY OR STANDBY GENERATORS. Contract responsibilities for the furnishing and installing of materials and equipment associated with emergency or standby generators shall be broken down as described below. The project design and specifications shall be developed in accordance with the following.

1. Scope shall include:

   a. Furnish and install concrete pad (minimum 6” high), vibration isolators and anchor bolts for the engine generator set(s).
   b. Furnish and install the engine generator set(s).

c. Furnish and install the automatic transfer switch(s).
d. Provide pressure regulator(s) for natural gas or LP fueled engines.
e. Provide day tank(s) for diesel-fueled generators in place.
f. Provide exhaust mufflers t.
g. Furnish and install all engine exhaust piping.
h. Insulate all muffler and exhaust line piping.
i. Furnish and install drip loop(s) in exhaust line piping.
j. Furnish and install UST or AST diesel fuel tanks with level meters and piping.**

OR

a. Furnish, install all diesel fuel lines, including flexible connectors.**
b. Provide all excavation and backfill required for installation of underground tanks and fuel lines.
c. Provide motorized intake louver(s)*
d. Provide exhaust air louver(s)*

* Finishes to be coordinated by the Professional.

** GESA Contractor shall comply with the requirements of the Storage Tank and Spill Prevention Act and shall be listed by the Department of Environmental Protection as a certified installer.

F EMERGENCY AND/OR STANDBY GENERATOR TESTING. Emergency or standby generators shall be tested at full load for four (4) hours using resistance banks.

1. Readings of all pertinent data shall be recorded at ten (10) minute intervals for the first two (2) hours, and at thirty (30) minute intervals for the remainder of the test.

2. If it becomes necessary to abort the test, another full four (4) hour test shall be made after correction of the problem(s).

G MEDIUM VOLTAGE SHIELDED POWER CABLE AND FUEL TESTING. Following are cable and field-testing specifications for XLP and EPR cable. The selection of the cable type will be the responsibility of the Professional in concurrence with the Funding Agency.

1. EPR Cable:

a. General:

(1). Scope – This specification covers single conductor, ethylene propylene rubber insulated, shielded, and jacketed power cable for use at 5,000 or 15,000 volts, 133% insulation level. Cable shall be rated at 90oC for normal operation; 130oC for short circuit conditions. Cables shall be UL listed and designated MV-90 in accordance with the National Electrical Code.

(2). Standards – The cable shall meet or exceed the industry standards of the latest edition of ICEA-NEMA Standard S-68-516, WC-8 and AEIC Standard CS-6.

b. Cable:

(1). Basic Construction – Cable shall have a single Class ‘B’ stranded bare copper conductor, extruded semi-conducting conductor screen, ethylene propylene rubber insulation, extruded semi-conducting insulation screen, copper tape shielding and extruded PVC jacket. The cable conductor screen,

insulation and the insulation screen shall be manufactured by employing an in-line triple tandem extrusion process.

(2). Conductor – Annealed copper with concentric lay Class 'B' stranding conforming to ASTM B 8 and ICEA S-68-516, Part 2.

(3). Conductor Screen – Extruded layer of semi-conducting ethylene propylene rubber compound shall be applied over the conductor. The DC volume resistivity of the screen shall not exceed 50,000 ohm/cm at 90oC when tested in accordance with AEIC No. CS-6. The conductor screen shall be clean stripping from the conductor and inseparably bound to the overlying insulation.

(4). Insulation – Ethylene propylene rubber with physical and electrical characteristics that comply with the requirements of ICEA Standard S-68-516. The insulation thickness shall be as follows for 133% insulation level.

5 KV - 115 Mils
15KV- 220 Mils

The thickness at any cross-section of the insulation shall not be less than 90% of the specified thickness.

(5). Insulation Screen – Extruded layer of semi-conducting ethylene propylene rubber compound shall be applied over the insulation. The DC volume of resistivity of the screen shall not exceed 50,000 ohm/cm at 90°C when tested in accordance with AEIC No. CS-6. Average thickness shall be in accordance with AEIC.

(6). Metallic Shield – Non-magnetic metallic conducting covering consisting of a 5-mil copper tape helically applied with a minimum overlap of not less than 12.5%.

(7). Cable Jacket – Polyvinylchloride jacket meeting the physical requirements of ICEA. The jacket shall have a minimum average thickness in accordance with ICEA S-68-516.

(8). Identification – The following information shall be permanently printed every 24" on the surface of the jacket.

(a). Manufacturer/Conductor Size

(b). And Type/Insulation Type and

(c). Thickness/% Insulation Level/

(d). Rated Voltage/MV-90/Year of Manufacture

c. Factory Testing and Certification:

(1). DC Resistance Test – Conductor DC resistance shall meet the requirements of ICEA S-68-516.

(2). AC and DC Voltage Tests – Each reel of cable shall be subjected to AC and DC tests in accordance with Part 6 of ICEA per the cable rated voltage for 133% insulation level. The cable shall be given a five (5) minute AC voltage withstand test and fifteen (15) minute DC voltage withstand test.

(3). Insulation Resistance – Insulation resistance shall be measured and recorded in megohms per 1,000 ft. and when corrected to 15.6oC the series insulation resistance shall not be less the 50,000 megohms per 1,000 ft.

(4). Corona Discharge – Each reel of cable shall be given a corona discharge test. The test shall be in accordance with AEIC No. CS-6, latest edition. An X-Y recording graph shall be furnished showing corona test results. The maximum partial discharge allowed is 5 pico coulombs.

(5). Certification – For each reel of cable, a certified and notarized factory test report, reel numbers for cable identification with date of manufacturer and testing shall be submitted. Nine (9) copies of this certification and test report shall be submitted through the Project Inspector for approval.

2. XLP Cable:

a. General:

(1). Scope – This specification covers single conductor, cross linked polyethylene insulated, shielded, and jacketed power cable for use at 5,000 or 15,000 volts, 133% insulation level. Cable shall be rated at 90oC for normal operation; 130oC for emergency overload conditions; 250oC for short circuit conditions. Cables shall be UL listed and designated MV-90 in accordance with the National Electric Code.

(2). Standards – The cable shall meet or exceed the industry standards of the latest edition of ICEA-NEMA Standard S-66-524, WC-7 and AEIC Standard CS-5.

b. Cable:

(1). Basic Construction – Cable shall have a single Class 'B' stranded bare copper conductor, extruded semi-conducting conductor screen, cross-linked polyethylene insulation, extruded semi-conducting insulation screen, copper drain wire shielding and extruded PVC jacket. The cable conductor screen, insulation and the insulation screen shall be manufactured by employing an in-line triple tandem extrusion process.

(2). Conductor – Annealed copper with concentric lay Class 'B' stranding conforming to ASTM B 8 and ICEA S-66-524, Part 2.

(3). Conductor Screen – Extruded layer of semi-conducting cross-linked polyethylene compound shall be applied over the conductor. The DC volume resistivity of the screen shall not exceed 50,000 ohm/cm at 90oC when tested in accordance with AEIC No. CS-5. The conductor screen shall be clean stripping from the conductor and inseparably bound to the overlying insulation.

(4). Insulation – Cross-linked polyethylene with physical and electrical characteristics that comply with the requirements of ICEA Standard S-66-524. The insulation thickness shall be as follows for 133% insulation level.

5 KV - 90 Mils
15KV- 220 Mils

The thickness at any cross-section of the insulation shall not be less than 90% of the specified thickness.

(5). Insulation Screen – Extruded layer of semi-conducting cross-linked polyethylene compound shall be applied over the insulation. The DC volume of resistivity of the screen shall not exceed 50,000 ohm/cm at 90oC when tested in accordance with AEIC No. CS-5. Average thickness shall be in accordance AEIC.

(6). Metallic Shield – Soft drawn uncoated copper wires helically applied over the insulation shield. The drain wire shield shall meet the requirements of ICEA S-66-524, Part 4 and UL 1072; minimum of 5,000 circular mils per inch of insulated conductor diameter. A non-metallic separator tape shall be helically applied over the metallic wire shield.

(7). Cable Jacket – Polyvinylchloride jacket meeting the physical requirements of ICEA. The jacket shall have a minimum average thickness in accordance with ICEA S-66-524.

(8). Identification – The following information shall be permanently printed every 24" on the surface of the jacket.
(a). Manufacturer/Conductor Size
(b). And Type/Insulation Type and
(c). Thickness/% Insulation Level/
(d). Rated Voltage/MV-90/Year of Manufacture

c. Factory Testing and Certification:

(1). DC Resistance Test – Conductor DC resistance shall meet the requirements of ICEA S-66-524.

(2). AC and DC Voltage Tests – Each reel of cable shall be subjected to AC and DC tests in accordance with Part 6 of ICEA per the cable rated voltage for 133% insulation level. The cable shall be given a five (5) minute AC voltage withstand test and a fifteen (15) minute DC voltage withstand test.

(3). Insulation Resistance – Insulation resistance shall be measured and recorded in megohms per 1,000 ft. and when corrected to 15.6oC the series insulation resistance shall not be less than 50,000 megohms per 1,000 ft.

(4). Corona Discharge – Each reel of cable shall be given a corona discharge test. The test shall be in accordance with AEIC No. CS-5, latest edition. An X-Y recording graph shall be furnished showing corona test results. The maximum partial discharge allowed is 5 pico coulombs.

(5). Certification – For each real of cable, a certified and notarized factory test report, reel numbers for cable identification with date of manufacture and testing shall be submitted. Nine (9) copies of this certification and test report shall be submitted through the Project Inspector for approval.

3. Field Testing:

a. General:

(1). Scope – Field testing cables, splices and terminations shall consist of a non-destructive, direct current, dielectric test for insulation of primary cable system using ICEA standard procedure.

(2). The GESA Contractor shall notify the Professional, Department and Funding Agency two (2) weeks prior to the date of tests. Tests must be witnessed by representatives of the Funding Agency.

(3). Testing shall be by an independent testing firm acceptable to the Department. Testing is not to be by the GESA Contractor. All tests shall be made by a qualified field technician especially trained for dielectric testing and interpretation of results and regularly engaged in dielectric testing.

(4). The GESA Contractor shall be responsible for disconnecting and reconnecting existing equipment as required to make these tests.

(5). If at any time during the test procedure, the test is stopped due to excessive readings, the installation shall be checked to locate the problems. Corrective measures shall be taken prior to continuing the test.

b. Cable, Splicing and Termination Testing:

(1). Scope – All new cables, including all splices and termination, shall be tested after installation prior to being energized. All cables not under test shall be properly grounded and tied to the shield of the cable under test. If it is necessary to repeat a test, the capacitance and absorption current shall be discharged by grounding the conductor for sufficient time to allow complete drainage. If the cable has been energized prior to testing, the capacitance shall be completely discharged by grounding the conductor in an approved manner.

(2). Field Testing – Tests performed and recorded shall be of the following types:

(a). Step Voltage Tests for New Cable Circuits

(b). Step Voltage and Time Resistance (Polarization Index) Tests for Existing Circuits

(3). An installation having only new cable, splices and termination shall be tested as follows:

(a). 5 KV System – Test to 25 KV DC

(b). 15 KV System – Test to 55 KV DC* (*64 KV DC for cable only)

(c). Under no circumstances is the test voltage to exceed 80% of the manufacturer's original DC over-voltage acceptance test

(4). An installation consisting of a combination of new and existing cables, splices and terminations shall be tested as follows:

(a). 5 KV System – Test to 20 KV DC provided the existing system passes the meggar test

(b). 15 KV System – Test to 35 KV DC provided the existing system passes the meggar test

(c). Lower test voltages may be used upon direction from the Funding Agency or the Department

(d). Under no circumstances is the test voltage to exceed 60% of the manufacturer's original DC over-voltage acceptance test

(5). The results shall be plotted in the form of a curve on kilovolt-megohm paper.

(6). In the step voltage tests, voltage shall be applied evenly to the insulation in ten (10) consecutive steps of a specified magnitude or steps equal to the kilovolt rating (whichever is the lower), starting at a pre-selected and specified initial value. Voltage shall be held at each step for one (1) minute and current readings shall be taken and recorded at the end of each one (1) minute period for each voltage step. For certain very long cables, the test current will not have stabilized at the end of one (1) minute. In these cases, each step shall be held for two (2) minutes or for sufficient time to allow for stabilization of the capacitance and absorption currents. In conducting the test, the voltage shall not be increased or decreased during the time period. At the completion of the step voltage test and when the maximum specified voltage is achieved, the voltage shall be held at this maximum for ten (10) minutes and current readings taken and recorded.

(7). In the Polarization Index Test, a specified constant test voltage shall be applied for ten (10) minutes to each conductor, recording insulation resistance at 1/4, 1/2 and 3/4 and one (1) minute and every minute thereafter. The Polarization index (ratio of ten (10) minute insulation resistance to one (1) minute insulation resistance) shall be at least 1.00 to permit application of high potential in the step voltage test.

c. Test Results:

(1). Determination – A determination is to be made by the testing firm field technician as soon as the test is completed, as to whether the system should be energized.

(2). Distribution – Nine (9) certified copies of the field test reports shall be furnished to the Professional through the Project Inspector for approval, and shall include the following:

(a). All readings shall be recorded and plotted on kilvoltmegohm paper.

(b). A written summary by the tester as to the conditions of the installation, and recommendations relative to the acceptability of the installation.

(3). If the Department concludes that the test results are marginal, another test shall be run prior to the expiration of the one (1) year bonding period. The test shall be arranged for and paid for by the Electrical Contractor.

1.2 HAZARDOUS MATERIALS SPECIFICATION

A PURPOSE. Based on past project experience, the Department has developed the "Protocol Regarding Asbestos, Lead, PCB's/Mercury, Radon and Other Hazardous Materials", which includes guidance specifications for handling of hazardous materials.

B GUIDANCE SPECIFICATIONS. The Protocol and Guidance Specifications for hazardous materials work include the following:

1. Professional's Responsibilities to The Funding Agency and the Department

2. Sample Hazardous Materials Survey RFP Letter

3. Sample Quality Assurance Hazmat Monitoring RFP Letter

4. Guidance Spec for Removal of Asbestos-Containing Materials*

5. Guidance Spec for Disturbance of Lead-Containing Surface Coatings*

6. Guidance Spec for Removal/Disposal of PCB and Mercury-Containing Materials*

7. Guidance Spec for Radon Testing and Mitigation Design*

8. Lead-Based Paint Guidance Note for Drawings*

* Sections D through H are available upon request; contact the GESA Project Coordinator.

C EDITING. These specifications are provided for guidance only and should not be copied verbatim. Edit specifications accordingly to suit project scope and field conditions. All guidance documents are provided to indicate the level of detail that the Department is expecting in the Construction Documents. The use of competent qualified individuals should be used for design.

CHAPTER 11

PROJECT INFORMATION EXHIBITS

EXHIBIT	TITLE
Section A	**Submission Checklists**
A1	Schematic Documents Submission Checklist
A2	Construction Documents Submission Checklist
Section B	**Drawing Standards**
B1	Cover Sheet Layout
B2	Cover Sheet Title Block
B3	Standard Sheet Title Block
Section C	**Miscellaneous Items**
C1	List of Regulatory Approvals/Permits – Status Report
C2	Boiler System Test Report
C3	Sample Electrical Panel Schedule
C4	Funding Agency Design Submission Approval Form
C5	Exceptions to L & I Special Inspections
Section D	**HazMat Protocol**
D1	Protocol Regarding Asbestos, Lead, PCB's/Mercury, Radon and Other Hazardous Materials

GESA PROJECT

SCHEMATIC DOCUMENT SUBMISSION CHECKLIST

Project Number: _____ Submission Date: _____

Project Title: _____

1	❑ Transmittal Letter (w/ this Schematic Submission Checklist attached)	
2	❑ Code Review and Analysis	
3	❑ Schematic Design Drawings w/ Cover Sheet	
4	❑ Notification Letters to All Utility Companies (include reply letters if available): ○ Electric ○ Telephone ○ Storm Sewer ○ Water ○ TV Cable ○ Other ○ Gas ○ Sanitary Sewer ○ Other	
5	❑ Fuel Feasibility Study (w/ Coal Non-Use Justification, where applicable)	
6	❑ Structural Engineer's Initial Subsurface and Related Site Investigation Reports w/ Professional's Request for Proposals for Geotechnical Services	
7	❑ Initial Report on Site Restrictions	
8	❑ List of Required Regulatory Approvals/Permits – Status Report	
9	❑ Initial Contact Letter to PHMC	
10	❑ Report on Status of Current and Anticipated Additional Services (if applicable)	
11	❑ Additional Items as applicable (list items in Transmittal Letter)	

GESA PROJECT

CONSTRUCTION DOCUMENT SUBMISSION CHECKLIST

Project Number:_____ Submission Date: _____

Project Title: _____

1	❑ Transmittal Letter (w/ this Construction Documents Submission Checklist attached)	
2	❑ Code Review and Analysis	
3	❑ Project Specifications	
4	❑ All Construction Drawings w/ Cover Sheet	
5	❑ Report Summarizing the Status of All Utilities	
6	❑ List of Required Regulatory Approvals/Permits – Status Report with copies of all applications/approvals	
7	❑ Geotechnical Report and All Other Reports (if applicable)	
8	❑ Funding Agency's Final Design Approval Letter	

Submit Final Documents to L&I for UCC Review/Approval and Building Permit after you receive the Construction Documents Submission Acceptance Letter from the Department.

1 3/4" | 3/4" | 34 1/2" | 5" | 3/4"

28 1/2"

3/4"

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES

HARRISBURG, PENNSYLVANIA

Xxxxxx X. Xxxxxxx, Governor

Xxxxxx X. Xxxxxxxx, Secretary

List Approval Numbers and Dates for each applicable Agency.

PROJECT NO. D.G.S. 578-12 PHASE 1
ERIE CIVIC HUMAN RESOURCES CENTER
ERIE, ERIE COUNTY, PENNSYLVANIA

(VOLUME OF)

COVER SHEET INSTRUCTIONS

- Cover Sheet layout may be varied as determined by the Project Professional; however, all pertinent information must be included with adjustments, as applicable to particular projects.
- Do not place lists of abbreviations, material legends or symbols on Cover Sheet.
- Include diagrammatic Project Location Map Vicinity Map, and Institutional Map or Campus Plan.

ARCHITECT / PROFESSIONAL
RIVERSIDE ARCHITECTURAL PARTNERSHIP
1234 MAIN STREET
ERIE, PA

PHONE: (918) 246-3208

STRUCTURAL ENGINEERING CONSULTANT
BIRKENSTOCK ENGINEERS
7890 NORTH SECOND AVENUE
PITTSBURGH, PA

MECHANICAL ENGINEERING CONSULTANT
BUTTONDOWN ENGINEERS
7654 EAST 42ND STREET
JOHNSTOWN, PA

INDEX TO DRAWINGS

CS-1 Cover Sheet

General Construction
Contract No. DGS 578-12 Phase 1.1

CIVIL DWGS.
C-1
C-2

ARCHITECTURAL DWGS.
AHE-1
A-2
A-3

STRUCTURAL DWGS.
S-1
S-2
S-3

H.V.A.C. Construction
Contract No. DGS 578-12 Phase 1.2

HVAC DWGS.
AHE-1
H-2
H-3

Plumbing Construction
Contract No. DGS 578-12 Phase 1.3

PLUMBING DWGS.
P-1
P-2
P-3

FIRE PROTECTION DWGS.
FP-1
FP-2
FP-3

Electrical Construction
Contract No. DGS 578-12 Phase 1.4

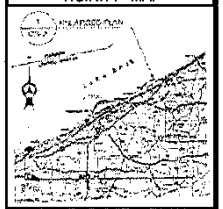
ELECTRICAL DWGS.
AHE-1
E-2
E-3

Cover Sheet title block (See full scale sample)

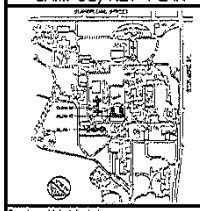
CODE APPROVALS

PROJECT LOCATION MAP

VICINITY MAP



CAMPUS/KEY PLAN



Drawings Listed in Index

APPROVED _____ DATE _____

Gary N. Foster, P.E., Director
Bureau of Engineering & Architecture
Department of General Services

SEAL

Professional's Signature Date

JOHN E. SMITH & ASSOCIATES
ARCHITECTS & ENGINEERS
320 MAIN STREET, SUITE 4
HARRISBURG, PENNSYLVANIA

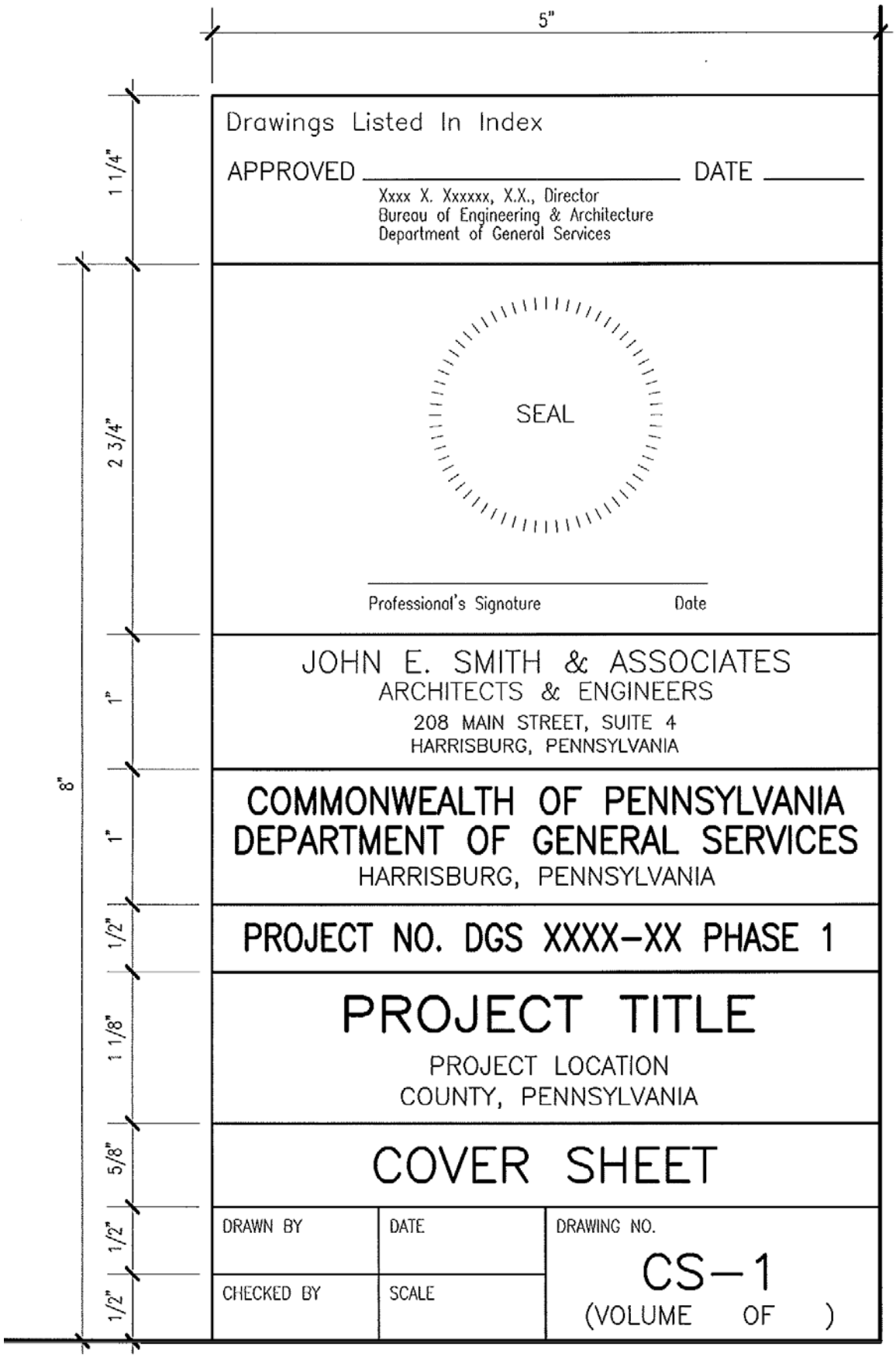
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. XXXX-XX PHASE 1

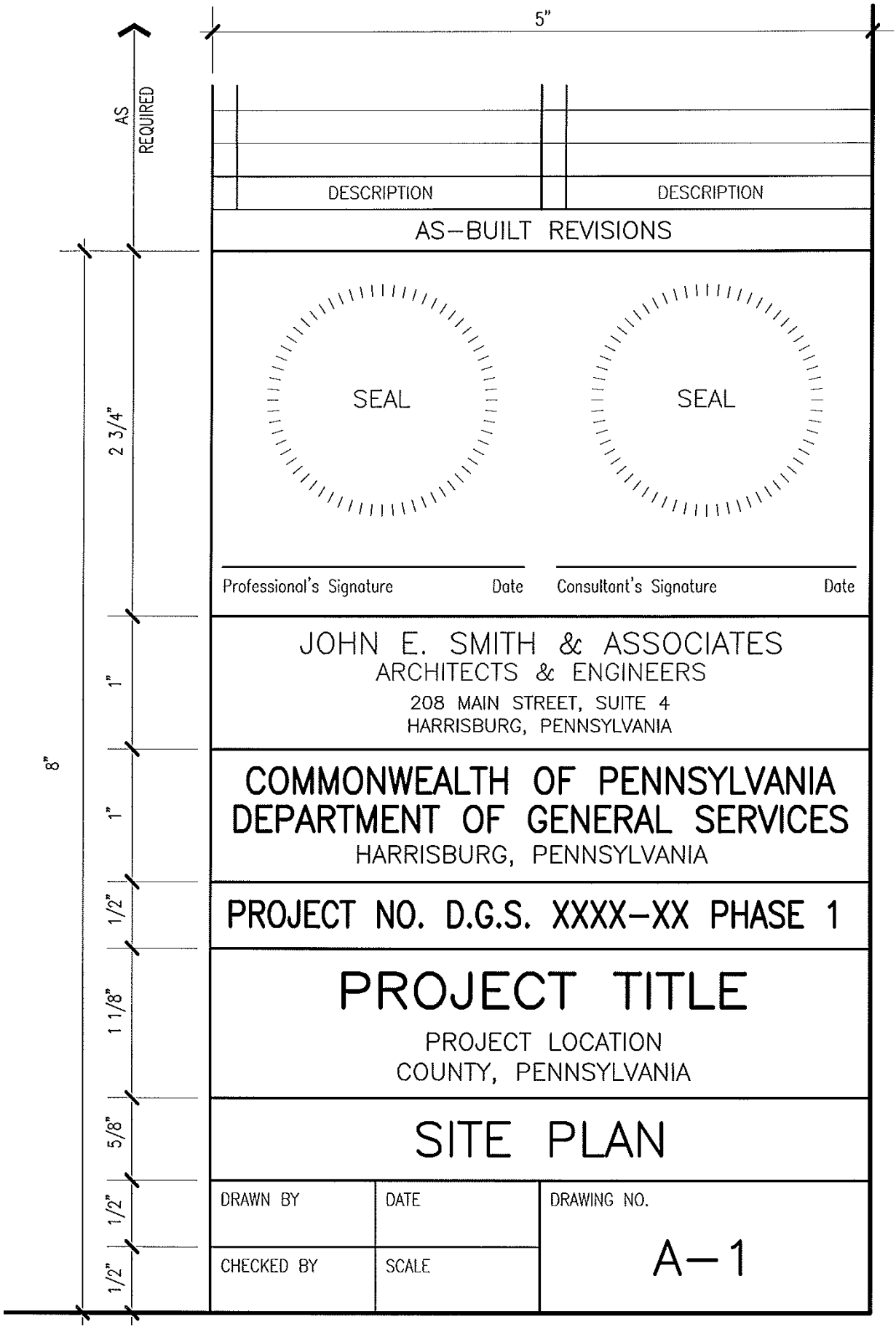
PROJECT TITLE
PROJECT LOCATION
COUNTY, PENNSYLVANIA
(VOLUME OF)

COVER SHEET

Drawn By	Date	Drawing No.
Checked By	Scale	CS-1



TITLE BLOCK: For use on the Cover Sheet, only. This is a sample. Edit with the correct information for Project No., Project Title and Location, Professional's Name & Address, Director's Name, Date, etc.



TITLE BLOCK: For all drawings other than the Cover Sheet. This is a sample. Edit with the correct information for Project No., Project Title and Location, Professional's Name & Address, Drawing Title, Drawing No., Date, etc.

LIST OF REGULATORY APPROVALS / PERMITS – Status Report

Project Number: _____ Time Period: _____

Project Location: _____ Funding Agency: _____

Professional Firm: _____

NO.	ITEM	GRANTING AUTHORIT	STATUS REPORT (Incl. anticipated approval date)
1	Local Approvals (as applicable)	Municipality	
2	Zoning Permit	Municipality	
3	Storm Water Mgt. Approval	Municipality/ County	
4	Soil Erosion and Sedimentation Control	Municipality/ County	
5	Land Development Plan/ Subdivision Approval	Municipality/ County	
6	PA. UCC Approval (incl. Building Permit)	L & I	
7	Pa. Natural Diversity Index	D.C.N.R.	
8	Highway Occupancy Permit	PennDOT	
9	Sanitary Sewer Module	D.E.P.	
10	Underground Tanks Approval	L&I/ D.E.P.	
12	Flood Plain Approval	D.E.P.	
13	Wetlands Approval	D.E.P.	
14	Archaeological Approval	P.H.M.C.	
15	Historical Building Approval	P.H.M.C.	
16	NPDES Approval	D.E.P.	

Instructions to Professional: Add additional Permits/Approvals, as applicable, for complete list of all required for the Project. Attach copies of all approval letters, as applicable.

Date: _____

BOILER SYSTEM TEST REPORT

PROJECT NO. D.G.S. _____

_____(Coal, Gas, Oil) _____Boiler

_____(Funding Agency) _____

PREPARED BY:

_____(Name)_____

_____(Representing)_____

REPORT DATE:

_____

SAMPLE GUIDE

Date: _____

REPORT OF BOILER SYSTEM TEST

The attached report of the Boiler System Test of Project No. D.G.S. GESA_____, High Pressure Boiler, _____(Funding Agency and Location) _____, has been prepared for the Department of General Services by _____(Contractor)_____.

SAMPLE

Testing Agent: _____

Witnessed By: _____
(Funding Agency)

Approved By: _____
(Professional)

Date: _____

Approved By: _____
(Department of - Agency -)

Date: _____

BOILER SYSTEM TEST REPORT

I. PROJECT IDENTIFICATION

Project No. D.G.S. GESA _____

High Pressure Boiler

_____ (Funding Agency) _____

_____ (Location) _____

Test Dates: _____

Test Dates: _____

II. SYSTEM DESIGN

A. Equipment (*)

Boiler: (Provide description, model number(s) and serial number(s) of all equipment)

Instrumentation:

Fuel Oil Service Pump:

Chemical Feed System:

(*) For coal fired included all associated system equipment – See _____.

B. Predicted Performance – Boiler/Burner – No. 2 Fuel Oil

	MINIMUM [1]	**MAXIMUM HOUR PEAK**
Actual evaporation, lbs/hr	10,000	70,000
Operation pressure, psig	150	150
Steam quality, %	99.5	99.5
Steam temperature at nozzle, ^{o}F	366	366
Feedwater temperature, ^{o}F	212	212
CO^2 at boiler outlet, %	12.8*	13.4*
Gas temperature at boiler outlet, ^{o}F	410	505
Total weight of exit gas, lbs/hr	11,310	77,955
Fuel burning rate, lbs/hr	650	4,480
Draft loss through boiler, WG	0.17	5.75
BTU release/ft^3 gross furnace volume	7,540	52,160
Efficiency complete unit, %	81.3	82.3

* Air Atomization

SAMPLE

[1] Data is to be provided by the boiler manufacturer and to be included as part of Contractor's bid package – See _____ for coal-fired boiler.

C. Fuel Analysis

Fuel Oil No. 2	
Specific gravity, API	0.844
Viscosity, SSU, @ 60°F	40.6
Sulfur, Wt. %, Maximum	0.15
Weight, lbs/gal	7.030
BTU, as fired	136,544

(Data from Laboratory Analysis)

III. OPERATING DATA – (Data as Result of Test)

Fuel Oil No. 2	
Evaporation	
Maximum lbs/hr	62,000
Minimum lbs/hr	5,000
Average lbs/hr	21,160
Total lbs/96 hrs	2,031.330
Steam Conditions	
Drum pressure, psig	150
Outlet temperature, °F	401
Enthalpy, saturated steam, BTU/lbs	1195.6
Purity, calorimeter, %	99.5
Feedwater Conditions	
Temperature to boiler, °F	224
Enthalpy, feedwater, BTU/lbs	192.17
Blowdown, % (approximately)	10.0
Fuel	
Consumed, gallons	16,452
BTU/gallons	136,544

IV. EFFICIENCY CALCULATIONS (Calculated for Test Data)

A. Fuel Oil No.2

$$\% \text{ Eff.} = \frac{W_s (h - hf) + W_b \times hfl}{V_o \times H_v} \times 100$$

Ws	Weight steam produced, lbs
Wb	Weight blowdown, lbs
Vo	Volume oil, gallons
H	Enthalpy saturated steam, BTU/lbs
Hf	Enthalpy feedwater, BTU/lbs
Hv	Heating value fuel, BTU/gal
Hfl	Enthalpy blowdown, BTU/lbs

SAMPLE

$$\% \text{ Eff} = \frac{2{,}031{,}330\ (1195.6 - 192.17) + 20{,}313\ (173.83)}{16{,}452 \times 136{,}544} \times 100 = 90.7$$

V. OBSERVATIONS (Information Prepared by Testing Agent)

A. The boiler performance test was conducted on _____(Date)_____ and _____(Date)_____, in accordance with the Department's standard boiler system testing procedures. The primary interest of the test was to determine the ability of the boiler system components furnished and installed under Project D.G.S. GESA_____, to satisfy the requirements of the system under normal institutional steam demand. No. 2 fuel oil was burned for the entire ninety-six (96) hour test.

B. A capacity test of approximately one (1) hour duration was run. Difficulty was experienced at peak of _____ lbs. per hour. The lack of sufficient quantity of boiler feedwater resulted in this limitation of capacity.

C. The ninety-six (96) hour test was started at 10:00 A.M. on ____(Date)_____, and ended at 10:00 A.M. on _____(Date)_____. No difficulties were encountered other than the limitation as detailed in Paragraph B.

D. The calculated overall boiler efficiency was 90.7%. This obviously high calculated efficiency is believed related to: (1) the steam flow recorder calibration factor and need to change orifice size and (2) an oil flow meter range below that recommended by the meter manufacturer.

E. Difficulty was experienced in feeding the boiler at near peak conditions while using the existing Funding Agency boiler feedwater system. Peak boiler steam capacity was not obtained.

F. The smoke density of combustion gases was satisfactory and in compliance with DEP regulations.

G. The boiler water chemical control was not satisfactory. Concentrations exceeded recommended control limits throughout the test.

H. The boiler chemical feed system failed on the third day of the test due to cutout of electrical overload in pump motor. Piping restrictions would cause such a condition.

I. The installation, operation and performance of the system components were satisfactory except as follows:

- ❖ Funnel drain to discharge overflow from injector was inadequately sized resulting in flooding boiler room floor. Drain piping size should be increased.

SAMPLE

- ❖ The orifice related to the Bailey steam flow recorder should be changed to have the recorded flow read direct without correction factor.

VI. SUMMARY (Information Prepared by Testing Agency)

A. The results of the test were satisfactory except for items listed under VI above. Those items considered to be the responsibility of the Mechanical Contractor should be corrected promptly. Other items of a design nature are offered for consideration by the Authority. Some items are the responsibility of the Funding Agency. All safety controls and lockout devices were tested and found to be satisfactory.

VII. RECOMMENDATIONS (Provided by Design Professional)

- ❖ Shall verify test results are proper.
- ❖ Shall comment as to action to be taken regarding any noted deficiencies, if any.
- ❖ Shall recommend acceptance or qualified rejection of boiler and provide action to be taken.
- ❖ For coal fired boilers, the Contractor shall obtain from DEP, Bureau of Air Quality Management 'Certification to Operate'. A copy shall be included in report.

VIII. ATTACHMENTS

A. Data sheets, Boiler System Test (for each test day)

B. Steam Flow Recorder Charts (for each test day)

C. Fuel Analysis

D. List of Representatives in Attendance (for each test day)

E. Copy of 'Certificate to Operate'

SAMPLE

SAMPLE ELECTRICAL PANEL SCHEDULE

PANEL NAME:	PANELBOARD "S"	NO. OF POLES:	30
LOCATION:	STORAGE	TYPE:	NQOD
VOLTAGE:	120 / 208V, 3 PHASE, 4 WIRE	BRACING:	10 KAIC SYM
AMPACITY:	100 AMP	MAINS:	100 M.L.O.

LOAD SERVED	COND.	GND.	WIRE SIZE	WIRE NO.	AMPS	POLES	POLE NO.	KW PER PHASE A	KW PER PHASE B	KW PER PHASE C	POLE NO.	POLES	AMPS	WIRE NO.	WIRE SIZE	GND.	COND.	LOAD SERVED
AHU-2	3/4	10	10	3	20	3	1	1.0			2	3	20	2	12	12	3/4	AHU-1
							3		1.0		4							
							5			0.8	6							
EC-1	3/4	12	12	2	20	1	7	1.0			8	1	20	2	12	12	3/4	EC-2
EC-3	3/4	12	12	2	20	1	9		5.5		10	1	20	2	12	12	3/4	EC-4
EXTERIOR RECEPTACLE	3/4	12	12	2	20	1	11			5.5	12	1	20	2	12	12	3/4	CHILLER HEAT TAPE
RECEPTACLES	3/4	12	12	2	20	1	13	5.5			14	1	20	2	12	12	3/4	RECEPTACLES
FOLDING DOOR POWER	3/4	12	12	2	20	1	15		0		16	1	20	2	12	12	3/4	GARAGE DOOR POWER
CLOCK POWER/LIGHT	3/4	12	12	2	20	1	17		1.0	0	18	1	20	2	12	12	3/4	PUMPS CP-2, CP-3
CANOPY LETTERS	3/4	12	12	2	20	1	19	0		0.8	20	1	20	2	12	12	3/4	EXT. LIGHT CONTROL
RECEPTACLES	3/4	12	12	2	20	1	21	1.2			22	1	20	2	12	12	3/4	RECEPTACLES
RECEPTACLES	3/4	12	12	2	20	1	23		1.2		24	1	20	2	12	12	3/4	RECEPTACLES
RECEPTACLES	3/4	12	12	2	20	1	25			1.2	26	1	20	2	12	12	3/4	RECEPTACLES
RECEPTACLES	3/4	12	12	2	20	1	27	0.8			28	1	20	2	12	12	3/4	RECEPTACLES
RECEPTACLES	3/4	12	12	2	20	1	29		5.5		30	1	20					SPARE
BOOKSTORE TRACK	3/4	12	12	2	20	1	31			5.5	32	1	20	2	12	12	3/4	BOOKSTORE TRACK
BOOKSTORE TRACK	3/4	12	12	2	20	1	33	5.5			34	1	20					SPARE
BOOKSTORE TRACK	3/4	12	12	2	20	1	35		0		36	1	20	2	12	12	3/4	LOBBY DISPLAY TRACK
LOBBY DISPLAY TRACK	3/4	12	12	2	20	1	37			0	38	1	20	2	12	12	3/4	LOBBY DISPLAY TRACK
LOBBY DISPLAY TRACK	3/4	12	12	2	20	1	39	0			40	1	20					SPARE
SPARE					20	1	41		0		42	1	20					SPARE
TOTAL KILOWATTS PER PHASE								7.3	6.5	6.3								

TOTAL A PHASE KILOWATTS =	9.0	TOTAL A PHASE AMPS =	75
TOTAL B PHASE KILOWATTS =	7.9	TOTAL B PHASE AMPS =	66
TOTAL C PHASE KILOWATTS =	7.3	TOTAL C PHASE AMPS =	61
TOTAL 3 PHASE KILOWATTS =	24.2	TOTAL 3 PHASE AMPS =	67

FUNDING AGENCY DESIGN SUBMISSION
APPROVAL FORM

Project Number: _____ Date: _____

Project Title: _____

_____

_____

The _____ has completed its review of the Construction Document Submission on the GESA Project dated _____, for the above-referenced Project, and hereby accepts and approves the design of the project with comments, if any attached to this sheet

APPROVED BY: _____
Funding Agency Representative Date

_____
Title

cc: Project Coordinator

LABOR & INDUSTRY

BUREAU OF OCCUPATIONAL AND INDUSTRIAL SAFETY
HARRISBURG, PA 17120

717-787-3806 Fax: 717-783-5002 www.dli.state.pa.us

May 07, 2007

Gary R. Taylor, P.E.
Director
Bureau of Engineering & Architecture
Room 203
18th & Herr Streets
Harrisburg, Pa. 17125

Re: Special Inspections

Dear Mr. Taylor,

Please be informed that upon a review of the Bureau of Engineering & Architecture's Special Inspection summary, submitted to this Department on April 18, 2007, we find no opposition to your special inspection program as presented.

It is our opinion that your inspection and test program, as summarized, meets both the spirit and the intent of the 2006 International Building Code chapter 17. However, be advised, that thru the adoption of future triennial code editions, we may have to revisit this matter if the testing and inspection requirements were to change.

If I can be of any further assistance please do not hesitate to contact me at 717-787-2525 of email at rseiler@state.pa.us.

Sincerely,

Ronald Seiler BCO
Chief
Buildings Plan Review Division

Cc: Edward Leister
File

PROTOCOL REGARDING
ASBESTOS, LEAD, PCBs/MERCURY,
RADON AND OTHER HAZARDOUS MATERIALS

SECTION	TITLE
A.	GESA Professional Responsibilities to Funding Agency
B.	Sample Hazardous Materials Survey Letter
C.	Sample Quality Assurance Hazmat Monitoring Letter
D.	Guidance Spec for Removal of Asbestos-Containing Materials
E.	Guidance Spec for Disturbance of Lead-Containing Surface Coatings
F.	Guidance Spec for Removal/Disposal of PCB and Mercury-Containing Materials
G.	Guidance Spec for Radon Testing and Mitigation Design
H.	Lead-Based Paint Guidance Note for Drawings