Project Manual for Electrical Switchgear Replacement Project

Bid#05-032116SB-01

Date Issued: February 12, 2016

DUE DATE/TIME: March 21, 2016 3:00 PM

Time and Date of Pre-Bid Meeting: February 23, 2016 10:00 AM
Deadline for Inquiries: February 29, 2016 3:00 PM
Deadline for Sealed Bids: March 21, 2016 3:00 PM
BID DOCUMENTS TABLE OF CONTENTS

Bid Documents Table of Contents
Invitation to Bid
Instructions to Bidders
General Conditions of Contract
Bid Form
Non-Collusion Affidavit Form
Contract Form
Bid Bond Form
Payment Bond Form
Performance Bond Form
Specifications

THE BID DOCUMENTS INCLUDED IN THIS PROJECT MANUAL ARE INTEGRATED AND FORM THE ENTIRE BASIS FOR WHICH BIDDERS SHALL SUBMIT BIDS FOR THE PROJECT. BIDDERS SHALL CAREFULLY READ EACH AND EVERY BID DOCUMENT PRIOR TO SUBMITTING ITS BID TO FULLY UNDERSTAND THE OBLIGATIONS IT ASSUMES AND RIGHTS IT WAIVES BY SUBMITTING ITS BID AND PERFORMING THE CONTRACT, IF AWARDED.
INVITATION TO BID

The Montgomery County Community College will receive sealed bids for the Electrical Switchgear Replacement Project. Bids shall be received by the Montgomery County Community College by 3:00 p.m. (Eastern Standard Time) on March 21, 2016, at its Purchasing Department office located at Room 121 College Hall, 340 DeKalb Pike, Blue Bell, PA 19422.

Bid Documents, including the Specifications, may be obtained at the office of the Purchasing Department, Montgomery County Community College, Room 121 College Hall, 340 DeKalb Pike, Blue Bell, PA 19422.

Timely submitted Bids will be publicly opened and read aloud on March 21, 2016 at 3:30 PM in College Hall Room 146 of the Montgomery County Community College, 340 Dekalb Pike, Blue Bell, PA 19422.

A mandatory, pre-bid meeting will be held as follows: February 23, 2016 at 10:00 A.M.

The pre-bid meeting will be held at College Hall, Room 146.

Bids will be received for any and/or all of the following separate prime contracts:

Electrical Construction

Bids must be submitted on forms included in the bidding documents and must be accompanied by Bid Security and Non-Collusion Affidavit in accordance with the Instructions to Bidders.

Bids shall conform to all other requirements as more fully set forth in the bidding documents, including compliance with all applicable laws and regulations.

This Project is subject to the Pennsylvania Prevailing Wage Law, approved August 15, 1961 (Act No. 442), as amended, and reference is made to the prevailing minimum wage rates applicable to this Project which have been promulgated by the Secretary of Labor and Industry.

All proposals submitted are valid for acceptance by the Owner and may not be withdrawn for a period of at least sixty (60) days after the actual date of the opening thereof unless the award of contract is delayed by the required approvals of another governmental agency, sale of bonds or award of grant or grants, in which case, proposals shall be irrevocable for one hundred twenty (120) days in accordance with Section 3911 of the Pennsylvania Commonwealth Procurement Code, 62 Pa.C.S. § 3911.

The Owner reserves the right to reject any or all proposals or any part thereof or items therein and to waive informalities and/or technicalities as it deems best to protect its interest.
1. **BID DOCUMENT AVAILABILITY**

   A. The Bid Documents are made available only for the purpose of obtaining Bids for the Project. Their availability does not grant a license for any other purposes.

   B. Upon receipt of Bid Documents, Bidders shall verify that the documents are complete. Bidder shall notify the College if the documents are incomplete or upon finding discrepancies or omissions in the Bid Documents. Bidder shall provide a mailing address and email address to the College for purposes of transmitting Addenda upon receipt of the Bid Documents. Each Bidder shall be responsible for the completeness of its set of Bid Documents. No allowance or concession will be made to a Bidder who complains of missing portions of Bid Documents or Addenda. All requests for clarifications must be in writing and received by the College no less than seven (7) days before Bid Deadline. All clarifications, modifications and corrections to the Bid Documents shall be issued in the form of Addenda and will be forwarded to Bidders that have previously supplied the College with a mailing and email address. Addenda listing revisions and changes to the Bid Documents shall become a part of and take precedence over the original Bid Documents and previously issued Addenda. Any information furnished related to the Project shall not be legally binding on the College unless issued in an Addendum.

2. **DEFINITIONS**

   A. **Addenda**: Written and/or graphic instruments issued by the College prior to the Bid deadline which modify or interpret the Bid Documents by additions, deletions, clarifications or corrections.

   B. **Bid Deadline**: The date and time which the College will receive and open sealed Bids for the Project as identified in the Invitation to Bid.

   C. **Bid Documents**: The bid documents include, without limitation, the Bid Documents Table of Contents, Invitation to Bid, Instructions to Bidders, General Conditions of Contract, Bid Bond Form, Contract Form, Performance Bond Form, Payment Bond Form, Non-Collusion Affidavit Form, Specifications, Bid Form and any Addenda.

   D. **Bid Security**: Bid Bond prepared on the form contained in the Bid Documents used to guarantee the Bid.

   E. **Bidder**: Person or entity submitting a Bid.

   F. **Base Bid**: Monetary sum identified by Bidder on the Bid Form for the full performance of the Project in accordance with the Contract.

   G. **Contract**: The entire integrated agreement between the College and Contractor in connection with the Project shall constitute the “Contract Documents” and form the Contract. The Contract Documents shall include, without limitation, the completed Contract Form,
H. **Contractor**: Bidder to whom the Contract is awarded.

I. **Detailed Cost Break-Down**: An itemized list of all labor materials required to complete the Project and shall include, without limitation, the number of units of labor and materials to be installed and/or delivered and the price applicable each itemized component of labor and materials (which shall include, without limitation, charges for delivery, fuel, transportation, storage, placement, handling charges, labor, overhead and profit and shall not be subject to escalation or surcharge during the term of the Contract) in a form acceptable to the College.

J. **College**: Montgomery County Community College, its agents, employees, elected officials and/or authorized representatives.

K. **College Parties**: The College Parties include, collectively and without limitation, employees, elected officials, agents and retained professionals (including, without limitation, a construction manager, architect and/or the engineer, if any).

L. **College Property**: Shall mean any real property owned or operated by the College, and all buildings and improvements thereon, and any personal property, systems and equipment located therein or thereon.

M. **Project**: **Electrical Switchgear Replacement Project**, which Project, includes, without limitation, the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations.

N. **Specifications**: The drawings, plans and specifications included with the Bid Documents that provide the technical details of the work and products required to complete the Project.

O. **Verification Form**: The verification form required to be submitted to the College by contractors and subcontractors pursuant to the Public Works Employment Verification Act 43 P.S. § 167.1 *et seq.*

3. **APPLICABILITY OF INSTRUCTIONS**

These Instructions to Bidders are a standardized listing of items generally applicable to Bids for contracted construction services entered into by the College. If a Bidder is unsure as to the applicability of a particular item, the College should be contacted for clarification prior to the submission of a Bid.

4. **PREPARATION AND SUBMISSION OF BIDS**
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

A. Bidder shall be solely responsible for the delivery of its Bid in the manner and time prescribed. All Bids must be received by the College at the place designated in the Invitation to Bid no later than the Bid Deadline. Bids received after the Bid Deadline shall be returned to Bidders unopened.

B. By submitting its Bid, Bidder represents that it has read and understands the Bid Documents, including all Addenda, its Bid is based upon the labor, materials, systems, and equipment required by the Specifications and is willing to accept performance of the Project for the amounts set forth in its Bid.

C. Bids shall be prepared and submitted on forms included in the Bid Documents. All blank spaces shall be filled in, by computer, typewriter or blue ink. All prices are to be firm net prices and are to be F.O.B. destination, including, without limitation, charges for delivery, fuel, transportation, storage, placement, handling charges, labor, overhead and profit and shall not be subject to escalation or surcharge during the term of the Contract. Bidder warrants that its Base Bid includes a deduction(s) for all rebates and discounts (e.g., manufacturer and/or governmental) that may be available as a result of the College’s purchase of the products, services and/or work set forth herein. On a separate sheet attached to the Bid Form, each Bidder shall identify such rebates and/or discounts that it will seek endorsement from the College associated with the goods identified herein.

D. Bids shall be irrevocable for sixty (60) days after the actual day of opening thereof unless delayed by the required approval of another governmental agency, the sale of bonds or the award of a grant, in which case, Bids shall be irrevocable for one hundred twenty (120) days after Bid opening. Extensions of the date for the award of contract may be made by the mutual written consent of College and the lowest responsible and responsive Bidder.

E. The Bid Form shall be signed in accordance with the following:

   (i) If the Bidder is an individual, the Bid shall be executed by him/her, personally; his/her signature shall be witnessed; his/her business address shall be stated, and any trade name employed in the conduct of his/her business shall be stated.

   (ii) If the Bidder is a partnership, the Bid Form shall be executed in the name of the partnership by each of the partners, or a general partner authorized for this purpose; the signatures of the partners shall be witnessed; and the business name and address of the partnership shall be stated.

   (iii) If the Bidder is a corporation, the Bid Form shall be executed in its name and on its behalf: (a) by the President or Vice President and attested by the Secretary or Assistant Secretary, and the Corporate Seal shall be affixed; or (b) by a duly authorized agent of the corporation whose authority to act, as of the date of the Bid, shall be established by a certified copy of a resolution by the Board of Directors of the bidding corporation authorizing said agent to sign the Bid on behalf of the corporation, submitted with the Bid. The business address of the corporation and state of incorporation shall be stated.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

(iv) If the Bidder is a limited liability company, the Bid Form shall be executed in its name and on its behalf: (a) by all of the members if the company is member-managed, or by the managing member if the company is manager-managed, or (b) by a duly authorized agent of the company whose authority to act, as of the date of the Bid, shall be established by a certified copy of a resolution by the members of the bidding company authorizing said agent to sign the Bid on behalf of the company, submitted with the Bid. The business address of the company and state of formation shall be stated.

(v) If the Bidder is a joint venture, each party of the joint venture shall execute the Bid Form under their respective seals in a manner appropriate to such party as described above.

F. The lowest responsive and responsible Bidder, as determined by the College, shall submit a completed Verification Form required by the Public Works Employment Verification Act (43 P.S. § 167.1 et seq.) acknowledging the Bidder’s responsibilities and compliance with the Public Works Employment Verification Act within ten (10) calendar days of the date of the College’s notification of its intent to award the Contract as a condition precedent to the award. Failure to timely submit such required Verification Form shall constitute a default by Bidder, and the College may, at its sole discretion, award the Contract to the next lowest responsive and responsible Bidder, reserving to itself all rights for damages relating to said default, or, in the alternative, allow Contractor additional time in which to provide the Verification Form. The Verification Form shall be obtained from the Secretary of the Pennsylvania Department of General Services and shall include a certification that the information is true and correct, subject to sanctions provided by law. The Verification Form shall be executed by a representative who has sufficient knowledge and authority to make the representations and certifications contained in the Verification Form.

G. Each Bid must be accompanied by Bid Security in the amount of ten percent (10%) of the total amount of the Base Bid plus any additive alternatives. Bid Security shall be in the form of a Bid Bond in the form set forth herein, naming the College as obligee. The Bid Bond shall be submitted on the form included in the Bidding Documents, and the Attorney-in-Fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of its Power of Attorney, authorizing said Attorney-in-Fact to act on behalf of the surety. The Power of Attorney must be dated the same date as the Bid Bond and both the Bid Bond and Power of Attorney shall have affixed the raised corporate seal of the surety. The Bid Bond form must be executed by a surety licensed and authorized to conduct business within the Commonwealth of Pennsylvania and named in the current list of companies holding Certificates of Authority as acceptable sureties on federal bonds and/or as acceptable reinsuring companies as published in Circular 570 (as amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department, and the amount of the bond shall not exceed the underwriting risk of such surety set forth in said circular or revision thereof. The Bid Security of Bidders will be returned at the Bidder’s request, upon (1) the execution of the Contract by the College, or (2) the rejection of all bids by College, or (3) the expiration of the firm bid period.

H. If the Bidder receiving a Notice of Intent to Award shall fail to execute the Contract, or fail to furnish the required Performance Bond and Payment Bond, Verification Form
required by the Pennsylvania Employment Verification Act, Detailed Cost Break-Down and/or certificate of insurance evidencing the insurance coverages required by the General Conditions within ten (10) calendar days after receipt of the Notice of Intent to Award (a “Defaulting Bidder”), the College may apply the Bid Security toward the difference between the amount of the Bid of the Defaulting Bidder as accepted by the College and any higher amount for which the College may contract for the required work, plus any advertising costs, legal fees, damages, penalties, and any and all other fees and expenses incurred by the College by reason of the failure of such Defaulting Bidder to comply herewith. If the amount of said damages exceeds the penal sum of the Bid Security, the Defaulting Bidder shall pay the College the full amount of the excess. If the College does not procure an executed contract with any other party for the performance of the work within thirty (30) days after the acceptance of the Bid from the Defaulting Bidder, whether because of the lack of other Bids or the inability or refusal of any other Bidder to contract, or because the cost under any higher Bid would be greater than the College would afford, as determined in the sole discretion of the College, then in that event, the Defaulting Bidder and its Surety shall pay to the College the full amount of the Bid Security as liquidated damages and not as a penalty.

I. All Bids shall be submitted in a sealed opaque envelope, clearly identified with Bidder’s name and Project name. The envelope shall also contain a notation that it should not be opened until the time specified for Bid opening. Bid envelopes not bearing this notation and opened in error may be rejected by the College, in its sole discretion. If a Bidder elects to submit a Bid by mailing rather than hand delivery, the sealed Bid envelope described above shall be enclosed in a mailing envelope and addressed to the College, and must be received prior to the date and time specified for Bid opening. Bids must be contained in a sealed, opaque envelope marked on the outside as follows:

BID: Electrical Switchgear Replacement Project
Bid # 05-032116SB-01______

J. Voluntary Submission of Supplier Information. If you are interested in submitting a bid, you are encouraged (but no required) to send the College’s Purchasing Department an email (purchasing@mc3.edu) or fax (215-619-7187) with the following information:

Bid Title: Electrical Switchgear Replacement Project
Bid #: 05-032116SB-01______
Company Name
Contact Name
Address
City/State/Zip
Phone Number
Fax Number
Email Address
Any comments or questions
K. **Delivery of Bids.** Sealed Proposals shall be submitted by mail, hand-delivery or express courier to:

Montgomery County Community College  
Procurement Department  
Room 121 College Hall  
340 DeKalb Pike  
Blue Bell, PA 19422

L. Bidders shall familiarize themselves with all of the bid specifications and addenda thereto and will be held responsible to fully comply therewith. Bidder, if requested, must submit a list of completed projects similar in size and scope to the project identified in this invitation to bid. Each Bidder shall visit the site and examine the conditions affecting the work before submitting a proposal. Bids shall include all costs and charges made necessary by special local conditions and ordinances. No extra payments will be allowed as a result of Bidder’s failure to adhere to the above statements. Each Bidder shall be held to have examined the premises, the site, the specifications, all and each of the contracted documents. Any failure by the Bidder to fully acquaint themselves with any of the available information shall not relieve them from the responsibility for performing work properly and in complete accordance with the specifications.

5. **STANDARD OF QUALITY**

A. The various materials and products specified in the Specifications by name or description are given to establish a standard of quality and of cost for Bid purposes. It is not the intent to limit the Bidder to any one material or product specified but rather to describe the minimum standard. When proprietary names are used, they shall be followed by the words “or substitution meeting or exceeding the minimum standard of quality, as determined by the College as evidenced by Addenda.” A Bid containing a substitution which does not meet the Specifications may be declared non-responsive. Where products or manufacturers are listed with the words “No Substitutions”, these items are proprietary and the sole acceptable source for this Project, and no substitutions will be permitted.

B. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the College at least seven (7) calendar days prior to the date for receipt of Bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including, but not limited to, drawings, cuts, performance test data, manufacturer’s warranty and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other work that result from the substitution shall be included. The burden of proof of the merit of the proposed substitute is upon the Bidder. The College’s decision of approval or disapproval of a proposed substitution shall be final and binding.

C. If the College approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals in any other manner.
6. MODIFICATION AND WITHDRAWAL

Bids may not be modified after submittal. Bids may be withdrawn after submittal, provided the Bidder makes its request to withdraw in writing and the request is acknowledged by the College in writing prior to the time specified for Bid opening in the Invitation to Bid. Negligence by Bidder in preparing its Bid confers no right of withdrawal or modification of its Bid after such Bid has been opened. No claims on account of mistakes or omissions in any Bid will be considered. Notwithstanding the above, a Bidder may withdraw its Bid after such Bid has been opened in accordance with the causes set forth in the Pennsylvania Bid Withdrawal Act, Act No. 4 of 1974, 73 P.S. §1601 et seq. Strict compliance with said Bid Withdrawal Act is required to withdraw a Bid after Bid opening.

7. OPENING OF BIDS

Bids will be publicly opened and read on the date, at the location, and commencing at the time stated in the Invitation to Bid. Bidders or their authorized agents may be present at Bid opening. The College shall have no obligation to notify any other person other than the lowest responsive and responsible Bidder of the College’s intent to award the Contract.

8. QUALIFICATIONS

Prior to the award of Contract, College may require satisfactory evidence to show that the Bidder is fully prepared in every way to perform the Contract timely and that he has been regularly engaged in such business. The College may make such investigation as it deems necessary to determine the ability of the bidder to do the work intended. In awarding bids, the College shall have sole discretion in determining the lowest responsive and responsible bidder and shall have the right to take into consideration the following factors, among others, in addition to price:
(i) The character, integrity, reputation and judgment of the Bidder.
(ii) The previous and existing compliance of the Bidder with the requirements of similar installations.
(iii) The ability, capacity, experience and skill of the Bidder to perform the Contract.

9. COLLUSIVE BIDS

More than one Bid for one Contract from an individual, partnership, corporation, company, or an association under the same or different names will be grounds for rejection of all Bids in which such Bidder is interested. Any and all Bids will be rejected if there is any reason for believing that collusion exists among any of the Bidders. Participants in such collusion will not be considered in future Bids. A Non-Collusion Affidavit shall be executed and submitted with the Bidder’s Bid using the form set forth herein.

10. BID INELIGIBILITY

A. Failure to provide Bid Security may result in rejection of Bid.
B. Bids not based on Bid Documents, those indicating a qualification of the Bid, conditions or uninvited substitutions, or which contain alteration of Bid Document forms, may be rejected by the College in its sole and absolute discretion. In addition, Bids failing to adhere to the Specifications may be rejected by the College in its sole and absolute discretion.

C. Bids that are unsigned, improperly signed or sealed, or illegible, may be rejected by the College in its sole and absolute discretion.

D. Bids where the prices are obviously unbalanced may be rejected by the College in its sole and absolute discretion.

E. Unless specifically required to be identified on the Bid Form, Bids containing “escalator” clauses may be rejected by the College at the College’s sole and absolute discretion.

F. All Bids shall conform with these Instructions to Bidders. Bids containing minor irregularities or informalities may be rejected by the College in its sole and absolute discretion. The College reserves the right to waive any such informalities or irregularities when a waiver is in the College’s best interest.

11. BID REJECTION OR AWARD

A. The College reserves the right to reject any and all Bids, or parts of a Bid, when a rejection is in the College’s best interest as determined by the College in its sole discretion. The College reserves the right to reject a Bid if the Bidder is not in a position to perform the Contract or has previously failed to perform similar contracts properly or on time as determined by the College in its sole and absolute discretion. If a Contract is awarded, it will be to the lowest responsive and responsible Bidder, provided such Bidder’s Bid is reasonable and in the College’s interest to accept.

B. In the event of a dispute between a Bidder and the College regarding the College’s determination of which Bidder is the lowest responsive and responsible Bidder, such contesting Bidder shall be responsible for any legal fees (e.g., fees of attorneys, paralegals and other legal professionals), professional fees, or other costs or expenses incurred by the College to the extent the Bidder does not completely prevail in such contest. Furthermore, under no circumstances shall the College be responsible for any legal fees, professional fees, or other costs or expenses incurred by the contesting Bidder if the College decides not to award the Contract to such Bidder based upon the College’s determination in its sole and absolute discretion that such contesting Bidder is not the lowest responsive and responsible Bidder.

C. Bidder agrees that it has prepared its Bid at its sole cost and expense. If, for any reason, the College rejects the Bidder’s Bid, Bidder agrees that it shall not seek to recover expected profits or Bid preparation fees or costs, nor make a claim of unjust enrichment against the College.

D. Tie Bids. In the unlikely event of tie bids, award will be determined by the toss of a coin.
12. AWARD OF THE CONTRACT

A. It is the intent of the College to award the Contract to the lowest responsive and responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bid Documents and does not exceed the funds available to the College.

B. The College reserves the right to award a Contract for one or more of the items set forth in the Specifications, or for all items set forth in the Specifications.

C. The College will notify the lowest responsive and responsible Bidder if the College intends to award the Contract. Such Bidder shall complete and execute the Contract Form, Performance Bond and Payment Bond in accordance with the amounts set forth in its Bid, and provide certificates of insurance, Verification Form, and Detailed Cost Break-Down. The executed Contract Form, executed Performance Bond, executed Payment Bond, executed Verification Form, Detailed Cost Break-Down and certificates of insurance shall be submitted to the College by the Bidder within ten (10) calendar days of the date of the College’s notification of its intent to award the Contract as a condition precedent to the award.

13. PAYMENT AND PERFORMANCE BONDS

A. Contractor shall furnish to College the following bonds:

(i) A performance bond in the amount of One Hundred Percent (100%) of the contract sum, conditioned upon the faithful performance of the Contract in accordance with the Contract shall be submitted. Such bond shall be executed on the form contained in the Bid Documents and shall be solely for the protection of College.

(ii) A payment bond in the amount of One Hundred Percent (100%) of the contract sum shall be submitted. Such bond shall be executed on the form contained in the Bid Documents and shall be solely for the protection of claimants supplying labor and materials to Contractor, or to any of Contractor’s subcontractors, in the prosecution of the work provided for in such Contract, and shall be conditioned upon the prompt delivery of such materials or products furnished or labor supplied or performed in the prosecution of the work.

B. Each of the above-referenced bonds shall be executed by a surety named in the current list of “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies,” as published in Circular 570 (as amended) by the Audit Staff, Bureau of Governmental Financial Operations, U.S. Treasury Department, and the amount of the bonds shall not exceed the underwriting risk of the surety as set forth in said circular or revision thereof. The surety shall be licensed and qualified to do business in the Commonwealth of Pennsylvania. The bonds shall be accompanied by a power of attorney evidencing the authority of the agent of the surety to execute the bonds as of the date of the bonds.

C. The lowest responsive and responsible Bidder, as determined by the College, shall submit a Payment and Performance Bond within ten (10) calendar days of the date of the College’s notification of its intent to award the Contract as a condition precedent to the award.
Failure to timely submit such required bonds shall constitute a default by Bidder, and the College may, at its sole discretion, award the Contract to the next lowest responsive and responsible Bidder, reserving to itself all rights for damages relating to said default, or, in the alternative, allow Contractor additional time in which to secure the required bonds. Other forms of bonds or changes in amounts may be required in the Specifications.

14. DETAILED COST BREAK-DOWN

For any Contract exceeding Five Thousand Dollars ($5,000), Contractor shall submit a Detailed Cost Break-Down (the total of which shall equal the full amount of the contract sum). The Detailed Cost Break-Down shall be submitted to the College within ten (10) calendar days of the date of the College’s notice of its intent to award the Contract. Failure to timely submit such Detailed Cost Break-Down shall constitute a default by Bidder, and the College may, at its sole discretion, award the Contract to the next lowest responsive and responsible Bidder, reserving to itself all rights for damages relating to said default, or, in the alternative, allow Contractor additional time in which to provide the Detailed Cost Break-Down. The College shall also have the right to award the Contract, but withhold payment to Contractor until the Detailed Cost Break-Down is submitted by Contractor.

15. RECEIVING HOURS

All shipments are to be made to the College in accordance with the instructions forwarded to the successful Bidder by the College. All deliveries shall be made between the hours of 8:30 AM and 4:30 PM, Monday through Friday, except on College holidays.

NOTICE: BIDS ARE PUBLICLY OPENED AND READ ON THE DATE SPECIFIED. IF YOU ARE INTERESTED IN IMMEDIATE INFORMATION RELATING TO THE BID, PLEASE HAVE A REPRESENTATIVE PRESENT AT BID OPENING. FOLLOWING BID OPENING, THE BIDS WILL BE REVIEWED BY THE APPROPRIATE AUTHORITIES OF AND FOR THE COLLEGE. THEREFORE, INFORMATION ON THE BIDS WILL NOT AGAIN BE AVAILABLE UNTIL THEY HAVE BEEN REVIEWED AND A FINAL RECOMMENDATION IS PRESENTED TO THE BOARD OF TRUSTEES OF THE COLLEGE AT ITS REGULARLY SCHEDULED MEETING.

Instructions to Bidders
GENERAL CONDITIONS OF THE CONTRACT

1. APPLICABILITY OF THE GENERAL CONDITIONS OF THE CONTRACT

These General Conditions of the Contract shall apply and be binding upon the College and Contractor awarded the Contract for the Project upon execution of the Contract Form by each party. All capitalized terms not defined in these General Conditions of the Contract shall have the same meaning set forth in the Instructions to Bidders. These General Conditions of the Contract are a standardized listing of items generally applicable to Contracts for contracted construction services entered into by the College. Where an item applies in limited cases, the same shall be noted as well as the conditions respecting applicability.

2. FAMILIARITY WITH PROPOSED WORK

A. The Contract is entered into by the College with the understanding that Contractor, prior to submission of its Bid, acquainted itself with the requirements of all Bid Documents and that it has obtained all necessary information for completion of the services or Project on or before the date(s) specified. The Contractor shall not at any time after the execution of the Contract set up any claims whatsoever based upon insufficient data or incorrectly assumed conditions, nor shall Contractor claim any misunderstanding in regard to the nature, conditions or character of the services or work to be performed or products to be supplied under the Contract, and Contractor shall assume all risk resulting from any changes in the conditions which may occur during the progress of the work.

B. Where estimated quantities have been shown for contract items, such quantities are solely for the purpose of comparing Bids, and are not intended to constitute an explicit or implicit representation as to the quantities of work and materials needed to fully complete the contract. This data is not intended to relieve Bidders of their responsibilities to familiarize themselves with conditions that may affect cost, progress or performance of the work.

C. Unit prices included in the Bid Form shall be applied to determine an equitable adjustment of the contract sum in connection with extra work or changes ordered and approved by the College in writing under the Contract. Unit prices submitted by a Bidder in its Bid for the Project are subject to approval and acceptance by the College. The College reserves the right to reject any unit price which is unreasonable or unbalanced, as compared with prevailing costs or as compared with unit prices submitted by other Bidders for this Project, and the College reserves the right to ask for a revised unit price before or after contracts are signed. Unit prices submitted by Bidder shall include all profit, overhead, insurance, taxes, labor, materials, plan, equipment, and tools necessary and required to fully complete the work item, as specified and details for the work item under the project specifications.

3. COMPETENT WORKERS

No person shall be employed to do work under the Contract except competent and first class workmen and mechanics. No workman shall be regarded as competent and first class within the meaning of the Educate America Act of 1994 or this provision except those who are
duly skilled in their respective branches of labor, and who shall be paid not less than such rates of wages and for such hours’ worked as shall be the established and current rates of wages paid for such hours by employers of organized labor in doing of similar work in the College where the Contract is being performed.

4. CASH ALLOWANCES.

No cash allowances for any purposes are included in the Specifications for this Project.

5. INSURANCE

A. The Contractor shall purchase, maintain and carry such liability insurance at its sole expense as set forth below to fully protect the College against all claims which may arise in connection with the Project. No work shall be started until the College has been provided Certificates of Insurance executed by an insurer licensed and qualified to do business in the Commonwealth of Pennsylvania and having an A- or better, or financial rating of VI or better with the A.M. Best’s Company Key Rating Guide-Latest Edition and being satisfactory to the College. All Certificates of Insurance must indicate that the College has (through endorsement to the policy) been specifically named as additional insured parties for all policies except Workers’ Compensation. The Certificate of Insurance must also provide that the policy will not be cancelled, materially changed, or allowed to expire until at least thirty (30) days’ prior written notice has been provided to the College. In addition, all of Contractor’s insurance policies and the Certificate of Insurance shall state that all of Contractor’s insurance policies are primary and non-contributory with respect to any other valid and collectible insurance policies. It is the obligation of the Contractor to obtain and furnish the College Certificates for any College approved subcontractors subject to the above terms and conditions. All General Liability policies shall provide a per job location aggregate. Failure to furnish the correct types of insurance on the correct forms in the correct amounts shall constitute a material breach of the conditions for award of the Contract and Contractor shall be deemed to be in default (i.e. a Defaulting Bidder).

B. General Liability Insurance. General liability coverages shall be provided by a commercial general liability policy on an occurrence and aggregate basis. The policy date or retroactive date shall predate the Contract. The termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of the Contract or later if otherwise specified in the Bid Documents. Where the Specifications require underground excavation, underground hazard coverage must be included. Where the Specifications require demolition and/or use of explosives, the explosion and collapse hazard coverage must be included. Coverage to include Products and/or Completed Operations and $1,000,000 products/completed operations aggregate.

   (i) Bodily Injury: $1,000,000 each occurrence, $2,000,000 aggregate.

   (ii) Property Damage: $1,000,000 each occurrence, $2,000,000 aggregate.

C. Automobile Liability. Coverage shall be subject to minimum combined single limit for bodily injury and/or property damage of $1,000,000, and cover all owned, non-owned and hired vehicles.
D. Workers’ Compensation and Employers’ Liability.

(i) Employers’ Liability: $500,000 each accident.
    $500,000 disease policy limits.
    $500,000 disease – each employee.

(ii) Workers’ Compensation: Statutory minimum.

E. Umbrella Liability. Coverage should be in the amount of $3,000,000 each occurrence and $3,000,000 aggregate.

6. WAIVER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES; ECONOMIC LOSS

A. The Contractor waives claims against the College and the College Parties for consequential and/or incidental damages arising out of or relating to the Contract. This waiver includes, but is not limited to:

(i) Consequential damages incurred by Contractor for principal office expenses including, but not limited to, the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of actual and expected profits.

(ii) Incidental damages incurred by Contractor including, but not limited to, costs resulting from stopping performance under the Contract, removing and transporting Contractor’s property (e.g., Contractor’s equipment, supplies and materials) from the Project site, and storing Contractor’s property (e.g., Contractor’s equipment, supplies and materials) at an alternate location.

B. The above waiver is applicable, without limitation, to all consequential and/or incidental damages, due to the termination of the Contract by Contractor or the College.

C. The Contractor shall have no claim or right of recovery of damages against the College or the College Parties for economic loss sustained, in whole or in part, by any act or omission of the College Parties to the extent that such act or omission constitutes a breach of contract. Specifically, and without limiting the generality of the foregoing, Contractor shall have no claim against the College or the College Parties for economic loss based upon any tort, including, without limitation, negligence, negligent misrepresentation or any other tort-based theory of liability.

7. FEES, PERMITS AND CERTIFICATIONS

The Contractor shall pay for, secure and provide all necessary and required local, state and federal fees, permits and certificates.

8. TAXES
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

Contractor hereby accepts and assumes full and exclusively liability for and shall pay all applicable sales, use, excise or other taxes required by law (collectively, the “Taxes”) on all materials, tools, apparatus, equipment, fixtures, services, incidentals or otherwise which may be purchased or used in connection with the work under the Contract or portions thereof, including, without limitation, all sales taxes, state and municipal taxes, business privilege taxes, use taxes and all contributions and payroll taxes under the provisions of Federal law or the laws of the Commonwealth of Pennsylvania. Contractor’s Bid was made in accordance with such laws and includes Taxes in the Bid. Notwithstanding the foregoing, however, certain items acquired as part of the work may be exempt from the Taxes, and no charges shall be allowed for such exempt items. It shall be Contractor’s responsibility to determine those items for which an exemption will apply, and Contractor shall provide independent legal or other tax advice to determine how and to what extent an exemption from Taxes applies. In order to facilitate purchases free of sales and/or use tax in the Commonwealth of Pennsylvania, and upon certification by Contractor’s legal and tax advisors that an item is, in fact, tax exempt, the College agrees to execute a tax exemption certificate prepared by Contractor or a subcontractor as may be required by the regulations of the Pennsylvania Department of Revenue. In the event that Contractor pays Taxes not properly due, the College shall be entitled to any refund relating thereto and Contractor agrees to assign any and all rights to said refund to the College. It is further agreed that the College shall have the right to deduct the amount of any and all such Taxes from the compensation owed to Contractor under the terms of the Contract at any time, in the College’s sole discretion, as the College deems advisable, it being agreed that the College shall have the right to deduct any and all such Taxes from the next payments due under the Contract and from the retained percentages. The College or its representatives shall be afforded access to all Contractor’s records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, certifications, and similar data relating to the Contract, and Contractor shall preserve all such records for a period of three (3) years, or for such longer period as may be required by law, after final payment. Further, the College or its representative shall have the authority, but not the obligation, to require Contractor to provide the College with certified payroll records for the labor furnished by Contractor in connection with the work.

9. INDEMNIFICATION

To the fullest extent permitted by law, Contractor shall, immediately upon demand, indemnify, defend and hold harmless the College (with legal counsel selected by the College), and the College Parties from and against any and all claims, suits, demands, liabilities, damages, losses, taxes and expenses, including, without limitation, legal fees and legal costs, arising out of or resulting from Contractor’s performance or non-performance of the Contract, including, without limitation, claims, suits, demands, liabilities, damages, losses, taxes and expenses attributable to bodily injury, sickness, disease or death, or to injury to or destruction of property, including, without limitation, loss of use resulting therefrom, caused in whole or in part by acts or omissions or negligence of Contractor, its subcontractors, their respective officers, employees, agents, or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, suit, demand, liability, damage, loss, tax or expense is caused in part by the College. The indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits
10. TIME PERIOD FOR PERFORMANCE OF WORK

A. The Contract shall be finally completed within 32 weeks after the College’s issuance of a Notice to Proceed to Contractor. The date set for final completion of the Contract is designated in the Contract. Milestones may be set forth in the specifications or a project schedule submitted by Contractor and approved by the College after the award of the Contract. Time is of the essence in performing all services or work and/or supplying all products required by the Contract. Provisions for liquidated damages in the event of any delay in completing the Contract may be set forth in the Specifications.

B. Within ten (10) days of notification to proceed with the Project, Contractor shall provide the College with a Project schedule identifying the commencement and milestone dates for completion of components of the services or work and/or delivery of products required by the Contract for the College’s review and approval. The Contractor shall perform the work in strict accordance with the latest approved Project schedule.

C. In the event Contractor shall neglect or refuse to complete the Project as required, or any part thereof, or to replace or re-perform any service or work and/or product which is rejected, then the College is authorized and empowered to purchase materials, equipment and services from third parties, and in such manner as it shall elect at the expense of Contractor, or to cancel the Contract; reserving to itself, nevertheless, all rights for damages, including, without limitation, legal fees, legal costs, and additional architectural, engineering or other design costs, which may be incurred by the College.

D. If Contractor is delayed at any time in the progress of the work by any act or neglect of the College, its agents, employees, retained professionals (including, without limitation, a construction manager, architect and/or engineers, if any), any separate contractor employed by the College or by changes ordered in the work, labor disputes (excluding labor disputes with Contractor’s own employees, or its subcontractor’s own employees), fire, unusual delay in transportation, adverse weather conditions not reasonably anticipated, unavoidable casualties or by any other cause beyond the reasonable control of Contractor, Contractor’s exclusive remedy shall be an extension of time allowed for final completion of the work under the Contract. This extension of time shall not act as an entitlement for damages due and owing Contractor for said delay. Under no circumstances shall Contractor be entitled to claim or recover payment, compensation or damages for any delays from any cause whatsoever in the progress of the work, notwithstanding whether such delays be avoidable or unavoidable.

11. PAYMENT

A. Contractor will be paid according to the schedule below, provided all services or work and/or products which payment is requested has been completed in accordance with the Contract and Contractor is in full compliance with all requirements of the Contract. Invoices must be received by the end of each calendar month, and will be authorized for payment by the Board of Trustees for the College at the following calendar months’ regular meeting.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

<table>
<thead>
<tr>
<th>Amount of Contract</th>
<th>Payment Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $5,000</td>
<td>100% upon completion of specified work.</td>
</tr>
<tr>
<td>$5,000 to $20,000</td>
<td>Upon completion of 50% of specified work, respective payment amount shall be made, less retainage. Upon completion of 100% of specified work, remaining payment amount shall be made. Payments shall be subject to conditions of paragraph B hereof.</td>
</tr>
<tr>
<td>$20,001 to $50,000</td>
<td>Upon completion of 25%, 50% and 75% of work, respective payment amount shall be made, less retainage. Upon completion of 100% of specified work, remaining payment amount shall be paid. Payments shall be subject to paragraph B hereof.</td>
</tr>
<tr>
<td>Over $50,000</td>
<td>Payments shall be made monthly upon completion of specified work, less retainage.</td>
</tr>
</tbody>
</table>

B. For any Contract from Five Thousand Dollars ($5,000) to Fifty Thousand Dollars ($50,000), payment will be made only after the Detailed Cost Break-Down has been provided by Contractor and approved by the College. Payments shall be made only for work completed according to the Detailed Cost Break-Down. Five percent (5%) retainage shall be withheld by the College for all payments prior to final completion. Upon final completion to the satisfaction and acceptance by the College, in the College’s sole and absolute discretion, final payment, including retainage, shall be made.

C. For any Contract in excess of Fifty Thousand Dollars ($50,000):

(i) Payment will be made only after the Detailed Cost Break-Down has been provided by Contractor and approved by the College. Payments shall be made only for work completed according to the Detailed Cost Break-Down. Retainage in the amount of ten percent (10%) of the value of the completed work, based on monthly progress payments, shall be withheld by the College from each monthly payment until the work has achieved 50% completion. Except as otherwise provided herein, when the work for the specified Project is fifty percent (50%) completed, one-half (1/2) of the amount retained by the College shall be returned to Contractor, provided that Contractor is making satisfactory progress and that there is no specific cause for greater withholding.

(ii) Notwithstanding the foregoing, the College may continue to withhold ten percent (10%) of the amount due Contractor after the Contract is fifty percent (50%) completed if the College determines in its sole and absolute discretion that there is a specific cause for greater withholding. A specific cause for greater withholding shall include, without limitation, the following:

(1) The Contractor’s inability to produce evidence satisfactory to the College evidencing payments for materials, labor and/or payments to Subcontractors, manufacturers or suppliers;
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

(2) The existence of a dispute between the College and Contractor regarding increased costs claimed by such Contractor; or

(3) Contractor’s failure to complete the work in accordance with the Contract, including, without limitation, the Specifications, etc.

D. If a specific cause for greater withholding does not exist after the work is fifty percent (50%) completed, the amount retained from each monthly payment shall be reduced to five percent (5%) of the value of the completed work based on monthly progress payments.

E. In the event a dispute arises between the College and Contractor, the College shall have the option as it deems necessary in its sole and absolute discretion to withhold additional retainage over and above the amount already retained by the College in the sum of one and one-half (1-1/2) times the amount of any possible liability until such time as a final resolution is agreed to by all parties directly or indirectly involved.

F. The Contractor shall retain the right to collect any proceeds from the rebates or discounts (e.g., manufacturer or governmental incentives) specifically enumerated in an attachment to Contractor’s Bid Form. The College shall retain the right to collect any proceeds from any rebates or discounts not specifically enumerated in an attachment to Contractor’s Bid Form. The Contractor and College will cooperate with the each other in applying for all rebates or discounts that may be available for the purchase of the services or work and/or products identified herein.

12. ACCESS CLEAN-UP/DAMAGE TO PREMISES.

Prior to entering College Property, Contractor shall notify the Director of Facilities at 215-641-6533 so that the College can notify Contractor of any security requirements and make appropriate arrangements to accommodate Contractor’s work. Where work is to be performed by Contractor on College Property, Contractor shall keep the College’s Property free from accumulation of waste materials or rubbish caused by Contractor’s performance. During the progress of the work and at final completion of the work, Contractor shall remove from and about the College’s Property, all waste materials, rubbish, Contractor’s tools, construction equipment, machinery and surplus materials. If Contractor fails to clean up as provided herein, the College may do so, and the costs thereof shall be paid by Contractor upon demand or deducted from subsequent invoices, at the College’s election. Contractor shall promptly remedy damage and loss to any College Property caused in whole or in part by Contractor, its subcontractors, or anyone directly or indirectly employed by them.

13. WARRANTY

All materials, equipment and products shall be new merchandise (except as agreed by the College), not previously used or recycled merchandise, and all workmanship shall be first class. All services, work, materials, equipment and products shall be guaranteed by Contractor against defects in workmanship and materials for a period of two (2) years from the date of final completion of the Contract by Contractor and acceptance of the College of the work to be performed under the Contract in accordance with the Contract Documents (the “Warranty
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

Period"). Contractor shall promptly remedy, at Contractor’s expense, any defects which were caused, in the sole judgment of the College, by defective or inferior workmanship or materials during the Warranty Period. If these defects are not remedied within five (5) days from notice received, the College shall have the right to replace any and all defective work and the Contractor agrees to pay all cost incurred thereby. Said costs may be deducted in whole or in part from the Contractor’s bill if said bill has not been paid in full.

14. ASSIGNING OF CONTRACT

The Contractor shall not sell, transfer, assign, or otherwise dispose of the Contract, or any portion thereof, or of its right, title, or interest therein without the written consent of the College.

15. GOVERNING LAW

The Contract shall be governed by the law of the Commonwealth of Pennsylvania, without regard to principles of conflict of laws. As between the College and Contractor, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued as provided by the laws of the Commonwealth of Pennsylvania. The College reserves all rights and privileges applicable to it pursuant to the doctrine of nullum tempus occurrit regi.

16. CLAIMS AND DISPUTES

A. Claims, disputes or other matters in question between the parties to the Contract arising out of or relating to the Contract or breach thereof shall be exclusively litigated in the Court of Common Pleas of Montgomery County and shall not be subject to arbitration, except for compulsory arbitration as provided by Montgomery County Civil Rules of Procedure, if applicable.

B. Pending resolution of any claim and/or dispute, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Contract so as to avoid delay in the schedule of completion of the Project.

C. To the extent Contractor pursues a claim or litigation against the College and the College prevails on any or all of its own claims or defenses to Contractor’s claims, Contractor will be liable for any and all legal fees, professional fees, costs or expenses of the College, as well as the true cost of any of the College’s employees’ time, associated with analyzing any claim, pursuing litigation or defending the claim or litigation. Further, to the extent any Contractor makes an excessive number of claims, which excessiveness shall be determined solely in the discretion of the College, and the College incurs any legal fees, professional fees, expenses, costs (including, but not limited to, employee cost), Contractor shall be liable for such fees, expenses or costs. In the event of a dispute between Contractor and the College, to the extent that the College incurs any legal fees, professional fees, or other costs or expenses, Contractor will be responsible for those amounts, which will be deducted, to the extent available, from any amount due Contractor. If the amount due Contractor is not sufficient to cover such costs and expenses, Contractor shall pay the difference to the College within seven (7) days of receipt of the College’s invoice for such legal fees, professional fees, or other cost or expenses.
17. **WAIVER OF CLAIMS**

The acceptance of final payment shall constitute a waiver of all claims by Contractor against the College other than those previously made in writing and specifically identified by Contractor as unsettled at the time of application for final payment.

18. **TERMINATION OF CONTRACT**

Upon ten (10) days written notice to Contractor, the College may, with or without cause and without prejudice to any other right or remedy, elect to terminate the Contract. Upon receipt of written notice from the College of such termination, Contractor shall cease operations as directed by the College in the notice; take actions necessary, or as the College may direct, for the protection and preservation of the work or products; and except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing contracts, subcontracts and purchase orders and enter into no further contracts, subcontracts and purchase orders. In case of such termination, where Contractor is without fault, Contractor shall be entitled to receive payment from the College for all satisfactorily services or work and/or products completed prior to termination.

19. **PENNSYLVANIA PROMPT PAY ACT**

Contractor expressly waives any right to penalties, interest and attorney’s fees pursuant to the prompt payment provisions of the Pennsylvania Commonwealth Procurement Code, 62 Pa.C.S. § 3931 et seq., as amended from time to time.

20. **COMPLIANCE WITH LAWS**

A. Contractor shall comply with all applicable federal, state, local and industry statutes, regulations, ordinances, codes and standards. The specific statutory requirements enumerated in this Section shall not limit the generality of the foregoing sentence or be construed as an exhaustive enumeration of Contractor’s obligations under applicable laws. The failure to specifically reference or include said matters in the Contract does not excuse Contractor from compliance with same. Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

B. **Hazardous Materials.** Each Contractor supplying or using any materials containing any hazardous substance listed on the Hazardous Substance List compiled by the Commonwealth of Pennsylvania, Department of Labor & Industry, must furnish appropriate material safety data sheets for all products for this Project. The College reserves the right to require Contractor to use alternative products if, in the College’s sole discretion, the product is too hazardous to be used in an educational facility. The Contractor shall comply with all other terms and conditions of the Pennsylvania Worker and Community Right-to-Know Act, Act No. 159 of 1984, 35 P.S. §7301 et seq., providing all information regarding the composition of all materials and products used or installed as part of the Project when required.
C. **Human Relations.** Contractor shall comply with the Pennsylvania Human Relations Act, 43 P.S. §951 et seq., which prohibits discrimination because of race, color, religious creed, ancestry, age, sex, national origin, handicap or disability, by employers, employment agencies, labor organizations, contractors and others. Contractor’s attention is directed to the language of the Commonwealth Non-Discrimination Clause as set forth in 16 Pa. Code §349.101.

D. **Non-Discrimination.** In hiring of employees for the performance of work under the Contract or any subcontract hereunder, no contractor or subcontractor shall by reason of race, creed or color, religious creed, ancestry, age, sex, national origin, handicap or disability, discriminate against any citizen of the Commonwealth of Pennsylvania who is qualified and available to perform the work to which the employment relates. No Contractor, subcontractor, or any person on his behalf, shall in any manner discriminate against or intimidate any employee hired for the performance of work under this contract/purchase order on account of race, or color, religious creed, ancestry, age sex, national origin, handicap or disability. Should the College be subjected to any costs or damages as a result of the Contractor's actions which have caused a charge of discrimination, the College shall be indemnified fully for any such losses which would include, but not be limited to damages awarded against the College, its attorney's fees and any other such costs. The Contract may be cancelled or terminated by the College, and all moneys due, or to become due hereunder may be forfeited for a second or any subsequent violation of the terms of conditions of this paragraph.

E. **Pennsylvania Uniform Construction Code.** The Contractor shall comply with all requirements of the Pennsylvania Uniform Construction Code, 35 P.S. § 7210.301 – 7210.304.

F. **Prevention of Environmental Pollution.** Section 3301 of the Pennsylvania Commonwealth Procurement Code requires that all invitations for bids and requests for proposals for construction projects issued by any governmental agencies set forth any provision of Federal and State statutes, rules, and regulations dealing with prevention of environmental pollution and the preservation of public natural resources that affect the Project. In this regard, a list of said provisions has been prepared by the Pennsylvania Department of Environmental Resources under Act 247 of 1972, 52 P.S. § 1612 (repealed). A copy of said list is available from Owner upon request. Contractor is hereby notified and agrees to comply with the terms of all statutes, rules and regulations enumerated in said list. Where any identified environmental statute, rule and/or regulation has been revised, amended, supplemented, repealed and/or supplanted, Contractor shall comply with such statute, rule and/or regulation as so modified. Notwithstanding the foregoing, failure to include any applicable environmental statute, rule and/or regulation in said list shall not relieve Contractor of its obligation to comply with same.

G. **Site Excavation.** To the extent applicable, Contractor shall comply with all rules and regulations of Chapter 102, Title 25 of the Pennsylvania Code relating to soil erosion and sedimentation control. Prior to any grading, Contractor shall obtain approval from the Department of Environmental Protection or County Conservation Commission for an approved sedimentation and erosion control site plan and shall perform all necessary site work in accordance with said plan. The plan shall be available at the site at all times. The Contractor shall maintain all devices as required to control erosion caused by storm water and prevent dust
H. Aluminum and Steel Products. The Contractor shall strictly comply with all requirements of the Pennsylvania Steel Products Procurement Act, 73 P.S. § 1881, et seq., and Trade Practices Act, 71 P.S. § 773.101, et seq., with respect to any steel aluminum or cast iron product (including machinery and equipment) used in connection with the Project.

I. Discrimination Prohibited. According to 62 Pa.C.S. § 3701, Contractor agrees to comply with and require subcontractors to comply with the following:

(i) In the hiring of employees for the performance of work under the Contract, or any subcontract, no contractor, subcontractor, or any person acting on behalf of the Contractor or subcontractor shall, by reason of gender, race, creed or color, discriminate against any citizen of the Commonwealth of Pennsylvania who is qualified and available to perform the work to which the employment relates.

(ii) No Contractor, subcontractor, or any person acting on their behalf, shall in any manner discriminate against or intimidate any employee hired for the performance of work under the Contract on account of gender, race, creed or color.

(iii) The Contract may be canceled or terminated by the College and all money due or to become due under the Contract may be forfeited, for a violation of the terms or conditions of 62 Pa.C.S. § 3701.

(iv) Contractor and each subcontractor or any person acting on their behalf shall furnish necessary employment documents and records to and permit access to their books, records, and accounts by the College and the Bureau of Contract Administration and Business Development, for purposes of investigation, to ascertain compliance with the terms or conditions of the Contract. If Contractor or any subcontractor does not possess documents or records reflecting the necessary information requested, Contractor or subcontractor shall furnish such information on reporting forms supplied by the College or the Bureau of Contract Administration and Business Development.

J. Public Works Employment Verification Act. Contractor shall cause each subcontractor (as defined in the Public Works Employment Verification Act) to submit to the College a separate and complete Verification Form, executed by a representative who has sufficient knowledge and authority to make the representations and certifications contained in the Verification Form required by the Public Works Employment Verification Act, 43 P.S. §§ 167.1 et seq., before performing any work on the Project.

K. Pennsylvania Prevailing Wage Rates (Applies: YES X NO □). If required by applicable laws, the Prevailing Wage Rates, as determined by the Secretary of the Department of
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

Labor and Industry, Prevailing Wage Division of the State of Pennsylvania, for the locality of the work and for each classification of workers needed to perform the Contract shall be paid to all workers performing labor for the Project. The provisions of the Pennsylvania Prevailing Wage Act, 43 P.S. §165.1, et seq., regulations and the Pennsylvania Prevailing Minimum Wage Rates, as determined by the Secretary of Labor and Industry, are made part of the Contract.

The general prevailing minimum wage rates including contributions for employee benefits as determined by the Secretary must be paid to the workmen employed in the performance of the Contract. The Contract provisions shall apply to all work performed on the Contract by the Contractor and to all work performed on the Contract by all subcontractors. The Contractor shall insert in each of its subcontracts all of the stipulations contained in these required provisions and such other stipulations as may be required. No workers may be employed on the public work except in accordance with the classifications set forth in the decision of the Secretary. In the event that additional or different classifications are necessary, the procedure set forth in the applicable regulations shall be followed.

L. Criminal History and Child Protective Services Information. Prior to any employee of Contractor, or an employee of Contractor’s subcontractors or material suppliers, if any, entering upon College Property to deliver any Products or perform any work, Contractor shall provide the College with a complete:

   (i) Original report of criminal history record information from the Pennsylvania State Police or a statement from the Pennsylvania State Police that the Pennsylvania State Police central repository contains no such information relating to any of Contractor’s employees or its subcontractor’s employees delivering Products or working on the College Property prior to such persons entering the College Property. Such report of criminal history shall be dated no more than one (1) year prior to the date of execution of the Form of Contract. To obtain this document, contact the nearest Pennsylvania State Police barracks.

   (ii) Copy of the Federal Criminal History record from the Federal Bureau of Investigation in the manner prescribed by the Department of Education. To obtain such a report, contact the nearest FBI Field Office.

   (iii) Original background check in accordance with Section 111 of the Public School Code of 1949, 24 P.S. Section 1-111, et seq., on the form published by the Pennsylvania Department of Education.

   (iv) Official clearance statement obtained from the Pennsylvania Department of Public Welfare pursuant to Section 6344 of the Child Protective Services Act, 23 Pa.C.S. §6344(b)(2), as the same has been or may be amended from time to time.

   (v) Self-reporting form provided by the Department of Education (form PDE-4006) completed and signed by, as applicable, the employee, individual subcontractor, or subcontractor’s employee.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

M. Prohibited Employment. The College shall review the above criminal history reports, self-reports and clearance statements for each individual who will prospectively work on-site. Where such review indicates that the individual has

(i) ever been convicted of any crime listed in 24 P.S. §1-111(e), or

(ii) was convicted of any other misdemeanor of the first degree or any other felony where supervision ended within the periods set forth in 24 P.S. §1-111(f.1), or

(iii) the clearance statement indicates the individual is named in the Statewide child abuse database as either

(1) an alleged perpetrator in a pending investigation, or

(2) the perpetrator in a founded or indicated instance of child abuse,

the College will not clear the individual and the Contractor and its subcontractors shall refuse to employ any such individual as an independent contractor or employee to perform any service or activity on any site under control of the College.

21. INTERPRETATIONS.

The captions and headings of various Paragraphs in the Contract are for convenience only and are not to be construed as defining or limiting, in any way, the scope or intent of the provisions hereof. The invalidity of any covenant, restriction, condition, limitation or any other part or provision of the Contract shall not impair or affect in any manner the validity, enforceability or effect of the remainder of the Contract.

22. COMPLIANCE WITH COLLEGE RULES AND REGULATIONS

A. No Smoking or Tobacco use in Buildings. Contractor will prohibit employees from smoking or using tobacco products in College Buildings, while on campus.

B. Sexual Harassment. Contractor will prohibit employees while on campus from engaging in sexual harassment activity. Sexual harassment activity is defined as unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct or written communication of an intimidating, hostile or offensive sexual nature.

C. Motor Vehicle Rules and Regulations. Contractor must conform to the following College Motor Vehicle Rules and Regulations:

- Use only those spaces designated for use by a service vehicle.
- In the event these designated spaces cannot be utilized, notify the Public Safety Department for proper clearance.
- Obtain and display a parking permit from the Public Safety Department.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

- Restrict Vehicles to 15 MPH and observe all traffic regulations posted on campus.

23. SUPPLEMENTARY CONDITIONS

A. The Contractor shall at all times protect and preserve all College property and assume full responsibility for any damages which may occur during or as result of services performed on the site.

B. The Contractor shall at all times while on the premises, take appropriate safety measures in the interest of persons in attendance.

C. All systems in all and/or part shall conform to all pertinent laws, ordinances and regulations of all bodies having jurisdiction, at all governing levels. In case of conflict between governing levels, the more stringent law shall apply. As a minimum, all work shall comply with Uniform Construction Code, BOCA codes, NFPA, ADA, and OSHA requirements.

D. All construction shown on the plans and not expressly mentioned in the specifications and all work specified and not shown on the plans but obviously necessary for the proper execution of same shall be performed by the Contractor, as it is not the intent to delineate or describe every detail and feature of work. No additions to the Contract sum will be approved for any materials, equipment and/or labor to perform work hereunder unless it can be clearly shown to be beyond the scope and intent of the drawings and specifications and absolutely essential to the proper prosecution of the work.

E. No extras of any kind or amount will be allowed or considered for any Contractor due to the Contractor's failure to examine and secure the required and available information or neglect to include any and all materials, tools, equipment, accessories, fixtures, and labor required to fully complete the work that is intended or specified herein.

F. The Contractor shall pay all fees and obtain and pay for all permits and inspections required with their work.

G. Contractor shall schedule their work to avoid any interruption of any utility services to the operating areas of the building during normal working hours. Interruption of services shall be done off hours at no additional cost to the College.

H. Contractor shall notify the College three (3) days prior to any interruption of services. The scheduling of all interruptions shall be approved by the College.

I. All services to systems must be maintained in the areas of this project at all times. Any required interruptions must be at the convenience of the College.

J. The Contractor shall, after acceptance of the installation by the College, provide any service incidental to the proper performance of the system under the warranties outlined above for the time periods listed above.
K. COOPERATION WITH THE OWNERS AUTHORITIES - Work under the Contract in progress or anticipated which may cause unusual problems for the College's personnel or the public shall be subject to revision in method or timing upon request of the College's authorities. Contractor must cooperate with the College's authorities in the performance of work, and make sight changes in methods or time of performance of work when requested, without additional cost to the College.

L. COORDINATION AND SCHEDULING - Contractor will cooperate and coordinate with all other entities, and/or their representatives whose presence is deemed necessary by the College.

M. ALTERATION TO EQUIPMENT - Contractors are not permitted to:
   - Alter any equipment or device to perform their work without permission of the College.
   - Prop open any doors or disable any locking mechanism.
   - Disrupt any utilities or alarm systems without prior notice and authorization.

N. Remove refuse material and clean work area daily. All disposed material shall be handled and documented in accordance with Local, State, and Federal regulations.

O. All deliveries, pick-ups, and entrance needs of the contractor shall be made at the appropriate delivery and loading dock locations and NOT via normal personnel entrances and exits.

P. Upon the completion of this project, and before final payment is made, the Contractor shall deliver to the College for approval three (3) copies of an operating and maintenance manual consisting of the items outline hereinafter. The purpose of this manual is to assist the College in routine operation, maintenance, troubleshooting, and procurement of replacement parts. All information in the manual shall be as-built and only material pertinent to project shall be included. The operating manual shall be considered a part of the final inspection and shall be submitted for approval at least 30 days in advance of a request for final payment. The manual should include the following: A copy of all final corrected equipment submittals, control diagrams, descriptive brochures, and a list of all parts of each piece of mechanical and electrical equipment which has been furnished and installed shall be provided.

Q. Complete and detailed printed operating and maintenance instructions for all major operating equipment shall be provided. The operating and start-up instructions shall be written in a concise, step by step manner. Maintenance instructions shall include maintenance schedules, procedures, adjustments, and troubleshooting techniques.

R. Contractor must certify that all equipment and/or services provided and/or installed are fully compliant with year 2000 system requirements.
S.  All changes/updates to drawings will be submitted on CAD disks.

24.  CHANGES IN PRICE

Neither the Bid price, nor the Contract sum, as applicable, will be based in any matter upon oral opinions of real or alleged instructions regardless of whether the instructions are expressed by the College, the Contractor, or their agents/representatives. These provisions do not deny normal discussion, recommendations, explanations, suggestions, approval, rejections, and similar activity of either or both parties in pursuit of work on an oral basis, such as in conference and otherwise at the site, but in such instances, documentation shall govern over personal claims regarding statements made contrary to written data. Interpretations of specifications, to be effective for claim purposes or for justification as to proper procedure in performing the work, must be obtained in writing before submitting a quotation or such work is begun, as applicable.
MONTGOMERY COUNTY COMMUNITY COLLEGE  
Electrical Switchgear Replacement Project

BID FORM

Montgomery County Community College  DATE ______________________________
Purchasing Department
Room 121 College Hall
340 DeKalb Pike
Blue Bell, PA 19422
Attn: Purchasing

BIDDER ______________________________

Re: Electrical Switchgear Replacement Project

The following Bid is submitted in response to your Invitation to Bid.

The Bid Security in the amount required by the Instructions to Bidders and the General Conditions of the Contract is enclosed with the Bid. It is agreed by this Bidder that the Bid Security shall be forfeited to the Montgomery County Community College (“College”) if this Bidder does not, within ten (10) days after notification of Award of Contract, furnish to the College the applicable Performance Bond, Payment Bond, insurance certificate, Verification Form, executed Contract and Detailed Cost Break-Down for the Project as required by the Bid Documents.

This Bidder has carefully examined the Bid Documents and the Project site, and certifies that it fully understands the requirements thereof. This Bidder agrees that, upon receipt of a fully executed Contract, it will furnish and deliver materials and perform the work necessary to complete the Project in accordance with the Specifications and other Contract Documents in an expeditious and workmanlike manner to the complete satisfaction and acceptance of the College for the price hereinafter stated.

This Bidder submits this Bid with the understanding that the work encompassed in the Bid Documents shall be commenced immediately upon receipt of the Notice to Proceed.

This Bidder understands the following supplements to the Bid Form must be submitted concurrent with this Bid submission.

Bid Security
Non-Collusion Affidavit
Attachment to Bid Form regarding Rebates and Discounts

Bidder understands the following supplements to the Bid Form must be executed and submitted to the College within ten (10) calendar days after notification is received that it is the lowest responsive and responsible Bidder and that failure to do so within such time shall be a deficiency in the Bid and cause for the College to reject this Bid, award the Contract to another entity and retain Bidder’s Bid Security:

Contract Form
Performance Bond

Bidder’s Initials ______  Bid Form
Page 1
This Bid is submitted with the definite understanding that Bids are valid for acceptance by the College and may not be withdrawn for a period of at least sixty (60) days after the actual date of the opening thereof, or such longer period specified in the Construction Documents.

It is understood that the College reserves the right to reject any or all Bids, or part(s) thereof or item(s) therein, and to waive technical deficiencies with the Bid if it is in the best interests of the College. Omission of any information may be sufficient cause for rejection of this Bid. It is further understood that competency and responsibility of Bidders will receive consideration before the Award of Contract.

The undersigned will not assign its Bid or any of its rights or interests thereunder without the written consent of the College.

The Base Bid and other required information are submitted in the spaces provided. Handwritten initials on each page of this Bid Form identify each as a part of this Bid.

**BASE BID**

The sum for the Electrical Switchgear Replacement Project.

(Other)

________dollars ($________)

(Other)

**ADDENDA**

The Bidder acknowledges receipt of Addenda listed below which have been issued during the bidding period and agrees that said Addenda shall become part of the Contract (Bidder shall list numbers and dates of Addenda received). Bidder understands that it had the responsibility to confirm its receipt of all Addenda prior to the submission of its Bid. Addenda properly issued by College and not listed herein shall be cause for rejection of the Bid.

No. ___________  Date ________________

No. ___________  Date ________________

No. ___________  Date ________________

**IDENTIFICATION OF BIDDER**

Company ___________________________________  Phone ________________

Bidder’s Initials ______  Bid Form

Page 2
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

Address ________________________________________________________________

Please check the appropriate category:

____ Sole Proprietorship  ______ Partnership  ______ Joint Venture

____ Pennsylvania Corporation or Limited Liability Company

____ Foreign Corporation or Company Registered in PA

Other: __________________________________ (please identify)

State of Organization: ____________________________________________________

Federal Identification Number: ____________________________________________

All correspondence and notices to the Bidder related to this Bid and Contract, if awarded, shall be
directed to:

Name: _________________________________________________________________

Title: __________________________________________________________________

Phone: __________________________________________________________________

Address: __________________________________________________________________

Email Address: __________________________________________________________

+Correspondence directed to the following email address shall be deemed received by the Bidder on
the date the email was transmitted.

The undersigned hereby certifies that this Bid is genuine and not sham, collusive, fraudulent or
made in the interest of or on behalf of any person, firm, or corporation not herein named; and
that the undersigned has not, directly or indirectly, induced or solicited any Bidder to submit a
sham Bid, or any other person, firm or corporation from bidding, and that the undersigned has
not, in any manner, sought by collusion to secure for himself any advantage over any other
bidder.

SIGNATURES

(Individual)

___________________________________(SEAL)

WITNESS: __________________________________________________________________

(Signature of Individual)

________________________________________

Bidder’s Initials ______  Bid Form

Page 3
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

(print name of Individual)
trading & doing business as

________________________________________________________

*******

(Partnership)
WITNESS:

______________________________
By: ___________________________(SEAL)
Print Name: _______________________
Partner

______________________________
By: ___________________________(SEAL)
Print Name: _______________________
Partner

______________________________
By: ___________________________(SEAL)
Print Name: _______________________
Partner

*******

(Corporation)
ATTEST:

______________________________
By: ___________________________(SEAL)
Print Name: _______________________
Print Name: _______________________
Title: Secretary (Assistant Secretary)
Title: President (Vice President)

(CORPORATE SEAL)

or (if appropriate)

WITNESS:

______________________________
*By: ___________________________(Authorized Representative)
Print Name: _______________________

*Attach resolution evidencing authority to execute on behalf of the corporation.
(Limited Liability Company)

WITNESS: ________________________________  (Name of Limited Liability Company)

By:_________________________________ (SEAL)
Print Name: ____________________________
    (Managing) Member

___________________________________
By:_________________________________ (SEAL)
Print Name: ____________________________
    Member

___________________________________
By:_________________________________ (SEAL)
Print Name: ____________________________
    Member

or (if appropriate)

WITNESS: ________________________________  (Name of Limited Liability Company)

___________________________________  *By:___________________________
(Authorized Representative)
Print Name: ____________________________

*Attach resolution evidencing authority to execute on behalf of the company.
NON-COLLUSION AFFIDAVIT

Commonwealth of Pennsylvania : s.s.
County of _________________ :

I state that I am ___________________ of __________________________ the Bidder
>Title) (Name of My Company),
that submitted the attached Bid and that I am authorized to make this affidavit on behalf of my
company, its owners, directors, and officers. I am the person responsible in my company for the
price(s) and the amount of this Bid.

I state that:

(1) The price(s) and amount of this Bid have been arrived at independently and
without consultation, communication or agreement by the Bidder, any of its sureties, agents,
representatives, owners, employees, or parties in interest with any other contractors, bidders,
potential bidders or any other sureties, agents, representatives, owners, employees or parties in
interest of any other contractors, bidders or potential bidders. The price(s) quoted in the attached
Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful
agreement on the part of the Bidder or any of its sureties, agents, representatives, owners,
employees, or parties in interest.

(2) Neither the price(s) nor the amount of this Bid, and neither the approximate
price(s) nor approximate amount of this Bid, have been disclosed to any other company or
person who is a bidder, potential bidder or a surety, agent, representative, owner, employee or
party in interest of any other contractor, bidder or potential bidder, and they will not be disclosed
before opening bid.

(3) No attempt has been made or will be made to induce any company or person to
refrain from bidding on this contract, or to submit a Bid higher than this Bid, or to submit any
collusive or intentionally high or non-competitive Bid or other form of complementary Bid.

(4) The Bid of my company is made in good faith and not pursuant to any agreement
or discussion with, or inducement from, any bidder, potential bidder or a surety, agent,
representative, owner, employee or party in interest of any other contractor, bidder or potential
bidder to submit a complementary or other non-competitive Bid.

(5) _________________, its affiliates, subsidiaries, officers, directors, and
(Name of My Company)
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 of Federal law in
any jurisdiction, involving conspiracy or collusion with respect to bidding on any public
contract, except as follows: ____________________________

______________________

Non-Collusion Affidavit
Page 1
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

I state that ___________________________ understands and acknowledges that the
(Name of My Company)
above representations are material and important, and will be relied on by Montgomery County
Community College in awarding the contract(s) for Project for which this Bid is submitted.

I understand and my company understands that any misstatement in this affidavit is and
shall be treated as fraudulent concealment of true facts relating to the submission of Bids for this
contract.

____________________________________
(Name and Position in Company)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS ____ DAY
OF __________________, 20___

______________________ Notary Public
My Commission Expires:
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

CONTRACT FORM

This Contract is made and entered into this ______ day of ________________, 20____ by and between the Montgomery County Community College (hereinafter, the “College”) and ______________________________ (the “Contractor”).

Whereas, Contractor submitted a Bid for the full and complete performance of the Electrical Switchgear Replacement Project (the “Project”) as detailed in the Specifications incorporated in the Contract Documents;

Whereas, the College notified Contractor that it was the lowest responsive and responsible Bidder for the Project;

Whereas, Contractor executes this Contract Form to memorialize its acceptance of the terms and conditions of the Contract.

Now, therefore for the consideration stated herein and other good and valuable consideration, the sufficiency of which is expressly acknowledged by both parties, and intending to be legally bound hereby, the parties mutually agree as follows:

1. Capitalized terms not defined herein shall have the same means as set forth in the Instructions to Bidders or General Conditions of the Contract, as applicable.

2. Contractor agrees to furnish all products and/or work for the completion of the Project to the College in accordance with the Contract Documents.

3. The College has accepted the following Alternates which shall be performed by Contractor in accordance with the Contract Documents:

   a. Alternate No. __: _________________________________

   b. Alternate No. __: _________________________________

4. Subject to the requirements of the General Conditions of the Contract and adjustments for the unit prices set forth in the Bid, the Contract Sum to be paid by the College to Contractor for the completion of the work required for the Project shall be __________________________ DOLLARS and ____________ CENTS ($____________________).

5. Contractor shall complete all work for the Project so that the College may take beneficial use thereof no later than ________________________.

6. The entire integrated agreement between the College and Contractor in connection with the Project includes this Contract Form, the completed Performance Bond, the completed Payment Bond, the completed Non-Collusion Affidavit, the completed Bid Form, any
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

other completed forms required by the Bid Documents, and the Bid Documents, all of which are incorporated herein by reference.

IN WITNESS WHEREOF, the Contractor and College cause this Contract to be signed, sealed and delivered as of the day and year first above written.

Contractor: Montgomery County Community College:

__________________________________________  ______________________________
Signature                                                                 Signature

__________________________________________  ______________________________
Name and Title                                                                            Name and Title
MONTGOMERY COUNTY COMMUNITY COLLEGE  
Electrical Switchgear Replacement Project

BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, ____________________________________________
(hereinafter called the “Principal”), and ____________________________________________
a company authorized to transact business in the Commonwealth of Pennsylvania, and having its
principal office at ____________________________________________,
(hereinafter called the “Surety”), are held and firmly bound unto the MONTGOMERY
COUNTY COMMUNITY COLLEGE (hereinafter called the “Obligee”), as Obligee, in the
amount equal to TEN PERCENT (10%) OF THE BASE BID PLUS ANY ADDITIVE
ALTERNATES (the “Penal Sum”), as lawful money of the United States of America, for
payment of which we bind ourselves, and each of our respective heirs, legal representatives,
successors and assigns, jointly and severally, by these presents, on this _____ day of
________________, 20____.

WHEREAS, said Principal is herewith submitting to the Obligee a bid to perform work
for the Obligee’s ____________________________________________ Project in___________________________
Township, _________________ County, Pennsylvania, pursuant to drawings, specifications, and other Contract Documents incorporated into said bid by reference; and it is a
condition of the Obligee’s receipt and consideration of said bid that such shall be accompanied
by bid security to be held by the Obligee on terms embodied herein.

THEREFORE, the condition of this obligation is that if said Principal shall, in the event
of acceptance of its Bid by Obligee and within the period specified therefore in the Contract
Documents, enter into a written contract with the Obligee, in accordance with the Bid as
accepted, and give bond(s) with good and sufficient surety or sureties, as may be required for the
faithful performance and proper fulfillment of such contract, in the form specified by the
Obligee, and furnish the required verification form, detailed cost break-down, certificates of
insurance and any other documents listed in the Contract Documents, in all respects as required
by the Contract Documents, then this obligation shall be void and of no effect, but otherwise it
shall remain in full force. In the event of the failure to enter into such contract, give such
bond(s), and furnish such verification form, detailed cost break-down, certificates of insurance or
other required documents within the time specified, the Principal and Surety will pay to the
Obligee the difference between the amount of the Principal’s accepted bid and any higher
amount for which the Obligee may contract for the required products and work, as well as any
advertising, professional, architectural, legal and other costs incurred by the Obligee by reason of
the default; provided, however, that the obligations of the Surety hereunder shall not exceed the
amount of the Penal Sum together with interest. If the Obligee does not procure an executed
contract with any other party for the provision of the products and work within thirty (30) days
after the acceptance of the Bid from the Principal, whether because of the lack of other bids or
the inability or refusal of any other Bidder to contract, or because the cost under any higher bid would be greater than the Obligee would afford, as determined in the sole discretion of the Obligee, then in that event, the Principal and Surety shall pay to the Obligee the full amount of the Penal Sum together with interest as liquidated damages and not as penalty.

IN WITNESS WHEREOF, the Principal and the Surety cause this Bid Bond to be signed, sealed and delivered this ____ day of ____________________, 20____.

| Individual Principal (Trading and/or Doing Business as: ____________________________ ) |
| Witness: | By: ____________________________ Name: ____________________________ |

| Partnership Principal |
| Name of Partnership: ____________________________ |
| Witness: | By: ____________________________ Name: ____________________________ Title: ____________________________ |

| Corporate/Limited Liability Principal |
| Name of Corporation/Company: ____________________________ |
| Attest: | By: ____________________________ Name: ____________________________ Title: ____________________________ |

[SEAL]

* If the signatory is an authorized representative, attach proof evidencing authority to execute on behalf of the corporation or limited liability company.

| Corporate Surety |
| Name of Surety: ____________________________ |
| Witness or Attest: | By: ____________________________ Name: ____________________________ |

[SEAL]

**
** Attach an appropriate Power of Attorney evidencing the authority of the Attorney-in-Fact to act on behalf of the Surety.
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____________________________,
as Principal (the “Principal”), and ________________________________, a corporation organized
and existing under laws of the ________________ of ____________________, with a principal
office at ________________________________, and authorized to do business in the Commonwealth of
Pennsylvania, as Surety (the “Surety”), are held and firmly bound, jointly and severally, unto the
MONTGOMERY COUNTY COMMUNITY COLLEGE, as Obligee (the “Obligee”), as
hereinafter set forth, in the full and just sum of ________________________________ Dollars
($______________) lawful money of the United States of America, for the payment of which we
bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally,
firmly by these presents. If more than one surety is named above, said sureties shall be jointly and
severally liable to Obligee.

WITNESSETH THAT:

WHEREAS, The Principal heretofore has submitted to the Obligee a certain bid (the “Bid”),
to perform certain __________________________ work for the Obligee, in connection with the ________
________ Project located in ________________ Township, ________________ County, Pennsylvania, pursuant to drawings, specifications and other related documents, which are
incorporated into the Bid by reference and a part thereof (the “Contract Documents”); and

WHEREAS, the Contract Documents are incorporated into this Bond by reference and made a part hereof; and

WHEREAS, The Obligee, is a “contracting body” under provisions of Act No. 385 of the
General Assembly of the Commonwealth of Pennsylvania, approved by the Governor on
December 20, 1967, known as and cited as the “Public Works Contractors’ Bond Law of 1967” (the
“Act”); and

WHEREAS, the Act, in Section 3(a), requires that, before an award shall be made to the
Principal by the obligee in accordance with the Bid, the Principal shall furnish this Bond to the
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

Obligee, with this Bond to become binding upon the award of a contract to the Principal by the Obligee in accordance with the Bid; and

WHEREAS, it also is a condition of the Contract Documents that this Bond shall be furnished by the Principal to the Obligee; and

WHEREAS, under the Contract Documents, it is provided, *inter alia*, that if the Principal shall furnish this Bond to the Obligee, and if the Obligee shall make an award to the Principal in accordance with the Bid, then the Principal and the Obligee shall enter into a contract with respect to performance of such work (the “Contract”), the form of which Contract is set forth in the Contract Documents.

NOW, THEREFORE, the terms and conditions of this Bond are and shall be that if the Principal and any subcontractor of the Principal to whom any portion of the work under the Contract shall be subcontracted, and if all assignees of the Principal and of any such subcontractor, promptly shall pay or shall cause to be paid, in full, all money which may be due any claimant supplying labor or materials in the prosecution and performance of the work in accordance with the Contract and in accordance with the Contract Documents, including any amendment, extension or addition to the Contract and/or to the Contract Documents, for material furnished or labor performed, then this Bond shall be void; otherwise, this Bond shall be and shall remain in force and effect.

This Bond, as provided by the Act, shall be solely for the protection of claimants supplying labor or materials to the Principal or to any subcontractor of the Principal in the prosecution of the work covered by the Contract, including any amendment, extension or addition to the Contract. The term “claimant”, when used herein and as required by the Act, shall mean any individual, firm, partnership, association or corporation. The phrase “labor or materials” when used herein and as required by the Act, shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site of the work covered by the Contract. As required by the Act, the provisions of this Bond shall be applicable whether or not the material furnished or labor performed enters into and becomes a component part of the public building, public work or public improvement contemplated by the Contract Documents and the Contract.

As provided and required by the Act, the Principal and the Surety agree that any claimant, who has performed labor or furnished material in the prosecution of the work in accordance with the Contract and in accordance with the Contract Documents, including any amendment, extension or addition to the Contract and/or to the Contract Documents, and who has not been paid therefore, in full, before the expiration of ninety (90) days after the day on which such claimant performed the last of such labor or furnished the last of such materials for which payment is claimed, may institute an action upon this Bond, in the name of the claimant, in assumpsit, to recover any amount due the claimant for such labor or material; and may prosecute such action to final judgment and may have execution upon the judgment; provided, however, that: (a) any claimant who has a direct contractual relationship with any subcontractor of the Principal, but has no contractual relationship, express or implied, with the Principal, may institute an action upon this Bond only if such claimant first shall have given written notice, served in the manner provided in the Act, to the Principal,
within ninety (90) days from the date upon which such claimant performed the last of the labor or furnished the last of the materials for which payment is claimed, stating, with substantial accuracy, the amount claimed and the name of the person for whom the work was performed or to whom the material was furnished; and (b) no action upon this Bond shall be commenced after the expiration of one (1) year from the day upon which the last of the labor was performed or material was supplied, for the payment of which such action is instituted by the claimant; and (c) every action upon this Bond shall be instituted either in the appropriate court of the County where the Contract is to be performed or of such other County as Pennsylvania statutes shall provide, or in the United States College Court for the College in which the project, to which the Contract relates, is situated, and not elsewhere.

This Bond is executed and delivered under and subject to the Act, to which reference hereby is made.

The Principal and the Surety agree that any alterations, changes and/or additions to the Contract Documents, and/or any alterations, changes and/or additions to the work to be performed under the Contract in accordance with the Contract Documents, and/or any alterations, changes and/or additions to the Contract, and/or any giving by the Obligee of any extensions of time for the performance of the Contract in accordance with the Contract Documents, and/or any act of forbearance of either the Principal or the Obligee toward the other with respect to the Contract Documents and the Contract, and/or the reduction of any percentage to be retained by the Obligee as permitted by the Contract Documents and by the Contract, shall not release, in any manner whatsoever, the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligations under this Bond; and the Surety, for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

Provided, that it is expressly agreed that this Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract Documents not increasing the contract price more than twenty percent (20%), so as to bind the Principal and the Surety to the full and faithful performance of the Contract Documents as so amended. The term “amendment”, wherever used in this Bond and whether referring to this Bond, the Contract Documents, or the Contract, shall include any alteration, addition, extension or modification of any character whatsoever.

Provided, further, that no final settlement between the Obligee and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

If the Principal is a foreign corporation (incorporated under any laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this Bond are and shall be that the Principal or the Surety shall not be discharged from liability on this Bond, nor this Bond surrendered until such Principal files with the Obligee a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor & Industry, evidencing the payment of all unemployment compensation, contributions, penalties and interest due the Commonwealth from said Principal or
any foreign corporation, subcontractors thereunder or for which liability has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L. 493, of the Commonwealth of Pennsylvania.

IN WITNESS WHEREOF, the Principal and the Surety cause this Payment Bond to be signed, sealed and delivered this _____ day of ________________, 20____.

Individual Principal (Trading and/or Doing Business as: ______________________________)
Witness: By: ______________________________
______________________________ Name: ______________________________

Partnership Principal
Name of Partnership: ______________________________
Witness: By: ______________________________
______________________________ Name: ______________________________
______________________________ Title: ______________________________
______________________________ By: ______________________________
Witness: Name: ______________________________
______________________________ Title: ______________________________

Corporate/Limited Liability Principal
Name of Corporation/Company: ______________________________
Attest: By: ______________________________
______________________________ Name: ______________________________
______________________________ Title: ______________________________*
[SEAL]

* If the signatory is an authorized representative, attach proof evidencing authority to execute on behalf of the corporation or limited liability company.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

<table>
<thead>
<tr>
<th>Corporate Surety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Surety: ____________________________</td>
</tr>
<tr>
<td>Witness or Attest: ____________________________</td>
</tr>
<tr>
<td>By: ____________________________</td>
</tr>
<tr>
<td>____________________________</td>
</tr>
<tr>
<td>Name: ____________________________</td>
</tr>
<tr>
<td>Title: ____________________________ **</td>
</tr>
</tbody>
</table>

** Attach an appropriate Power of Attorney evidencing the authority of the Attorney-in-Fact to act on behalf of the Surety.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, ______________________, as Principal (the “Principal”), and ________________________________, a corporation organized and existing under the laws of the _________of ____________________, having its principal office at ________________________________, and authorized to do business in the Commonwealth of Pennsylvania, as Surety (the “Surety”), are held and firmly bound, jointly and severally, unto the MONTGOMERY COUNTY COMMUNITY COLLEGE, as Obligee (the “Obligee”), as hereinafter set forth in the full and just sum of ________________________________ Dollars ($__________________), lawful money of the United States of America, for the payment of which sum we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. If more than one surety is named above, said sureties shall be jointly and severally liable to Obligee.

WITNESSETH THAT:

WHEREAS, The Principal heretofore has submitted to the Obligee a certain bid (the “Bid”), to perform certain __________________________ work for the Obligee, in connection with the ________ Project located in ____________ Township, __________ County, Pennsylvania pursuant to plans, specifications and other related documents, constituting the contract documents, which are incorporated into the Bid by reference and a part thereof (the “Contract Documents”); and

WHEREAS, the Contract Documents are incorporated in this Bond by reference and made a part hereof; and

WHEREAS, the Obligee is a “Contracting Body” under provisions of Act No. 385 of the General Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967, known and cited as the “Public Works Contractors’ Bond Law of 1967” (the “Act”); and
WHEREAS, the Act, in Section 3(a), requires that, before an award shall be made to the Principal by the Obligee in accordance with the Bid, the Principal shall furnish this Bond to the Obligee, with this Bond to become binding upon the award of a contract to the Principal by the Obligee in accordance with the Bid; and

WHEREAS, it also is a condition of the Contract Documents that this Bond shall be furnished by the Principal to the Obligee; and

WHEREAS, under the Contract Documents, it is provided, inter alia, that if the Principal shall furnish this Bond to the Obligee, and if the Obligee shall make an award to the Principal in accordance with the Bid, then the Principal and the Obligee shall enter into an contract with respect to performance of such work (the “Contract”), the form of which Contract is set forth in the Contract Documents.

NOW, THEREFORE, the terms and conditions of this bond are and shall be that if: (a) the Principal well, truly and faithfully shall comply with and shall perform the Contract in accordance with the Contract Documents, at the time and in the manner provided in the Contract and in the Contract Documents, and if the Principal shall satisfy all claims and demands incurred in or related to the performance of the Contract by the Principal or growing out of the performance of the Contract by the Principal, and if the Principal shall indemnify completely and shall save harmless the Obligee and all of its officers, agents and employees from any and all costs and damages which the Obligee and all of its officers, agents and employees may sustain or suffer by reason of the failure of the Principal to do so, and if the Principal shall reimburse completely and shall pay to the Obligee any and all costs and expenses which the Obligee and all of its officers, agents and employees may incur by reason of any such default or failure of the Principal, including, but not limited to, additional legal and professional fees resulting from such default or failure of the Principal, delay damages resulting from such default or failure of the Principal, and liquidated damages in accordance with the Contract Documents; and (b) if the Principal shall remedy, without cost to the Obligee, all defects which may develop during the period of two (2) years from the date of final completion by the Principal and acceptance of the Obligee of the work to be performed under the Contract in accordance with the Contract Documents, which defects, in the sole judgment of the Obligee or its legal successors in interests, shall be caused by or shall result from defective or inferior materials or workmanship, then this Bond shall be void; otherwise, this Bond shall be and shall remain in force and effect and all claims, demands, costs, expenses and damages including, but not limited to, additional legal and professional fees resulting from the default or failure of Principal, delay damages resulting from such default or failure of the Principal, and liquidated damages in accordance with the Contract Documents, shall be payable by Principal and Surety to Owner; provided, however, that the obligations of the Surety hereunder shall not exceed the amount of this Performance Bond.

This Bond is executed and delivered under and subject to the Act, to which reference hereby is made.

The Principal and the Surety agree that any alterations, changes and/or additions to the Contract Documents, and/or any alterations, changes and/or additions to the work to be performed under the Contract in accordance with the Contract Documents, and/or any alterations, changes
and/or additions to the Contract, and/or any giving by the Obligee of any extensions of time for the performance of the Contract in accordance with the Contract Documents, and/or any act of forbearance of either the Principal or the Obligee toward the other with respect to the Contract Documents and the Contract, and/or the reduction of any percentage to be retained by the Obligee as permitted by the Contract Documents and by the Contract, shall not release, in any manner whatsoever, the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligation under this bond; and the Surety, for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

If the Principal is a foreign corporation (incorporated under any laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this Bond are and shall be that the Principal and the Surety shall not be discharged from liability on this Bond, nor this Bond surrendered until such Principal files with the Obligee a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidencing the payment of all unemployment compensation, contributions, penalties and interest due the Commonwealth from said Principal or any foreign corporation, subcontractor thereunder or for which liability has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L. 493, of the Commonwealth of Pennsylvania.

Any proceeding, legal or equitable, under this Bond shall be instituted in the Court of Common Pleas of Montgomery County, Pennsylvania, and in any such proceeding Obligee may join both Principal and Surety as parties, and Principal and Surety hereby consent to such joinder, jurisdiction and venue. This Bond shall be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Pennsylvania.

IN WITNESS WHEREOF, the Principal and the Surety cause this Performance Bond to be signed, sealed and delivered this _____ day of __________________, 20____.

| Individual Principal (Trading and/or Doing Business as: __________________________) |
| Witness: | By: __________________________ |
| __________________________ | __________________________ |
| __________________________ | Name: __________________________ |
## Montgomery County Community College
### Electrical Switchgear Replacement Project

#### Partnership Principal
Name of Partnership: ____________________________
By: ____________________________
Witness: 
Name: ____________________________
Title: ____________________________

#### Corporate/Limited Liability Principal
Name of Corporation/Company: ____________________________
By: ____________________________
Attest: 
Name: ____________________________
Title: ____________________________
[SEAL]

* If the signatory is an authorized representative, attach proof evidencing authority to execute on behalf of the corporation or limited liability company.

#### Corporate Surety
Name of Surety: ____________________________
Witness or Attest: 
Name: ____________________________
Title: ____________________________
[SEAL]

** Attach an appropriate Power of Attorney evidencing the authority of the Attorney-in-Fact to act on behalf of the Surety.
SPECIFICATIONS

SECTION 16124 - MEDIUM-VOLTAGE CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY
A. This Section includes cables and related splices, terminations, and accessories for medium-voltage electrical distribution systems.

1.3 DEFINITIONS

1.4 SUBMITTALS
A. Product Data: For each type of cable indicated. Include splices and terminations for cables and cable accessories.
B. Field quality-control test reports.

1.5 QUALITY ASSURANCE
A. Installer: Engage a cable splicer, trained and certified by splice material manufacturer, to install, splice, and terminate medium-voltage cable.
B. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.
C. Source Limitations: Obtain cables and accessories through one source from a single manufacturer.
Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

E. Comply with IEEE C2 and NFPA 70.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cables:
   b. General Cable Technologies Corporation.
   c. Kerite Co. (The); Hubbell Incorporated.
   d. Okonite Company (The).
   e. Pirelli Cables & Systems NA.
   f. Rome Cable Corporation.
   g. Southwire Company.

2. Cable Splicing and Terminating Products and Accessories:

   a. Engineered Products Company.
   c. MPHusky.
   d. Raychem Corp.; Telephone Energy and Industrial Division; Tyco International Ltd.
   e. RTE Components; Cooper Power Systems, Inc.
   f. Scott Fetzer Co. (The); Adalet.
   g. Thomas & Betts Corporation.
   h. Thomas & Betts Corporation/Elastimold.
   i. 3M; Electrical Products Division.

2.2 CABLES

A. Cable Type: MV90.

B. Comply with UL 1072, AEIC CS 8, ICEA S-93-639, and ICEA S-97-682.

C. Conductor: Copper.

D. Conductor Insulation: Crosslinked polyethylene.

   1. Voltage Rating: 15 kV.
   2. Insulation Thickness: 100 percent insulation level.
E. Shielding: Copper tape, helically applied over semiconducting insulation shield.

F. Cable Jacket: Chlorosulfonated polyethylene, CPE.

2.3 SPLICE KITS

1. Do not splice. All cables shall be installed in continuous lengths.

2.4 SOLID TERMINATIONS

A. Shielded-Cable Terminations: Comply with the following classes of IEEE 48. Insulation class is equivalent to that of cable. Include shield ground strap for shielded cable terminations.

1. Class 1 Terminations: Modular type, furnished as a kit, with stress-relief tube; multiple, molded-silicone rubber, insulator modules; shield ground strap; and compression-type connector.

2. Class 1 Terminations: Heat-shrink type with heat-shrink inner stress control and outer nontracking tubes; multiple, molded, nontracking skirt modules; and compression-type connector.

2.5 SOURCE QUALITY CONTROL

A. Test and inspect cables according to ICEA S-97-682 before shipping.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install cables according to IEEE 576.

B. Pull Conductors: Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

1. Where necessary, use manufacturer-approved pulling compound or lubricant that will not deteriorate conductor or insulation.

2. Use pulling means, including fish tape, cable, rope, and basket-weave cable grips that will not damage cables and raceways. Do not use rope hitches for pulling attachment to cable.

C. In manholes, handholes, pull boxes, junction boxes, and cable vaults, train cables around walls by the longest route from entry to exit and support cables at intervals adequate to prevent sag.

D. Install terminations at ends of conductors.
E. Ground shields of shielded cable at terminations, splices, and separable insulated connectors. Ground metal bodies of terminators, splices, cable and separable insulated-connector fittings, and hardware.

F. Do not pass shield-ground wires through any current transformers.

3.2 FIELD QUALITY CONTROL

A. Testing: Engage a qualified testing and inspecting agency to perform the following field tests and inspections and prepare test reports:

B. Perform the following field tests and inspections and prepare test reports:

1. Perform each visual and mechanical inspection and electrical test stated in NETA ATS. Certify compliance with test parameters.
2. After installing medium-voltage cables and before electrical circuitry has been energized, test for compliance with requirements.

C. Remove and replace malfunctioning units and retest as specified above.

END OF SECTION 16124

SECTION 16341 - MEDIUM-VOLTAGE SWITCHGEAR

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes metal-clad, circuit-breaker switchgear with the following components, features, and accessories:

1. Copper, tin-plated main bus.
2. Analog instruments.
3. Auto-Transfer and Protective Relays.
4. Control UPS system.
5. Shipping split and temporary end cover for phased installation.
6. Customer-owned, electronic energy and power quality meter.
1.3 SUBMITTALS

A. Product Data: For each type of switchgear and related equipment, include the following:
   1. Rated capacities, operating characteristics, furnished specialties, and accessories for individual circuit breakers.
   2. Time-current characteristic curves for overcurrent protective relays.

B. Shop Drawings: For each type of switchgear and related equipment, include the following:
   1. Dimensioned plans, elevations, sections, and details, including required clearances and service space around equipment. Show method of field assembly and location and size of each shipping split and field connection. Include the following:
      a. Tabulation of installed devices with features and ratings.
      b. Outline and general arrangement drawing showing dimensions, shipping sections, and weights of each assembled section.
      c. Drawing of cable termination compartments showing required locations for conduits and indicating space available for cable terminations. Switchgear is to be placed onto an existing pad and must align with existing conduits.
      d. Floor plan drawing showing locations for anchor bolts.
      e. Current ratings of buses.
      f. Short-time and short-circuit ratings of switchgear assembly.
      g. Nameplate legends.
      h. Utility company's metering provisions with indication of approval by utility company.
   2. Wiring Diagrams: For each type of switchgear and related equipment, include the following:
      a. Power, signal, and control wiring.
      b. Three-line diagrams of showing device terminal numbers and internal diagrams.
      c. Schematic control diagrams.
      d. Diagrams showing connections of component devices and equipment.

C. Complete and submit a service and metering application to PECO.

D. Submit switchgear to PECO for approval before submission to the owner or Engineer.

E. Source quality-control test reports.

F. Field quality-control test reports.

G. Operation and Maintenance Data: For switchgear and switchgear components to include in emergency, operation, and maintenance manuals. In addition to items
specified in Division 1 Section "Operation and Maintenance Data," include the following:

1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
2. Time-current curves, including selectable ranges for each type of overcurrent protective device.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of switchgear and associated components through one source from a single manufacturer.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with IEEE C2.

1.5 PROJECT CONDITIONS

A. Product Selection for Restricted Space: Switchgear is to replace existing and must fit in the space available and align with input and output conduits.

B. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service according to requirements indicated:

1. Notify Owner no fewer than seven days in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Owner's written permission and notification to PECO.
3. Shutdowns may only occur on Sundays between 12:00 AM and 6:00 AM.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 MANUFACTURED UNITS

A. Description: Factory assembled and tested, and complying with IEEE C37.20.1.
**MONTGOMERY COUNTY COMMUNITY COLLEGE**  
**Electrical Switchgear Replacement Project**

### B. Ratings: Suitable for application in 3-phase, 60-Hz, solidly grounded-neutral system.

### C. System Voltage: 13.2 kV nominal; 15 kV maximum.

### D. Basic Impulse Level: 95 kV

#### 2.3 METAL-CLAD, CIRCUIT-BREAKER SWITCHGEAR

**A. Manufacturers:**

1. Eaton Corporation; Cutler-Hammer Products.
2. General Electric Distribution & Control.
3. Penn Panel and Box Company.
5. Square D; Schneider Electric.

**B. Comply with IEEE C37.20.3.**

**C. Nominal Interrupting-Capacity Class: 250 MVA.**

**D. Ratings: Comply with IEEE C37.04.**


**E. Circuit Breakers:** Three-pole, single-throw, electrically operated, draw-out-mounting units using three individual, vacuum-sealed interrupter modules and including the following features:

1. Designed to operate at rated voltage to interrupt fault current within its rating within five cycles of trip initiation. For systems with X/R ratio of 17 or less, transient voltage during interruption shall not exceed twice the rated line-to-ground voltage of the system.
2. Contact-Wear Indicator: Readily accessible to field maintenance personnel.
3. Minimum of six Type A and six Type B spare contacts.
4. Interchangeability: Vacuum circuit breakers interchangeable with breakers of same current and interrupting ratings.
   
   a. Current Rating of Main Circuit Breakers: 1200 A.
   b. Continuous Current Rating of Tie Circuit Breaker: 1200 A.

5. Operating Mechanism: Electrically charged, mechanically and electrically trip-free, stored-energy operated.

   a. Closing speed of moving contacts to be independent of both control and operator.
   b. Design mechanism to permit manual charging and slow closing of contacts for inspection or adjustment.
   c. Control Power: Uninterruptable Power Supply (UPS), 120 V ac for closing and capacitor tripping.
6. Maintain the existing key interlocking system with the respective 33 kV upstream switch. Access to the 33 kV fuse shall require the main 33 kV switch and associated 13.2 kV breaker to be locked open and the breaker racked out. Each 33 kV switch shall be capable of being opened at any time and not restricted by the position of the associated 13.2 kV main breaker.

F. Control Voltage UPS Alarm: Switchgear shall have a monitor for UPS control power voltage with a remote alarm located in the metering shed. Alarm shall sound for any of the UPS’s alarm relay outputs.

2.4 FABRICATION

A. Outdoor Enclosure (non-walk-in): Galvanized steel, weatherproof construction; integral structural-steel base frame with factory-applied asphaltic undercoating.

1. Each compartment shall have the following features:
   a. Structural design and anchorage adequate to resist loads imposed by 125-mph wind.
   b. Space heater operating at one-half or less of rated voltage, sized to prevent condensation.
   c. Louvers equipped with insect and rodent screen and filter, and arranged to permit air circulation while excluding rodents and exterior dust.
   d. Hinged front door with locking provisions.
   e. Weatherproof GFCI duplex receptacle.
   f. Power for heaters and receptacles to be provided by control power transformer.
   g. Windows for infra-red inspection of cable terminations.

B. Finish: Manufacturer's standard gray finish over rust-inhibiting primer on phosphatizing-treated metal surfaces.

C. Auxiliary Compartments: Arranged to suit house meters, relays, controls, and auxiliary equipment; isolated from medium-voltage components.

D. Utility Metering Compartment: Dedicated to PECO use only. Manufactured per the requirements of ESR section 7, Appendix A, Section 3.4; and signs per Section 7, Appendix B, section 6. PECO will provide new metering CTs and VTs to mount in the new compartments. Meters are remote from the metering compartment.

2.5 COMPONENTS

A. Main Bus: Copper, tin plated; full length of switchgear.

B. Ground Bus: Copper, copper, tin plated; minimum size 1/4 by 2 inches; full length of switchgear.

C. Bus Insulation: Covered with flame-retardant insulation.

1. Potential Transformers: Secondary voltage rating of 120 V and NEMA accuracy class of 0.3 with burdens of W, X, and Y.
2. Current Transformers: Burden and accuracy class suitable for connected relays, meters, and instruments. Provide shorting terminal test blocks for CT isolation during relay testing, ABB Flexitester type or equal.

E. Multifunction Digital-Metering Monitor: Microprocessor-based unit suitable for three- or four-wire systems, listed and labeled by an NRTL, and with the following features:

1. Inputs from sensors or 5-A current-transformer secondaries, and potential terminals rated to 600 V.
2. Switch-selectable digital display with the following features:
   a. Phase Currents, Each Phase: Plus or minus 1 percent.
   b. Phase-to-Phase Voltages, Three Phase: Plus or minus 1 percent.
   c. Phase-to-Neutral Voltages, Three Phase: Plus or minus 1 percent.
   d. Three-Phase Real Power: Plus or minus 2 percent.
   e. Three-Phase Reactive Power: Plus or minus 2 percent.
   f. Power Factor: Plus or minus 2 percent.
   g. Frequency: Plus or minus 0.5 percent.
   h. Integrated Demand, with Demand Interval Selectable from 5 to 60 Minutes: Plus or minus 2 percent.
   i. Accumulated energy, in megawatt hours, plus or minus 2 percent; stored values unaffected by power outages for up to 72 hours.

3. Mounting: Display and control unit that is flush or semi-flush mounted in instrument compartment door.

F. Relays: Comply with IEEE C37.90, integrated digital type; with test blocks and plugs.


1. Install in cable termination compartments in each phase of circuit.
2. Coordinate rating with circuit voltage.

H. Control Power Supply: Control power transformer supplies 120-V control circuits through secondary disconnect devices. Include the following features:

1. Dry-type transformers, in separate compartments for units larger than 3 kVA, including primary and secondary fuses.
2. Two control power transformers in separate compartments with necessary interlocking relays; each transformer connected to line side of associated main circuit breaker.
   a. Secondary windings connected through an internal automatic transfer relay to UPS that feeds switchgear control power bus.
3. Control Power Fuses: Primary and secondary fuses provide current-limiting and overload protection.

I. Control Wiring: Type SIS, factory installed, complete with bundling, lacing, and protection; and complying with the following:

1. Flexible conductors for No. 8 AWG and smaller, for conductors across hinges, and for conductors for interconnections between shipping units.
2. Conductors sized according to NFPA 70 for duty required.
3. Arrange wiring for phased installation. Provide terminal blocks and wiring harness with SIS wiring to interconnect sections that are not installed at the same time. See phasing plan.

2.6 IDENTIFICATION

A. Materials: Refer to Division 16 Section "Electrical Identification." Identify units, devices, controls, and wiring.

2.7 SOURCE QUALITY CONTROL

A. Before shipment of equipment, perform the following tests and prepare test reports:

1. Production tests on circuit breakers according to ANSI C37.09.
2. Production tests on completed switchgear assembly according to IEEE C37.20.2.

B. Assemble switchgear and equipment in manufacturer's plant and perform the following:

1. Functional tests of all relays, instruments, meters, and control devices by application of secondary three-phase voltage to voltage circuits and injection of current in current transformer secondary circuits.
2. Functional test of all control and trip circuits. Connect test devices into circuits to simulate operation of controlled remote equipment such as circuit-breaker trip coils, close coils, and auxiliary contacts. Test proper operation of relay targets.

C. Prepare equipment for shipment.

   a. Provide suitable crating, blocking, and supports so equipment will withstand expected domestic shipping and handling shocks and vibration.

   2. Weatherproof equipment for shipment. Close connection openings to prevent entrance of foreign material during shipment and storage.

2.8 FACTORY FINISHES

A. Finish: Manufacturer's standard color finish applied to equipment before shipping.
MONTGOMERY COUNTY COMMUNITY COLLEGE
Electrical Switchgear Replacement Project

2.9 OPERATING SEQUENCE

A. Normal Operation: Both Main Circuit Breakers 52-1 and 52-2 closed, fed from the respective 34.5 kV transformer secondaries; campus distribution fed via double ended, open loop; system set to “AUTO”. Interlocks shall prevent parallel operation in the Automatic mode.

B. Selector and Control Switches
   1. 52CS “OPEN-CLOSE”: Control switches for each of the two incoming breakers and the tie breaker. CLOSE control operable only in the “MANUAL” position.
   2. 43A/M “AUTO-MANUAL”: Selector switch to choose operating mode of main-tie-main arrangement. In “AUTO” position, control is automatic via the control relays. In “MANUAL” position, control is accomplished by operating personnel.

C. Manual Operation
   1. The circuit breakers shall be operated in the “MANUAL” mode via the circuit breaker control switches (52CS). When in the “MANUAL” mode, non-parallel interlocks shall NOT be bypassed, although the breakers may be operated independently.
   2. Back transfer shall be accomplished by manually placing the 43A/M control switch in the “MANUAL” position. Circuit breakers shall transfer to the desired position under control of the respective 52CS.
   3. The system shall be restored to normal operating mode by moving the 43A/M to the “AUTO” position.

D. Automatic Operation
   1. Auto Transfer: Includes an adjustable time delay in the “AUTO” close circuit of all three breakers. The scheme will respond to, and clear a single Utility failure within 5 seconds.
   2. Normal operation is defined by the presence of voltage on both lines, the 43A/M selector switch in the “AUTO” position, the two incoming circuit breakers closed, the tie circuit breaker open, and the associated red and green lights illuminated reflecting the correct breaker position.
   3. Presence of voltage is indicated by the illumination of each line’s white potential indicating light.
   4. Loss of voltage on either line is determined by the 27/47 relay. An under-voltage condition will be sensed by this relay and should the undervoltage condition persist for a predetermined time (as determined by the dial setting), tripping of the associated line breaker will occur. Opening of the line breaker will initiate a time delay (adj. 1.5 to 15 seconds), Completion of the time delay will initiate closing of the tie breaker.
   5. Return of voltage to the lost source will not in itself initiate a back transfer. Subsequent to an automatic transfer and return of voltage to the lost source, back transfer will occur automatically only upon loss of the source on the closed main circuit breaker and completion of the time delay. For ordinary back-transfer, see C.2 above.
   6. Tripping of a main circuit breaker via the 52CS when in the “AUTO” mode, will result in the lockout of that main and the tie breaker.
E. Overcurrent Operation. An overcurrent condition on either line, sensed by 50/51 or 51
N relays, will activate the respective 86 relay, which will trip and lockout the affected
main and tie breakers.

F. Undervoltage Trip Indication. A yellow indicator light on each main breaker indicates
operation of the 27/47 undervoltage device. This light will remain illuminated after
return of voltage, until manually reset via the “U.V. RESET” pushbutton. The potential
indicating lights and voltmeter should be checked to verify that voltage has returned
before resetting this indicator or operating the circuit breakers.

G. “LIVE TEST” Pushbuttons. In order to check the automatic operation for maintenance
purposes, it is possible to simulate loss of voltage condition by depressing and holding
“TEST” pushbuttons.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine elements and surfaces to receive switchgear for compliance with requirements
for installation tolerances, required clearances, and other conditions affecting
performance.

1. Proceed with installation only after unsatisfactory conditions have been
corrected.

3.2 INSTALLATION

A. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets
and temporary blocking of moving parts from switchgear units and components.

3.3 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide
warning signs as specified in Division 16 Section "Electrical Identification."

B. Diagram and Instructions:

1. Frame under clear acrylic plastic on front of switchgear.
   a. Operating Instructions: Printed basic instructions for switchgear,
      including control sequences and emergency procedures.
   b. System Power Riser Diagrams: Depict power sources, feeders,
      distribution components, and major loads.

2. Storage for Maintenance: Include a rack or holder, near the operating
   instructions, for a copy of maintenance manual.
3.4 CONNECTIONS

A. Cable terminations at switchgear are specified in Division 16 Section "Medium-Voltage Cables."

B. Tighten bus joints, electrical connectors, and terminals according to manufacturer's published torque-tightening values.

C. Ground equipment according to Division 16 Section "Grounding and Bonding."

D. Connect wiring according to Division 16 Sections "Conductors and Cables" and "Medium-Voltage Cables."

3.5 ADJUSTING

A. Set field-adjustable, protective-relay trip characteristics.

B. On completion of installation, inspect interior and exterior of switchgear. Vacuum dirt and debris; do not use compressed air to assist in cleaning. Repair damaged finishes.

3.6 FIELD QUALITY CONTROL

A. Prepare for acceptance tests as follows:
   1. Test insulation resistance for each switchgear bus, component, connecting supply, feeder, and control circuit.
   2. Test continuity of each circuit.

B. Manufacturer's Field Service: Engage a factory-authorized service representative to perform the following:
   1. Inspect switchgear, wiring, components, connections, and equipment installation. Test and adjust components and equipment.
   2. Assist in field testing of equipment.

C. Remove and replace malfunctioning units and retest as specified above.

D. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform infrared scan of each switchgear. Remove front and rear panels so joints and connections are accessible to portable scanner.
   1. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switchgear 11 months after date of Substantial Completion.
   2. Instrument: Use an infrared-scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
   3. Record of Infrared Scanning: Prepare a certified report that identifies switchgear checked and that describes infrared-scanning results. Include notation of
3.7 PROTECTION

A. Temporary Heating: Apply temporary heat to switchgear, according to manufacturer's written instructions, throughout periods when switchgear environment is not controlled for temperature and humidity within manufacturer's stipulated service conditions.

3.8 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain switchgear. Refer to Division 1 Section "Demonstration and Training."

END OF SECTION 16341