

**FINANCE DEPARTMENT
DIVISION OF PURCHASES & SUPPLIES**



Sheldon A. Neeley, Mayor

PROPOSAL #23000516

**ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION IMPROVEMENTS - WATER POLLUTION
CONTROL**

Date Posted: 12/28/22

PROPOSAL NO. 23000516**CITY OF FLINT****FINANCE DEPARTMENT****DIVISION OF PURCHASES AND SUPPLIES**

City Hall, 1101 S. Saginaw Street, Room #203 – Flint, Michigan 48502

(810) 766-7340

www.cityofflint.com

Sheldon Neeley

Mayor

REQUEST FOR PROPOSALS**OWNER/RETURN TO:**

THE CITY OF FLINT
FINANCE DEPARTMENT – DIVISION OF PURCHASES AND SUPPLIES
1101 S. SAGINAW ST., ROOM 203, 2nd FLOOR
FLINT, MI 48502

PROPOSAL # 23000516**SCOPE OF WORK:**

The City of Flint, Finance Department of Purchases & Supplies, is soliciting sealed bids for providing:

ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION IMPROVEMENTS - WATER POLLUTION CONTROL

Per the attached additional requirements.

If your firm is interested in providing the requested services, please submit:

Submit to City:

- 1 original, printed, signed, original proposals and signed addenda
- 2 additional copies unbound
- 1 electronic copy

Proposal submittal information MUST be received by the following dates and times:

1. The mail in **HARD COPY** with the original signature (signed documents) must be received by **Thursday, January 12, 2023 by 11:00 A.M. (EST)**, City of Flint, Finance Department - Division of Purchases and Supplies, 1101 S. Saginaw St., Room 203, Flint, MI, 48502. Bids must be in a sealed envelope clearly identifying the proposal name and proposal number.
2. **Electronic Copy**, please email to PurchasingBids@cityofflint.com by **Thursday, January 12, 2023 by 11:00 A.M. (EST)**. Please note that in the subject line of the email, type in the proposal name and number.
2. Faxed bids are not accepted.
3. Both mail in proposal and electronic submittal must be received by due date and time.

PLEASE NOTE: When dropping off a bid, please do not put bids in drop boxes on the outside of City Hall. Please call if you have any questions and need to drop off a bid.

All additional proposal documents, requirements, addendums, specifications, and plans/drawings (if utilized) are available on the Purchasing page of the City of Flint's web site at <https://www.cityofflint.com/finance/purchasing/bids-2/> under "open bids" and the specific bid or proposal number assigned to this notice.

Effective immediately upon release of these Bidding Documents, and until notice of contract award, all official communications from proposers regarding the requirements of this Bid shall be directed to:

Lauren Rowley
810-766-7340

lrowley@cityofflint.com

The City, or designee, shall distribute all official changes, modifications, responses to questions or notices relating to the requirements of this Bid. Addendum to this Bid may be developed and shared with all Vendors. Any other information of any kind from any other source shall not be considered official, and proposers relying on other information do so at their own risk.

NOTICE TO VENDOR Offers, subject to the conditions made a part hereof, will be received at this office, ***1101 S. Saginaw St., Flint, MI 48502 for the following:***

All additional proposal documents, requirements, addendums, specifications, and plans/drawings (if utilized) are available on the Purchasing page of the City of Flint's web site at <https://www.cityofflint.com/finance/purchasing/bids-2/> under "open bids" and the specific bid or proposal number assigned to this notice.

New vendors should complete and submit a vendor application, IRS W-9 Form, and Vendor ACH Payment Authorization Form with the City of Flint. Links to these forms are available at <https://www.cityofflint.com/finance/accounts-payable-department/>.

Results may be viewed next business day online EXCEPT when a bid is under review. The bidders/public will only see the names of the bidders that submitted a bid, not their cost. This will protect the bidders cost in case there is a re-bid.

<https://www.cityofflint.com/finance/purchasing/results/> under "bid results".

City of Flint has partnered with BidNet as part of the [MITN Purchasing Group](#) (branded page link) to post

bid opportunities to this site. As a vendor, you can register with the [MITN Purchasing Group](#) and be sure that you see all available bids and opportunities. By selecting automatic bid notification, your company will receive emails once the City of Flint has a bid opportunity that matches your company's business. In addition, the site handles bid opportunities, RFPs, and RFQs for other member governmental agencies throughout Michigan. City of Flint looks forward to providing you with more bid information and simplifying the entire bid, proposal, and quote processes for everyone involved. We appreciate your cooperation and welcome your participation. If you need help registering, please call the MITN Purchasing Group support department toll free 1-800-835-4603 option #2.

Link to City of Flint open solicitations:

[MITN Purchasing Group](#) (branded page link)

Any written questions regarding this project shall be directed to Lauren Rowley, Purchasing Manager at lrowley@cityofflint.com using the subject title of "RFP #23-516 – ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION IMPROVEMENTS - WATER POLLUTION CONTROL." Questions must be submitted by **Friday, January 6, 2023** before 10:00 A.M. (EST). Please see attached form for Question submittal form.

Bid Opening Due Date – Thursday, January 12, 2023 at 11:00 A.M.

Bid Opening via Google Meet. The public is invited to view the opening by joining the Google Meet link below:

Join with Google Meet

Meeting ID

meet.google.com/sav-cxbq-abv

Phone Numbers

(US) +1 413-438-4035

PIN: 588 944 490#

Mandatory Pre-Bid Meeting

A mandatory pre-bid meeting touring the Water Pollution Control Facility at the City of Flint will be held on **Thursday, January 5, 2023 at 10:00 am EST at the City of Flint Water Pollution Control Facility, G-4652 Beecher Rd, Flint, MI 48532**. Prospective bidders are to meet here, with a department official escorting individuals to tour the facility. For more questions, please contact Krystal Wallace at kwallace@cityofflint.com. This will be the only venue that potential contractors will be able to have a face-to-face conversation with the WPC Department. This venue will also allow contractors to ask any questions concerning this Project. Failure to attend this meeting may result in disqualification of your bid.

IN PERSON

The public is invited to view the bid opening in person by attending at McKenzie Conference Room, 2nd Floor, 1101 S. Saginaw St., Flint, MI 48502.

If you have any problems signing in, please email purchasingbids@cityofflint.com.

Sincerely,

A handwritten signature in cursive script that reads "Lauren Rowley".

Lauren Rowley
Purchasing Manager

INSTRUCTIONS TO VENDORS

- 1) **PRE-BID INFORMATION AND QUESTIONS:** Each bid that is timely received will be evaluated on its merit and completeness of all requested information. In preparing bids, Bidders are advised to rely only upon the contents of this Request for Proposals (RFP) and accompanying documents and any written clarifications or addenda issued by the City of Flint. If a Bidder finds a discrepancy, error or omission in the RFP package, or requires any written addendum thereto, the Bidder is requested to notify the Purchasing contact noted on the cover of this RFP, so that written clarification may be sent to all prospective Bidders. **THE CITY OF FLINT IS NOT RESPONSIBLE FOR ANY ORAL INSTRUCTIONS.** All questions must be submitted in writing to the Finance Department of Purchases and Supplies before any pre-bid deadline (if specified) or at least one (1) week prior to the proposal opening date indicated on the front of this document.
- 2) **RFP MODIFICATIONS:** The City of Flint has the right to correct, modify or cancel the RFP, in whole or in part, or to reject any Bid, in whole or in part, within the discretion of the City of Flint, or their designee. If any such changes are made, all known recipients of the RFP will be sent a copy of such changes. If any changes are made to this RFP document by any party other than the City of Flint, the original document in the City of Flint's files takes precedence.
- 3) **PROPOSAL SUBMISSION:**
 - a) The Bidder must include the following items, or the proposal may be deemed non-responsive:
 - i) All forms contained in this RFP, fully completed.
 - b) Bids must be submitted to the Finance Department of Purchases and Supplies, City of Flint, 1101 S. Saginaw Street, Room 203, Flint, Michigan 48502 by the date and time indicated as the deadline. The Purchasing Department time stamp will determine the official receipt time. It is each Bidder's responsibility to insure that their proposal is time stamped by the Purchasing Department by the deadline. This responsibility rests entirely with the Bidder, regardless of delays resulting from postal handling or for any other reasons. Proposals will be accepted at any time during the normal course of business only, said hours being 8:00 a.m. to 5:00 p.m. local time, Monday through Friday, legal holidays as exception.
 - c) Bids must be enclosed in a sealed, non-transparent envelope, box or package, and clearly marked on the outside with the following: RFP Title, RFP Number, Deadline and Bidder's name.
 - d) Submission of a bid establishes a conclusive presumption that the Bidder is thoroughly familiar with the Request for Proposals (RFP), and that the Contractor understands and agrees to abide by each and all of the stipulations and requirements contained therein.
 - e) All prices and notations must be typed or printed in ink. No erasures are permitted. Mistakes may be crossed out and corrections must be initialed in ink by the person(s) signing the bid.
 - f) Proposals sent by email, facsimile, or other electronic means will not be considered unless specifically authorized in this RFP.
 - g) All costs incurred in the preparation and presentation of the bid are the Bidder's sole responsibility; no pre-bid costs will be reimbursed to any Bidder. All documentation submitted with the proposal will become the property of the City of Flint.

- h) Proposals must be held firm for a minimum of 120 days.
- 4) **EXCEPTIONS:** Bidder shall clearly identify any proposed deviations from the Terms or Scope in the Request for Proposals. Each exception must be clearly defined and referenced to the proper paragraph in this RFP. The exception shall include, at a minimum, the proposed substitute language and opinion as to why the suggested substitution will provide equivalent or better service and performance. If no exceptions are noted in the bid, the City of Flint will assume complete conformance with this specification and the successful Bidder will be required to perform accordingly. Bids not meeting all requirements may be rejected.
- 5) **DUPLICATE BIDS:** No more than one (1) bid from any Bidder including its subsidiaries, affiliated companies and franchises will be considered by the City of Flint. In the event multiple proposals are submitted in violation of this provision, the City will have the right to determine which bid will be considered or, at its sole option, reject all such multiple proposals.
- 6) **WITHDRAWAL:** Bids may only be withdrawn by written notice prior to the date and time set for the opening of bids. No bid may be withdrawn after the deadline for submission.
- 7) **REJECTION/GOOD STANDING:** The City of Flint reserves the right to reject any or all bids, or to accept or reject any bid in part, and to waive any minor informality or irregularity in bids received if it is determined by the City of Flint, or their designee, that the best interest of the City will be served by doing so. No bid will be considered from any person, firm or corporation in arrears or in default to the City on any contract, debt, taxes or other obligation, or if the Bidder is debarred by the City of Flint from consideration for a contract award pursuant to Section 18-21.5 (d) of Article IV of the "Purchasing Ordinance of the City of Flint".
- 8) **PROCUREMENT POLICY:** Procurement for the City of Flint will be handled in a manner providing fair opportunity to all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City. The City of Flint and their officials have the vested authority to execute a contract, subject to City Council and Mayoral approval where required.
- 9) **BID SIGNATURES:** Bids must be signed by an authorized official of the Bidder. Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the City of Flint if the Bidder is determined to be the lowest Responsive and Responsible Bidder.
- 10) **CONTRACT AWARD/SPLIT AWARDS:** The City of Flint reserves the right to award by item and/or group of items. The Bidder to whom the award is made will be notified at the earliest possible date. Tentative acceptance of the bid, intent to recommend award of a contract and actual award of the contract will be provided by written notice sent to the Bidder at the address designated in the bid if a separate Agreement is required to be executed. After a final award of the Agreement by the City of Flint, the Contractor/Vendor must execute and perform said Agreement. All proposals must be firm for at least 120 days from the due date of the proposal. If, for any reason, a contract is not executed with the selected Bidder within 14 days after notice of recommendation for award, then the City may recommend the next lowest responsive and responsible Bidder.

- 11) **NO RFP RESPONSE:** Bidders who receive this RFP but who do not submit a bid should return this RFP package stating “No Bid” and are encouraged to list the reason(s) for not responding. Failure to return this form may result in removal of the Bidder’s name from all future lists.
- 12) **FREEDOM OF INFORMATION ACT (FOIA) REQUIREMENTS:** Bids are subject to public disclosure after the deadline for submission in accordance with state law.
- 13) **ARBITRATION:** Contractor/Vendor agrees to submit to arbitration all claims, counterclaims, disputes and other matters in question arising out of or relating to this agreement or the breach thereof. The Contractor’s/Vendor’s agreement to arbitrate shall be specifically enforceable under the prevailing law of any court having jurisdiction to hear such matters. Contractor’s/Vendor’s obligation to submit to arbitration shall be subject to the following provisions:
- a) Notice of demand for arbitration must be submitted to the City in writing within a reasonable time after the claim, dispute or other matter in question has arisen. A reasonable time is hereby determined to be fourteen (14) days from the date the party demanding the arbitration knows or should have known the facts giving rise to their claim, dispute or question. In no event may the demand for arbitration be made after the time when institution of legal or equitable proceedings based on such claim dispute or other matters in question would be barred by the applicable statute of limitation.
 - b) Within fourteen (14) days from the date that demand for arbitration is received by the City, each party shall submit to the other the name of one person to serve as an arbitrator. The two arbitrators together shall then select a third person, the three together shall then serve as a panel in all proceedings. Any decision concurred in by a majority of the three shall be a final binding decision.
 - c) The final decision rendered by said arbitrators shall be binding and conclusive and shall be subject to specific enforcement by a court of competent jurisdiction.
 - d) The costs of the arbitration shall be split and borne equally between the parties and such costs are not subject to shifting by the arbitrator.
 - e) This provision shall survive the expiration or termination of this Agreement in perpetuity.
- 14) **BID HOLD:** The City of Flint may hold bids for a period of one hundred twenty (120) days from opening, for the purpose of reviewing the results and investigating the qualifications of bidders prior to making an award.
- 15) **NONCOMPLIANCE:** Failure to deliver in accordance with specifications will be cause for the City of Flint and they may cancel the contract or any part thereof and purchase on the open market, charging any additional cost to the Contractor/Vendor.
- 16) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP:** Nothing contained in these documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.

- 17) **ERRORS AND OMISSIONS:** Bidder is not permitted to take advantage of any obvious errors or omissions in specifications.
- 18) **INTERPRETATION:** In the event that any provision contained herein shall be determined by a court of competent jurisdiction or an appropriate administrative tribunal to be contrary to the provision of law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal having jurisdiction over this Agreement and the interpretation thereof, or the parties hereto, so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision.
- 19) **LAWS AND ORDINANCES:** The Bidder shall obey and abide by all of the laws, rules and regulations of the Federal Government, State of Michigan, Genesee County and the City of Flint, applicable to the performance of this Agreement, including, but not limited to, labor laws, and laws regulating or applying to public improvement, local government, and its operational requirements.
- 20) **LOCAL PREFERENCE:** Contractors/bidders located within the corporate city limits of Flint, Michigan may be given a seven percent (7%) competitive price advantage. Additionally, if the lowest responsible bidder is not located within the limits of the City of Flint, but is located within the County of Genesee, and said bidder does not exceed the bid of the lowest non-local bidder by more than three and one-half percent (3-1/2%), then said lowest Genesee County bidder may be determined to be the lowest responsible bidder, and make the award to such Genesee County bidder accordingly, subject to the approval of the City Council. If the lowest non-local bidder does not exceed that of any Proposers/bidders by (7%) inside the City of Flint or (3-1/2%) inside the County of Genesee, then the Purchasing Director shall be allowed to request that the lowest local vendor match the price offered by the lowest non-local vendor.
- 21) **MATERIAL WORKMANSHIP AND STANDARDS OF PERFORMANCE:** The Bidder agrees to exercise independent judgment and to complete performance under this Agreement in accordance with sound professional practices. In entering into this Agreement, the City is relying upon the professional reputation, experience, certification and ability of the Bidder by her/him/themselves or by others employed by her/him/them and working under their direction and control. The continued effectiveness of this Agreement during its term or any renewal term shall be contingent, in part, upon the Bidder maintaining her/his/their operating qualifications in accordance with the requirements of federal, state and local laws. All materials furnished must be new, of latest model and standard first grade quality, or best workmanship and design, unless otherwise expressly specified. Bidder, if required, must furnish satisfactory evidence of quality materials; offers of experimental or unproven equipment may be disregarded.
- 22) **MODIFICATIONS/CHANGES:** Any modification to this agreement must be in writing and signed by the authorized employee, officer, board or council representative authorized to make such modifications pursuant to the State law and local ordinances.
- 23) **NON-COLLUSION:** The Bidder acknowledges that by signing this document that she/he/they is/are duly authorized to make said offer on behalf of the company she/he/they represent(s) and that said bid is

genuine and not sham or collusive and not made in the interests or on behalf of any person not therein named, and that she/he/they and said bidder have not directly induced or solicited any other person(s) or corporation to refrain from responding to this solicitation and that she/he/they and said bidder have not in any manner sought by collusion to secure to themselves and said bidder any advantage over any other bidder.

- 24) **NON-DISCRIMINATION:** Pursuant to the requirements of 1976 P.A. 453 (Michigan Civil Rights Act) and 1976 P.A. 220 (Michigan Handicapped Rights Act), the local unit and its agent agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or because of a handicap that is unrelated to the person's ability to perform the duties of nondiscrimination provision identical to this provision and binding upon any and all contractors and subcontractors. A breach of this covenant shall be regarded as a material breach of this contract.
- 25) **SUBCONTRACTING:** No subcontract work shall be started prior to the written approval of the subcontractor by the City. The City reserves the right to accept or reject any subcontractor.
- 26) **UNION COMPLIANCE:** Bidder agrees to comply with all regulations and requirements of any national or local union(s) that may have jurisdiction over any of the materials, facilities, services or personnel to be furnished by the City.
- 27) **WAIVER:** Failure of the City to insist upon strict compliance with any of the terms, covenants or conditions of this Agreement shall not be deemed a waiver of that term, covenant or condition or of any other term, covenant or condition. Any waiver or relinquishment of any right or power hereunder at any one or more times shall not be deemed a waiver or relinquishment of that right or power at any other time.
- 28) **CITY INCOME TAX WITHHOLDING:** Contractor and any subcontractor engaged in this contract shall withhold from each payment to his employees the City income tax on all of their compensation subject to tax, after giving effect to exemptions, as follows:
- a) Residents of the City:
At a rate equal to 1% of all compensation paid to the employee who is a resident of the City of Flint.
 - b) Non-residents:
At a rate equal to 1/2% of the compensation paid to the employee for work done or services performed in the City of Flint.
- These taxes shall be held in trust and paid over to the City of Flint in accordance with City ordinances and State law. Any failure to do so shall constitute a substantial and material breach of this contract.
- 29) **CONTRACT DOCUMENTS:** The invitation for proposal, instructions to proposal, proposal, affidavit, addenda (if any), statement of Bidder's qualifications (when required), general conditions, special conditions, performance bond, labor and material payment bond, insurance certificates, technical specifications, and drawings, together with this agreement, form the contract, and they are as fully

a part of the contract as if attached hereto or repeated herein.

- 30) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP WITH SUBCONTRACTORS:** Nothing contained in the Contract Documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.
- 31) **EFFECTIVE DATE:** Any agreement between the City and the Bidder shall be effective upon the date that it is executed by all parties hereto.
- 32) **FORCE MAJEURE:** Neither party shall be responsible for damages or delays caused by Force Majeure nor other events beyond the control of the other party and which could not reasonably have anticipated the control of the other party and which could not reasonably have been anticipated or prevented. For purposes of this Agreement, Force Majeure includes, but is not limited to, adverse weather conditions, floods, epidemics, war, riot, strikes, lockouts, and other industrial disturbances; unknown site conditions, accidents, sabotage, fire, and acts of God. Should Force Majeure occur, the parties shall mutually agree on the terms and conditions upon which the services may continue.
- 33) **INDEMNIFICATION:** To the fullest extent permitted by law, Bidder agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Flint, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Flint, including the Project Manager, against any and all claims, demands, suits, or losses, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Flint, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Flint, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, which may arise as a result of Bidder's acts, omissions, faults, and negligence or that of any of his employees, agents, and representatives in connection with the performance of this contract. Should the Bidder fail to indemnify the City in the above-mentioned circumstances, the City may exercise its option to deduct the cost that it incurs from the contract price forthwith.

These provisions shall survive the termination or expiration of any agreement entered into as a result of this request.

- 34) **INDEPENDENT CONTRACTOR:** No provision of this contract shall be construed as creating an employer-employee relationship. It is hereby expressly understood and agreed that Bidder is an "independent contractor" as that phrase has been defined and interpreted by the courts of the State of Michigan and, as such, Bidder is not entitled to any benefits not otherwise specified herein.
- 35) **NO THIRD-PARTY BENEFICIARY:** No contractor, subcontractor, mechanic, material man, laborer, vendor, or other person dealing with the principal Contractor shall be, nor shall any of them be deemed to be, third-party beneficiaries of this contract, but each such person shall be deemed to have agreed (a) that they shall look to the principal Contractor as their sole source of recovery if not paid, and (b) except as otherwise agreed to by the principal Contractor and any such person in writing, they may not enter any claim or bring any such action against the City under any circumstances. Except as provided by law, or as otherwise agreed to in writing between the City and such person, each such person shall be deemed to have waived in writing all rights to seek redress from the City under any circumstances whatsoever.
- 36) **NON-ASSIGNABILITY:** Contractor shall not assign or transfer any interest in this contract without the prior written consent of the City provided, however, that claims for money due or to become due to Contractor from the City under this contract may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.
- 37) **NON-DISCLOSURE/CONFIDENTIALITY:** Contractor agrees that the documents identified herein as the contract documents are confidential information intended for the sole use of the City and that Contractor will not disclose any such information, or in any other way make such documents public, without the express written approval of the City or the order of the court of appropriate jurisdiction or as required by the laws of the State of Michigan.
- 38) **RECORDS PROPERTY OF CITY:** All documents, information, reports and the like prepared or generated by Contractor as a result of this contract shall become the sole property of the City of Flint.
- 39) **SEVERABILITY:** In the event that any provision contained herein shall be determined by a court or administrative tribunal to be contrary to a provision of state or federal law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision. The invalidation of one or more terms of this contract shall not affect the validity of the remaining terms.
- 40) **TERMINATION:** This contract may be terminated by either party hereto by submitting a notice of termination to the other party. Such notice shall be in writing and shall be effective 30 days from the date it is submitted unless otherwise agreed to by the parties hereto. Contractor, upon receiving such notice and prorated payment upon termination of this contract shall give to the City all pertinent

records, data, and information created up to the date of termination to which the City, under the terms of this contract, is entitled.

- 41) **TIME PERFORMANCE:** Contractor's services shall commence immediately upon receipt of the notice to proceed and shall be carried out forthwith and without reasonable delay.
- 42) **EVALUATION OF PROPOSAL:** In the City's evaluation of proposals, at minimum: cost, serviceability, financial stability, and all requirements set forth in this document shall be considered as selection and award criteria unless otherwise specified.
- 43) **PREVAILING WAGE:** When applicable, all work for this project, including that of any subcontractor or sub-subcontractor, must meet Davis-Bacon Act requirements and full prevailing wage. Information on Davis-Bacon reporting and requirements, including payroll reporting, can be found at: <https://www.dol.gov/whd/govcontracts/dbra.htm>
- 44) **INSURANCE & BONDS:** The bidder whose proposal is accepted will be required to furnish bonds and evidence of insurance within five days from date of Notice of Award. In case of failure or refusal on the part of the bidder to furnish bonds, if required, within the set period, the amount of deposit may be forfeited to the county and the contract may be awarded to the next lowest responsible bidder. Upon the notification of award and approval of the bond, the deposit will be returned to the proposer. The deposit of persons other than the one to whom award is made will be returned to the person or persons making the proposal immediately after the contract and bonds have been executed.
- 45) **PROPOSAL SUBMISSION:** Proposals and all information requested of the vendor shall be entered in the appropriate spaces. Failure to do so may disqualify the vendor's offer. An authorized officer or employee of the bidder shall submit the proposal.
- 46) **PRICES:** Prices proposed shall be for new products in current production unless otherwise specified. Where refurbished or discontinued items are offered they must be clearly identified as such. Prices proposed shall be exclusive of any rebates due the City. Any rebates the City may be entitled to should be shown as a separate line item and include expiration date. Corrections and/or modifications received after the bid closing time specified will not be accepted. Unit prices prevail.
All prices will be bid F.O.B. DESTINATION, INCLUDE ALL DELIVERY AND ANY ADDITIONAL CHARGES, and remain in effect as specified in the quotation.
- 47) **AWARD:** Unless otherwise stated in the proposal documents, the City cannot guarantee exclusivity of the contract for the proposed products or services.
Award of the proposal shall be based upon a combination of factors, including but not limited to, adherence to proposal requirements, references and any other factors that may be in the City's best interest.
The City reserves the right to reject any and all bids, and to waive any defect or irregularity in bids. The City reserves the right to accept and separate items in the bid;
and to accept the proposal that in the opinion of the City is to the best advantage and interest

of the public we serve. The City also has the right to re-solicit bids if it is deemed to be in the best interest of the City.

The City reserves the right to reject low bids which have major deviations from our specification; to accept a higher quotation which has only minor deviations. By signing the bid, the vendor agrees to accept a split award unless the awarded vendor clearly indicates that it takes exception. The bid will be awarded to that responsible, responsive bidder whose proposal conforms to this solicitation, and will be most advantageous to the City, with regard not only to price, but also to availability of product, location and quality of product considered.

The City reserves the right to award all line items, to make no award or to award on an individual line item basis, whichever is deemed to be in the best interest of the City.

Time of delivery may be a consideration in the award.

- 48) **ETHICS IN PURCHASING:** Bidders and proposers are required to comply with Flint City Ordinance 3865 in its entirety. It is incumbent upon and the responsibility of the bidder to become familiar with and comply with the Purchasing ordinances as outlined in 3865 covering chapter 18 of the Flint City Ordinances. Bidder/Proposer acknowledges in accordance with Flint City Ordinance Section 18-21.19 Ethics in Purchasing, any and all communication about the bid selection process should be directed to those City employees delegated with the authority with respect to all purchases of goods and services.

Bidder/Proposer acknowledges and agrees that while a procurement is pending, bidders and proposers shall not communicate about the solicitation with any City employee, agent, or elected official, other than the purchasing director or other City personnel identify in the solicitation. This means that bidder and proposer are prohibited from communicating orally or by written communications, including but not limited to voicemail messages, social media, email, in person, among any other form of communication while the award is pending, to the aforementioned, with the exception to those employees designated by the City. If you are unclear about the process, it is your duty and obligation to contact the designated employee(s) for clarification.

Violations of the ethics provision of the ordinance, without regard to if the violation rises to the level of a criminal violation, may subject the bidder or proposer to debarment.

- 49) **BID PROTESTS:** If Bidder/Proposal believe that they are aggrieved in connection with the solicitation or award of the purchase order or contract, they may protest the action to the City as outlined in Flint City Charter Section 18-21.15.

PROPOSAL NO.23000516
ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION IMPROVEMENTS -
WATER POLLUTION CONTROL

THE FOLLOWING PAGES MUST BE COMPLETED AND INCLUDED WITH SUBMITTAL IN THE FOLLOWING ORDER.

Purchasing Checklist:

- ☐ Cover Sheet
- ☐ Exhibit A - Complete Proposal Submittal with detailed Summary of Pricing
- ☐ Exhibit B –Qualifications and Licenses Requirements
- ☐ Exhibit C – Disclosure of Supplier Responsibility Statement
- ☐ Exhibit D - List of References
- ☐ Exhibit E - Certificate of Insurance
- ☐ Exhibit F – Non-Bidder’s Response
- ☐ City of Flint, Michigan Affidavit

❖ EXHIBIT A - SUBMITTAL WITH DETAILED SUMMARY OF PRICING

PROPOSAL NO.23000516
ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION IMPROVEMENTS -
WATER POLLUTION CONTROL

REQUEST FOR PROPOSALS AND QUALIFICATIONS**FOR ENGINEERING SERVICES****ELECTRICAL DISTRIBUTION IMPROVEMENTS**

Flint Water Pollution Control
G-4652 Beecher Road
Flint, Michigan

Project Objective

The purpose of this State of Michigan CWSRF project is to upgrade the primary electrical distribution system and sections of the secondary electrical distribution at the WPC. Primary considerations for design are effectiveness, reliability, and efficiency of the electrical distribution system. It is anticipated that the primary electrical distribution system will be improved with a newer technology process.

Existing conditions

The City of Flint WPC receives a primary voltage of 4160VAC from Consumers Energy. This primary voltage is distributed throughout the plant as follows:

The existing electrical distribution system has two circuits from Consumers Energy that are currently designated 266 and 1/6A. Each circuit is then brought into the S1South and S1North Switchgear houses separately from the substation. The S1South Switchgear feeds the S2 Switchgear located in the Blower Building. The S1North Switchgear feeds the EPS/Retention Basin Complex.

The EPS/Retention Basin Complex has a Medium Voltage Load Break disconnect on each circuit each feeding a transformer. The transformers provide Low Voltage power to a Low Voltage switchgear having a Main-Tie-Main configuration.

The S2 Switchgear has a manual Main-Tie-Main configuration. The standard operating configuration has one side fed from the 266 feeder and the other from the 1/6A feeder. From the S2 Switchgear, both feeders are distributed throughout the main body of the plant. The cabinets

are designated S2L-0 through S2L-4, S2-Tie, and S2R-7 through S2R-11 with S2L-4 and S2R-7 being the incoming feeders. These feeder breakers provide power to the following:

S2L-0: MCC XP1LV(BLOWER BUILDING MCC XP1 EXTENSION)/AERATION BUILDING/ ADMINISTRATION
S2L-1: BLOWER BUILDING MCC XP1/AGRIT/PHOSPHATE/B GRIT/MAINTENANCE BUILDING
S2L-2: OIL STORAGE/NWPS EMERGENCY/INCINERATOR COMPLEX EAST
S2L-3: EQUIPMENT BUILDING EAST/SCREW LIFT BUILDING
S2L-4: INCOMING LINE 266
S2/TIE: TIE BREAKER
S2R-7: INCOMING LINE 1/6A
S2R-8: EQUIPMENT BUILDING WEST/SO₂ BUILDING
S2R-9: SLUDGE THICKENER/DIGESTER/PAC/NWPS NORMAL/INCINERATOR COMPLEX WEST
S2R-10: BLOWER BUILDING MCC XP1/AGRIT/PHOSPHATE/B GRIT/MAINTENANCE BUILDING
S2R-11: MCC XP1LV(BLOWER BUILDING MCC XP1 EXTENSION)/AERATION BUILDING/ ADMINISTRATION

The Equipment Building, the Incinerator Complex, MCC XP1MV, MCC XP1LV and the Northwest Pumping Station all have both the 266 and 1/6A circuits available to provide power. In the case of the Equipment Building, designated the S3 Switchgear, there is a Medium Voltage Main-Tie-Main configuration. At the Incinerator Complex, there are separate transformers feeding a Low Voltage Switchgear with a Main-Tie-Main configuration. The Northwest Pumping Station and the MCC XP1LV also utilize separate transformers that supply a Low Voltage Automatic Transfer Switches. From Switchgear S2 the MCC XP1MV feeders source kirk-keyed Main-Tie-Main disconnects in the MCC XP1MV line-up providing power to the aeration blowers and the primary Grit Loop feeders.

The Digester, Oil Barn and Sludge Thickening Building all have transformers that provide Low Voltage power to Motor Control Centers within the respective buildings.

From MCC XP1MV, the two kirk-keyed primary Grit Loop feeders are a double-ended loop providing primary power to the A-Grit, B-Grit and Maintenance buildings (as well as low voltage power to the Ferrous building and other distribution equipment) through a primary distribution pad located outdoors South of the Administration building and West of the A Grit building. This distribution pad has the third kirk-key in the “middle” of the loop.

The Third Avenue Pumping Station has two dual-fed 8320/4160VAC primary transformers. These transformers can each receive power from either the 266 or 1/6A sources through a kirk-keyed disconnect system.

Proposed Improvements

The intent of this Request for Proposal is to develop recommendations, design specification and provide construction oversight for the replacement and upgrading of the following Switchgear, their corresponding transformers, the overall electrical distribution system and other equipment as listed or implied:

1. Switchgear S1North.
2. Switchgear S1South.
3. Switchgear S2.
4. Switchgear S3.
5. Primary distribution transformers throughout the facility.
6. Primary distribution transformers at Third Avenue Pumping Station.

Scope of Services - The Engineering Consultant shall perform the following services:

A. Design

This project is a State of Michigan CWSRF project and shall conform and be designed to all requirements required to adhere to the State's project parameters and specifications. The Consultant shall prepare Design and Construction documents consisting of Civil, Structural, Mechanical, Electrical, and Instrumentation drawing sheets and specifications. The Construction Documents shall be developed for the purpose of bidding the construction of the facilities and acquiring a MDEQ Part 41 Construction Permit for the above improvements. Upon MDEQ approval, and receipt of the Permit, the documents shall be used to competitively bid the project for construction. The Consultant shall ensure that the Construction Documents result in a complete and operational system as described above and below. The design shall incorporate the following project elements:

1. Specifications for concrete and flooring repairs and new installation where required including walkways, housekeeping pads and foundations.
2. Provide specifications and design for the new electrical distribution equipment listed above in accordance and to seamlessly integrate with City of Flint Water Pollution Facility existing SCADA and electrical distribution design and including any affected equipment owned or operated by Bioworks, Inc. (e.g. loss of power trip relay to prevent backfeed into Consumers Energy's system.) The facility utilizes Eaton switchgear and transformers and Rockwell Automation Programmable Logic ControlLogix systems. Specifications shall design non-contact IR observation and testing windows. Specifications shall require a witness test at each production facility for a minimum of two (2) City representatives. Appendix A may be used as a template but the actual design shall reflect the listed Scope of Services as a minimum.
3. Insofar as possible, the specifications and design shall show that the locations and sizes of the equipment shall be maintained unless otherwise noted. Conduit entrances and cable lengths shall be verified with regards to feeder breaker connections. Terminals sizes shall be verified. Labeling shall be updated as necessary or requested by City of Flint.
4. Switchgear S1, both North and South, shall have full house designs to reduce environmental contamination and deterioration of the switchgear. The houses shall be heated. Wireless communications compatible with existing systems shall be designed and specified to allow monitoring of switchgear and house conditions and electrical data.
5. Switchgear S2 shall maintain the Main-Tie-Main functionality utilizing Eaton control schemes designed for automatic transfer upon loss of power. There shall not be any automatic re-transfer upon restoration of power. The re-transfer scheme shall match existing systems at the East Pumping Station and Third Avenue Pumping Station. SCADA network connections and communications shall be included. Arc-flash ductwork necessary to reduce arc-flash exposure and to reduce the switchgear footprint shall be included and shall exhaust to the South. Considerations for the monitoring and control of Bioworks, Inc. equipment shall be

designed into the switchgear. Considerations shall be designed and specified for the balancing and transfer of loads with regards to the most efficient use of Bioworks, Inc.'s electrical production.

6. Switchgear S3 shall be designed without the existing Main-Tie-Main configuration which shall be replaced with primary voltage, load-break fused disconnects. It is anticipated that existing conduits shall be used to supply the disconnects and the switchgear shall be designed as such. Switchgear S3 shall additionally be designed with a contingency to temporarily maintain the functionality of Blower 5 utilizing the existing contactor and control equipment which shall be removed at a later date. Dry-type transformers to replace the two (2) GE Model 9T26F2060G4, 500 kVA, 4160-480Y/277 transformers shall be included to provide power to the associated motor control centers and shall include temperature monitoring (as a minimum) to be populated into the SCADA network. SCADA network connections shall be included.
7. With the exception of the transformers located in Switchgear S3, the replacement of the primary transformers at the facility and its Third Avenue Pumping Station shall be verified, designed and specified with more efficient transformers but are contingent on available funding. Spigots for oil testing shall be located for easy access without opening the transformer. The transformers shall include but not be limited to:
 - a. Compartment Transformer No. 1 (Digester)
GE Class OA, 1000 kVA, 4160-480Y/277
 - b. Compartment Transformer No. 2 (Sludge Thickener)
GE Class OA, 500 kVA, 4160-480Y/277
 - c. Compartment Transformer No. 3 (A Grit)
GE Class OA, 500 kVA, 4160-480Y/277
 - d. Compartment Transformer No. 4 (B Grit)
GE Class OA, 500 kVA, 4160-480Y/277
 - e. Compartment Transformer No. 5
GE Class OA, 500 kVA, 4160-480Y/277
 - f. Pre-Aeration Transformer
GE Sealed Gas, Class AA, 300 kVA, No. E687866
 - g. Incinerator Complex Transformers (2)
GE Oil filled Class OA, 1500 kVA 4160-480Y/277
 - h. Northwest Pump Station Transformers (2)
GE Oil filled Class OA/FA, 500 kVA, 4160-480Y/277
 - j. Maintenance Building Transformer
GE Class OA, 225 kVA, 4160-480Y/277
 - k. East Pumping Station Transformers (2)
GE Oil filled Class OA, 1000 kVA, 4160-480Y/277
 - l. Third Avenue Pumping Station Transformers (2)
GE Oil filled Class OA, 2000 kVA, 8320-4160Y/2400
8. Provide specifications and design for SCADA communications with regards to monitoring the new and existing electrical distribution equipment including PLC programming and HMI interfacing. Details shall be coordinated with the City of Flint WPC SCADA Supervisor but shall incorporate the following for each switchgear, motor control center and independent power monitoring unit as a minimum: voltage per phase, amperage per phase, kilowatts, kilowatt-hours, and

Power Factor. Alarm programming and annunciation shall be included where applicable. Additional data points may be requested. HMI screens shall compile the information into an easily readable format with the goal of showing a total and a breakdown of facility power consumption “at a glance” and data shall be collected in Historian. An HMI screen for each switchgear shall be included showing the state of the switchgear and any other pertinent information and shall be approved by the WPC SCADA Supervisor.

9. **A Primary Concern is the scheduling of the work involved.** The consultant shall develop a step-by-step schedule, including but not limited to, procurement, installation and removal of bypass or diversion apparatuses, for the installation of the new electrical distribution equipment. The schedule shall not hinder or otherwise detrimentally affect the plant process to the satisfaction of WPC management nor shall the schedule in any way result in a NPDES permit violation. *This factor is of utmost importance.*
10. Specify and design any necessary building modifications, including demolition.
11. Specify and design Arc-Flash Hazard Calculation, Protective Device Coordination and Short-Circuit Coordination studies to be performed on all the new electrical distribution equipment and upon any affected downstream equipment’s arc-flash hazard rating and protective device or short-circuit coordination. The firm performing the studies shall obtain any needed information from Consumers Energy and the City of Flint where practicable, collect any other required information, provide a detailed report and an AutoCAD one-line diagram with arc-flash and related notation and procure and install any placards, stickers, signs, etc. on the equipment.
12. Specify and design a power factor correction system that shall be procured and integrated into the electrical distribution system either during the new installation, if deemed necessary or advisable, or otherwise provide connection points for a future installation of a power factor correction system.
13. Design a load-shedding schedule that shall not detrimentally affect plant processes for the purpose of temporarily reducing the loads to Consumers Energy for up to 12 hours. If such a schedule is unattainable, a report shall be provided describing the reasoning.
14. Specify a Maintenance schedule for the new electrical distribution equipment to include monthly, 6-month, yearly and 3-year procedures, including IR observation and testing. Specify the manufacturer and contractor to provide baseline information collection for purposes of comparing against future International Electrical Testing Association (NETA)-based testing. It shall be specified that the new equipment, maintenance schedules and notifications shall be entered into the Antero Maintenance system following the existing format. Review & make recommendations to existing Switchgear Maintenance Contract to include new equipment and procedures.

B. Bidding Support Services

The Consultant shall prepare appropriate bid documents, conduct a prebid meeting with potential contractors, respond to questions during the bidding process, and prepare addenda as required during the course of bidding. The Consultant shall distribute minutes and responses to questions raised at the meeting. The Consultant shall assist in the review of the

bids and make a recommendation for award of the Contract. The work is to be coordinated with other on-going projects as needed.

C. Construction Services - The Consultant shall perform the following services during construction:

1. Respond to Construction Contractor Requests for Information (RFIs) with City of Flint WPCF approval.
2. Attend regularly scheduled construction meetings during the course of construction. Take meeting minutes and provide copies to all attendees. Provide a photographic history of the demolition, construction and commissioning of the equipment.
3. Insure that charges and costs are consistent with the Consultant's submitted bid and project schedule.
4. Resolve field engineering issues in conjunction with the City of Flint WPC and provide supervision during construction. The Consultant shall include in the Proposal an anticipated level of resident engineering and onsite inspections.
5. Insure that the Construction Contractor is in compliance with all EPA and EGLE requirements for a CWSRF project. Ex. Review of Davis-Bacon payroll requirements
6. Update and correct the design drawings to produce project record drawings depicting the as-built conditions.

D. Start-up Services

The Consultant shall assist the Contractor and Owner's staff during the start-up period and shall provide oversight and engineering during the start-up period. The Consultant shall specify and/or provide equipment specific training that shall encompass detailed operation and maintenance of the equipment. The Consultant shall include in the Proposal an anticipated level of office engineering, inspections, and onsite start-up services.

E. Deliverables - The Consultant shall provide the following:

1. Pre-design draft report, five copies for review.
2. Final pre-design report, five copies.
3. 50% design submittals, five copies.
4. Specification documents and drawings. Drawings shall be in AutoCAD format.
5. 90% design submittals, five hard copies and specifications.

6. 100% design submittals, five hard copies and specifications.
7. Bid drawing sets, five hard copies, 24" X 36" drawings, five copies of 11" X 17" drawings, and specifications.
8. Record Drawing Set - two hard copies, 24" X 36" drawings and one electronic AutoCAD copy.
9. Equipment Manuals – three hard copies and one electronic copy in Microsoft Word.

F. Contents of the Proposal The proposal shall be issued in the following format:

1. **Project Team-** Provide an organizational chart with a listing of the Consultant's project team members. Resumes of key project team members shall be attached to the proposal. Sub-consultant resumes shall be included. Consultants shall agree not to substitute key members without written authorization of the City.
2. **Approach and Design Concept-** Describe the Consultant's proposed approach to the pre-design and design of the facilities.
3. **Scope of Services-** Provide a detailed list of all task items to be performed in the conformance with the Scope of Services work herein.
4. **Project Schedule-** Provide a detailed project schedule listing pre-design, design, bidding, and anticipated construction period. The schedule shall not hinder the plant process in any manner.
5. **References-** Provide references for any previous projects of this nature or for demonstration of the efficacy of the design concept.
6. **Insurance-** State the insurance types and limits to be maintained by the Consultant during the course of the project.

G. General Bid and Proposal Requirements

The formal detailed proposal is being solicited to provide engineering design and construction management services. Proposal statements must include the following:

1. The name, address, telephone number, and fax number of the consulting engineering firm.
2. The name, telephone number, and e-mail address of the primary contact person for the proposal.

3. Composition of the team proposed to provide the consulting engineering firm's design and construction services, including any subcontractors. The team description should include:
 - a. Specific discipline covered by each team member; that is, mechanical, process, structural, electrical, instrumentation and controls, etc.
 - b. Resumes demonstrating related work experience.
 - c. Indication of the current workload of specific team members, and hours available for this project. Please note that subsequent substitution of proposed team members without City concurrence may result in rejection of the firm for this project.
4. A description of the qualifications of the project manager proposed to lead this project.
5. Ability of the consulting engineering firm and any sub consultants to dedicate proposed project team members to provide the necessary services. Subsequent substitution of proposed team members without City concurrence may result in rejection of the firm for this project.
6. A summary statement indicating the vendor's understanding of the project, its goals and purposes, and the constraints or limitations that must be observed while achieving them.
7. A listing of equipment the consultant envisions needing to obtain the project goals.
8. The design concept and approach to be used to achieve a successful and cost effective project.
9. A detailed Project Scope of Services. References to related experiences on previous projects may be included.
10. A schedule providing milestone dates after a "Notice To Proceed", and expected completion for each phase of the services to be provided.

Detailed responses to the RFP shall be submitted to the City Purchasing Department on or before the deadline date and time specified.

Failure to supply all requested information and documentation listed under proposal statements shall result in bid disqualification.

List any value-added considerations or alternate proposal on a separate sheet of paper.

The proposals will be rated to determine the best value for the City. Ratings will be based on the following factors:

- Qualifications of the firm and the team members to be dedicated to this project, including project-related experience
- Qualifications of the project manager to be dedicated to this project.
- Ability of the firm and dedicated personnel to provide the services.
- Understanding of the project, its goals, purposes, and related constraints.
- Quality of the design, design concept, and the potential for achieving project goals.
- Quality of the proposal, including level of detail and presentation.

These items are not of equal importance. Responding firms will be scored on each category, and a composite rating calculated based on the rating form below. The City reserves the right to reject any and all proposal submittals.

Proposal Statement Evaluation Form			
Item	Score	Weight (%)	Rating
1. Qualifications of firm, project manager, and personnel to be dedicated for provision of services		25	
2. Ability of the firm and dedicated personnel to provide the services (workload)		10	
3. Understanding of the project and its goals		25	
4. Design concept		30	
5. Quality of the proposal, including level of detail and presentation		10	
<i>TOTAL</i>		<i>100</i>	

1. Failure to use this bid form may result in bid disqualification.
2. List value-added considerations on a separate sheet of paper.
3. Quantities (dollar amounts) are not guaranteed.

Terms: _____ Dest: _____ Fed. ID#: _____

FIRM NAME: _____

ADDRESS: _____

CITY/STATE/ZIP _____

PHONE: _____ FAX: _____

SIGNED: _____ DATE: _____

Please submit original plus one copy.

Bid results may be viewed next business online at www.cityofflint.com/purchasing

APPENDIX A

- 1 Lot of Eaton Engineering Services
 - PSE – Protective Relay Programming (entire project)
 - PSA – Main-Tie-Main ATO Programming (S2 Main Switchgear)
 - EESS – Startup/Training (entire project)
 - PSE – Short Circuit, Coordination, Arc Flash Study
- 1 S2 Main MV Switchgear Line-up (M-T-M w/ ATO)
- 1 S1 North Sheltered Aisle MV Switchgear Line-up
- 1 S1 South Sheltered Aisle MV Switchgear Line-up
- 1 S3 Substation consisting of:
 - (1) 3 bay MV Switch Line-up
 - (2) 500kva transformers closed coupled to MV Switches and ATC on secondary.

BILL OF MATERIAL

Item No.	Qty	Product	Description
	1	Engineering Services	Power Systems Engineering
			EDR5000 Relay Programming
		Designation	Protective Relay Programming

Item No.	Qty	Product	Description
	1	Engineering Services	Power Systems Automation
			Main-Tie Main Auto Transfer Programming w/ Allen Bradley PLC
		Designation	S2 - PSA M-T-M Automation

Item No.	Qty	Product	Description
	1	EESS SAT	Engineering Services Start-up
		Designation	Start-up
	Qty	List of Materials	
	1	Jobsite: , Flint, Michigan 48503	
	8	Customer Training Provided by EESS: 16 Hours	
	2	MVA - 5kV Outdoor with Aisle (OPC)	
	2	Power Transformers	
	1	MVS 5/15 kV Trnsfmr Primary Switch	
	1	MVA 5kV Indoor	

Item No.	Qty	Product	Description
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- 1 EESS Services EESS Short Circuit and Coordination Studies: Arc Flash Hazard Analysis, Arc Flash Labels - Standard

Designation Study

Qty List of Materials

- 1 ESS Study-BidManager
- 1 Arc Flash study
- 1 Arc Flash Labels - Standard

Item No.	Qty	Product	Description
	1	Medium Voltage Assemblies	Medium Voltage Assemblies, 4160V, 3-Phase, 3-Wire, 60 Hertz, 250 MVA / 29 kA, 1200 Amps Main Bus Rating

Designation S2 - M-T-M MAIN MVA

Structure

- 1 Cell, 5kv 1200 A**
 - 1 Hinged rear doors
 - 1 Rear door padlock provisions
 - 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 - 3 CT, single ratio, standard accuracy
 - 3 CT, single ratio, standard accuracy
 - 1 Zero Sequence CT, Std 7.25in ID
 - 1 Breaker 3 cycle interrupting
 - 1 MOC switch 7 poles (4a / 3b contacts)
 - 1 TOC switch 7 poles (3a / 4b contacts)
 - 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment
 - 1 Breaker Control Switch, Electros witch Series 24
 - 1 Capacitor Trip Device, ITI, CTD-2
 - 1 Common MCCB protection for motor, close, and trip ckts
 - 1 Light - Eaton - E34-LED-P-T
 - 1 Light - Eaton - E34-LED-P-T
 - 1 Communication - Eaton - PXG900
 - 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 2 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 3 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

Structure

- 4 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

Structure

- 5 Cell, 5kv 1200 A**
 1 Lightning arrester distribution class 6 kV - Set of 3
 1 Hinged rear doors
 1 Rear door padlock provisions
 1 Upper Sectionalizing Bus 1200A
 1 Upper Vertical Bus 1200A
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 6 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 1 Upper Left Sectionalizing Bus 1200A
 0 Cable lugs, extra sets (1st included)
- B Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Relay - Protective - Eaton - EDR-5000
- C Compartment - CPT 1-phase 15 kVA 5 kV**
- D Compartment - Voltage transformer 5 kV**

- Structure**
- 7 Cell, 5kv 1200 A**
 1 Lightning arrester distribution class 6 kV - Set of 3
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- B Compartment - CPT 1-phase 15 kVA 5 kV**
- A Compartment - Voltage transformer 5 kV**
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment
 1 Breaker Control Switch, Electrosch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 8 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electros witch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 9 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electros witch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 10 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electroschwitch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

- Structure**
- 11 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Rear door padlock provisions
 0 Cable lugs, extra sets (1st included)
- D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A**
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking
 - Breaker Compartment
 1 Breaker Control Switch, Electroschwitch Series 24
 1 Capacitor Trip Device, ITI, CTD-2
 1 Common MCCB protection for motor, close, and trip
 ckts
 1 Light - Eaton - E34-LED-P-T
 1 Light - Eaton - E34-LED-P-T
 1 Communication - Eaton - PXG900
 1 Relay - Protective - Eaton - EDR-5000

Structure

- 1 Communication - Eaton - PXG900
- 11 Door gaskets
- 11 Ventilation filters (indoor)
- 11 Rodent Proofing
- 11 Epoxy bus supports
- 11 Mimic Bus (plastic)
- 1 Pendants for Operating Integrated Electrical Racking
- 11 Control Wire Gauge - #14
- 11 Control Wire Color - Gray
- 31 CT Wire Gauge - #14 SIS
- 31 CT Wire Color - Gray
- 1 Ground Wire Gauge - Standard #14
- 1 Ground Wire Color - Green
- 11 Wire Identification
- 11 General Wire Markers - Adhesive wrap-around
- 11 Harness Wire Markers - Adhesive Wrap-Around
- 11 VW-1 Type Wiring
- 11 Insulated Lock-In Fork wire lugs
- 11 Communication wiring - RS-485
- 31 Short circuit terminal block
- 11 Device nameplate
- 1 Provisions For PSA Backpan - PSA To Provide Auto-Transfer Scheme and Programming
- 11 Scada adder
- 1 Accessories - standard set
- 1 Set of extension rails
- 1 Breaker lifting yoke
- 1 Test jumper
- 1 Levering crank
- 1 Maintenance tool for manually charging the breaker
- 1 Breaker lifting device (Manual Crank)
- 1 Test cabinet, AC
- 1 Dockable dolly
- 1 Ramp
- 3 Spare primary fuse
- 3 Spare secondary fuse
- 2 Spare Touch-Up Paint
- 1 One-day Test
- 1 Freight on Board
- 1 Certified test report

Item No.	Qty	Product	Description
	1	Medium Voltage Assemblies-OPC	Medium Voltage Assemblies, 4160V, 3-Phase, 3-Wire, 60 Hertz, 250 MVA / 29 kA, 1200 Amps Main Bus Rating
		Designation	S1 SOUTH - MAIN PLANT
Structure	1	Cell, 5kv 1200 A	1 Lightning arrester distribution class 6 kV - Set of 3 1 Hinged rear doors 1 3-pt Latch with provision for padlock 1 T-handle Latch 1 GFCI Receptacle (one on each end of aisle included as standard)
	D	Compartment - Breaker Compartment 50 VCPW-ND 250 1200A	3 CT, single ratio, standard accuracy 3 CT, single ratio, standard accuracy 3 Zero Sequence CT, Std 7.25in ID 1 Breaker 3 cycle interrupting 1 MOC switch 7 poles (4a / 3b contacts) 1 TOC switch 7 poles (3a / 4b contacts) 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment 1 Breaker Control Switch, Electroschwitch Series 24 1 M22 LED Push-To-Test light assembly, qty 2 (red & green) 1 Common Fuse protection for motor, close, and trip ckts 1 Capacitor Trip Device, ITI, CTD-2 1 Relay - Protective - Eaton - EDR-5000 2 Light - Eaton - E34 1 Communication - Eaton - PXG900
	A	Compartment - Voltage transformer 5 kV, c/w certified test	
	B	Compartment - CPT 1-phase 10 kVA 5 kV	
Structure	2	Cell, 5kv 1200 A	1 Hinged rear doors 1 Lower Vertical Bus 1200A 0 Cable lugs, extra sets (1st included) 1 3-pt Latch with provision for padlock 1 T-handle Latch 1 Door-Mounted GFCI Receptacle

- Structure**
- 3 Cell, 5kv 1200 A**
 1 Lightning arrester distribution class 6 kV - Set of 3
 1 Hinged rear doors
 0 Cable lugs, extra sets (1st included)
 1 3-pt Latch with provision for padlock
 1 T-handle Latch
 1 Door-Mounted GFCI Receptacle
A Compartment - Voltage transformer 5 kV, c/w certified test
B Compartment - CPT 1-phase 10 kVA 5 kV
D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment
 1 Breaker Control Switch, Electros witch Series 24
 1 M22 LED Push-To-Test light assembly, qty 2 (red & green)
 1 Common Fuse protection for motor, close, and trip ckts
 1 Capacitor Trip Device, ITI, CTD-2
 1 Relay - Protective - Eaton - EDR-5000
 2 Light - Eaton - E34

- Structure**
- 4 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Lower Vertical Bus 1200A
 0 Cable lugs, extra sets (1st included)
 1 3-pt Latch with provision for padlock
 1 T-handle Latch
 1 GFCI Receptacle (one on each end of aisle included as standard)

Structure

- 4 Sheltered aisle
- 1 Roof mounted exhaust fan
- 4 Fluorescent light in aisle
- 1 Heater in aisle
- 1 125 MPH Wind Rating
- 4 Mimic Bus (plastic)
- 2 Closed-Door Racking Provision w/ plug - Breaker
Compartment
- 1 Pendants for Operating Integrated Electrical
Racking
- 4 Control Wire Gauge - #14
- 4 Control Wire Color - Gray
- 6 CT Wire Gauge - #14 SIS
- 6 CT Wire Color - Gray
- 1 Ground Wire Gauge - Standard #14
- 1 Ground Wire Color - Green
- 4 Wire Identification
- 4 General Wire Markers - Adhesive wrap-around
- 4 Harness Wire Markers - Adhesive Wrap-Around
- 4 VW-1 Type Wiring
- 4 Insulated Lock-In Fork wire lugs
- 6 Short circuit terminal block
- 4 Device nameplate
- 1 Accessories - standard set
- 1 Maintenance tool for manually charging the breaker
- 1 Levering crank
- 1 Test jumper
- 1 Breaker lifting yoke
- 1 Set of extension rails
- 1 One-day Test
- 1 Freight on Board
- 1 Certified test report

Item No.	Qty	Product	Description
	1	Medium Voltage Assemblies-OPC	Medium Voltage Assemblies, 4160V, 3-Phase, 3-Wire, 60 Hertz, 250 MVA / 29 kA, 1200 Amps Main Bus Rating
		Designation	S1 NORTH - EAST PUMP STATION
Structure	1	Cell, 5kv 1200 A	1 Hinged rear doors 1 Lower Vertical Bus 1200A 0 Cable lugs, extra sets (1st included) 1 3-pt Latch with provision for padlock 1 T-handle Latch 1 GFCI Receptacle (one on each end of aisle included as standard)
Structure	2	Cell, 5kv 1200 A	1 Lightning arrester distribution class 6 kV - Set of 3 1 Hinged rear doors 1 3-pt Latch with provision for padlock 1 T-handle Latch 1 Door-Mounted GFCI Receptacle
	D	Compartment - Breaker Compartment 50 VCPW-ND 250 1200A	3 CT, single ratio, standard accuracy 3 CT, single ratio, standard accuracy 3 Zero Sequence CT, Std 7.25in ID 1 Breaker 3 cycle interrupting 1 MOC switch 7 poles (4a / 3b contacts) 1 TOC switch 7 poles (3a / 4b contacts) 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment 1 Breaker Control Switch, Electroschwitch Series 24 1 M22 LED Push-To-Test light assembly, qty 2 (red & green) 1 Common Fuse protection for motor, close, and trip ckts 1 Capacitor Trip Device, ITI, CTD-2 1 Relay - Protective - Eaton - EDR-5000 2 Light - Eaton - E34 1 Communication - Eaton - PXG900
	A	Compartment - Voltage transformer 5 kV, c/w certified test	
	B	Compartment - CPT 1-phase 10 kVA 5 kV	

- Structure**
- 3 Cell, 5kv 1200 A**
 1 Lightning arrester distribution class 6 kV - Set of 3
 1 Hinged rear doors
 0 Cable lugs, extra sets (1st included)
 1 3-pt Latch with provision for padlock
 1 T-handle Latch
 1 Door-Mounted GFCI Receptacle
A Compartment - Voltage transformer 5 kV, c/w certified test
B Compartment - CPT 1-phase 10 kVA 5 kV
D Compartment - Breaker Compartment 50 VCPW-ND 250 1200A
 3 CT, single ratio, standard accuracy
 3 CT, single ratio, standard accuracy
 1 Zero Sequence CT, Std 7.25in ID
 1 Breaker 3 cycle interrupting
 1 MOC switch 7 poles (4a / 3b contacts)
 1 TOC switch 7 poles (3a / 4b contacts)
 1 Discrete I/O Operated Integrated Electrical Racking - Breaker Compartment
 1 Breaker Control Switch, Electros witch Series 24
 1 M22 LED Push-To-Test light assembly, qty 2 (red & green)
 1 Common Fuse protection for motor, close, and trip ckts
 1 Capacitor Trip Device, ITI, CTD-2
 1 Relay - Protective - Eaton - EDR-5000
 2 Light - Eaton - E34

- Structure**
- 4 Cell, 5kv 1200 A**
 1 Hinged rear doors
 1 Lower Vertical Bus 1200A
 0 Cable lugs, extra sets (1st included)
 1 3-pt Latch with provision for padlock
 1 T-handle Latch
 1 GFCI Receptacle (one on each end of aisle included as standard)

Structure

- 4 Sheltered aisle
- 1 Roof mounted exhaust fan
- 4 Fluorescent light in aisle
- 1 Heater in aisle
- 1 125 MPH Wind Rating
- 4 Mimic Bus (plastic)
- 2 Closed-Door Racking Provision w/ plug - Breaker
Compartment
- 1 Pendants for Operating Integrated Electrical
Racking
- 4 Control Wire Gauge - #14
- 4 Control Wire Color - Gray
- 6 CT Wire Gauge - #14 SIS
- 6 CT Wire Color - Gray
- 1 Ground Wire Gauge - Standard #14
- 1 Ground Wire Color - Green
- 4 Wire Identification
- 4 General Wire Markers - Adhesive wrap-around
- 4 Harness Wire Markers - Adhesive Wrap-Around
- 4 VW-1 Type Wiring
- 4 Insulated Lock-In Fork wire lugs
- 6 Short circuit terminal block
- 4 Device nameplate
- 1 Accessories - standard set
- 1 Maintenance tool for manually charging the breaker
- 1 Levering crank
- 1 Test jumper
- 1 Breaker lifting yoke
- 1 Set of extension rails
- 1 One-day Test
- 1 Freight on Board
- 1 Certified test report

Item No.	Qty	Product	Description
	1	Medium Voltage Switches	Indoor, 5kV Max, 4.16kV system, 3 wires, 800A, Silver-Plated Copper bus, 3 Structures, Double Ended (Cable Connection to Transformer - Eaton Sourced, Load Side)

Designation S3 MV SWITCHES

Qty List of Materials

- 3 Indoor Enclosure
- 3 Copper silver plated bus
- 3 800A Copper silver plated main bus
- 3 Fully Insulated - Sleeve 5kV
- 3 Epoxy Insulators
- 3 Interior Touch-Up Paint
- 3 Exterior Touch-Up Paint
- 3 Mimic Bus Plastic Adhesive
- 3 Dust Proof Roof
- 2 5kV Switch 600A, 40kA mom, 40kA fc
- 3 Rodent Proof
- 1 Cable Entrance Section
- 1 Freight on Board
- 2 Set of Expulsion - E Rated, RBA-400 - 100E fuses
- 2 Visual blown fuse indication
- 2 Spare set of Expulsion - E Rated, RBA-400 - 100E fuses
- 2 Cable Connection to Transformer - Eaton Sourced
- 3 Rear door - 3 Point Latching with Handles
- 2 Horizontal barrier
- 3 Vertical barrier
- 2 Lower screen barrier
- 3 Bottom Plate
- 1 Epoxy Wall Bushing
- 1 Wall Bushing
- 2 Premium Drive Rod Links
- 1 2 set(s) of Compression lugs for Entrance
- 1 1 Compression lug for Ground Size=4/0
- 1 Steel cable support
- 1 Total Freight Price

Item No.	Qty	Product	Description
	1	Power Transformers	Power Transformer, 500 KVA, MV Switch, Air Terminal Chamber,

Designation S3 - XFMR LEFT

Qty List of Materials

- 1 Secondary Substation, Ventilated VPI Polyester 500KVA

Item No.	Qty	Product	Description
	1	Power Transformers	Power Transformer, 500 KVA, MV Switch, Air Terminal Chamber
		Designation	S3 - XFMR RIGHT
		Qty	List of Materials
	1	Secondary Substation, 500KVA	Ventilated VPI Polyester

Medium Voltage Assemblies General Information SWITCHGEAR S2

System Parameters

System Voltage: 4160 System Grounding: Solid
Short Circuit Rating: 250 MVA / 29 kA BIL: 60
Phase Sequence: 123

Main Bus Specifications

Bus Insulation Fluidized Bed Epoxy Amps: 1200
Bus Support Insulation: Epoxy Bus Plating: Silver
Ground Bus: 0.25 x 2 Ground Bus Plating: None
Neutral Bus: None

Structure Specifications

Enclosure Type: Indoor Dust Proof: Yes
Design Type: 26 Wide Rodent Proof: Yes
Front Door Latching: 1/4 Turn Knob Drip Proof Roof: No
Interior Paint Color: ANSI-61 Light Grey Base Channel: No
Exterior Paint Color: ANSI-61 Light Grey Door Gaskets: Yes
Rear Door Access: Doors Outdoor House: No
Rear Door Latching: Bolted Doors w/Padlock Floor Plate: None

Control Power Specifications

Breaker Control Power Source: CPT 1st Trip Coil Voltage: 120V Cap-CTD2
Charging Motor Voltage: 120 VAC 2nd Trip Coil Voltage: None
Close Coil Voltage: 120 VAC U/V Trip Coil Voltage: None

Wiring Specifications

Control Wire Gauge: Standard #14 Control Wire Color: Gray
CT Wire Gauge: Standard #14 CT Wire Color: Gray
Gnd Wire Gauge: Standard #14 Gnd Wire Color: Green
Wiring Type: Wire ID Terminal Type: Insulated Lock-Fork
Marker Type: Adhesive wrap-around Type of Transfer: Provisions For PSA Backpan

Applicable Standards

Seismic Zone: IBC/CBC Seismic Qualified 3rd Party Certification: UL
California Code: No Chicago Code: No

Total of 11 Structures, Total Width of 286 Inches

Split #	Struct #	Width	Height	Depth	Description
1	1	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
1	2	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
1	3	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
1	4	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
1	5	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker

Shipping Split Totals:

Structure Weight = 8200 Breaker Weight = 1725 for 5 Breakers Width = 130

Split #	Struct #	Width	Height	Depth	Description
2	6	26.00	95.00	86.25	Breakers Structure,Breaker over Auxilliary

Shipping Split Totals:

Structure Weight = 1840 Breaker Weight = 345 for 1 Breakers Width = 26

Split #	Struct #	Width	Height	Depth	Description
3	7	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker

Shipping Split Totals:

Structure Weight = 1740 Breaker Weight = 345 for 1 Breakers Width = 26

Split #	Struct #	Width	Height	Depth	Description
4	8	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
4	9	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
4	10	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker
4	11	26.00	95.00	86.25	Breakers Structure,Auxilliary over Breaker

Shipping Split Totals:

Structure Weight = 6560 Breaker Weight = 1380 for 4 Breakers Width = 104

Str#	Unit	Description/Modifications
1	D	Breaker Compartment 50 VCPW-ND 250 1200A

2	D	Breaker Compartment 50 VCPW-ND 250 1200A
3	D	Breaker Compartment 50 VCPW-ND 250 1200A
4	D	Breaker Compartment 50 VCPW-ND 250 1200A
5		Lightning arrester distribution class 6 kV - Set of 3
D		Breaker Compartment 50 VCPW-ND 250 1200A
6	B	Breaker Compartment 50 VCPW-ND 250 1200A
C		CPT 1-phase 15 kVA 5 kV
D		Voltage transformer 5 kV
7		Lightning arrester distribution class 6 kV - Set of 3
A		Voltage transformer 5 kV
B		CPT 1-phase 15 kVA 5 kV
D		Breaker Compartment 50 VCPW-ND 250 1200A
8	D	Breaker Compartment 50 VCPW-ND 250 1200A
9	D	Breaker Compartment 50 VCPW-ND 250 1200A
10	D	Breaker Compartment 50 VCPW-ND 250 1200A
11	D	Breaker Compartment 50 VCPW-ND 250

Medium Voltage Assemblies General Information SWITCHGEAR S1SOUTH

System Parameters

System Voltage: 4160
Short Circuit Rating: 250 MVA / 29 kA
Phase Sequence: 123

System Grounding: Solid
BIL: 60

Main Bus Specifications

Bus Insulation Fluidized Bed Epoxy
Bus Support Insulation: Glass Poly
Ground Bus: 0.25 x 2
Neutral Bus: None

Amps: 1200
Bus Plating: Silver
Ground Bus Plating: None

Structure Specifications

Enclosure Type: Sheltered aisle
Design Type: 26 Wide
Front Door Latching: T-Handle
Interior Paint Color: ANSI-61 Light Grey
Exterior Paint Color: ANSI-61 Light Grey
Aisle Paint Color: ANSI-61 Light Grey
Rear Door Access: Doors

Rear Door Latching: 3pt Latch w/Padlock
Aisle Fan: Yes
Aisle Heater: Yes
Fluorescent Aisle Light: Yes
Sheltered Aisle Ext.: No
Space Heaters: Yes

Control Power Specifications

Breaker Control Power Source: CPT
Charging Motor Voltage: 120 VAC
Close Coil Voltage: 120 VAC

1st Trip Coil Voltage: 120V Cap-CTD2
2nd Trip Coil Voltage: None
U/V Trip Coil Voltage: None

Wiring Specifications

Control Wire Gauge: Standard #14
CT Wire Gauge: Standard #14
Gnd Wire Gauge: Standard #14
Wiring Type: Wire ID
Marker Type: Adhesive wrap-around

Control Wire Color: Gray
CT Wire Color: Gray
Gnd Wire Color: Green
Terminal Type: Insulated Lock-Fork
Type of Transfer: None

Applicable Standards

Seismic Zone: None
California Code: No

3rd Party Certification: UL
Chicago Code: No

Total of 4 Structures, Total Width of 104 Inches

Split #	Struct #	Width	Height	Depth	Description
1	1	26.00	144.00	168.00	Breakers Structure,Auxilliary over Breaker
1	2	26.00	144.00	168.00	Breakers Structure
1	3	26.00	144.00	168.00	Breakers Structure,Auxilliary over Breaker
1	4	26.00	144.00	168.00	Breakers Structure

Shipping Split Totals:

Structure Weight = 11744 Breaker Weight = 690 for 2 Breakers Width = 104

Str#	Unit	Description/Modifications
1		Lightning arrester distribution class 6 kV - Set of 3
A		Voltage transformer 5 kV, c/w certified test
B		CPT 1-phase 10 kVA 5 kV
D		Breaker Compartment 50 VCPW-ND 250 1200A
2		
3		Lightning arrester distribution class 6 kV - Set of 3
A		Voltage transformer 5 kV, c/w certified test
B		CPT 1-phase 10 kVA 5 kV
D		Breaker Compartment 50 VCPW-ND 250 1200A
4		

Medium Voltage Assemblies General Information SWITCHGEAR S1NORTH

System Parameters

System Voltage: 4160
Short Circuit Rating: 250 MVA / 29 kA
Phase Sequence: 123

System Grounding: Solid
BIL: 60

Main Bus Specifications

Bus Insulation Fluidized Bed Epoxy
Bus Support Insulation: Glass Poly
Ground Bus: 0.25 x 2 Ground
Neutral Bus: None

Amps: 1200
Bus Plating: Silver
Bus Plating: None

Structure Specifications

Enclosure Type: Sheltered aisle
Design Type: 26 Wide
Front Door Latching: T-Handle
Interior Paint Color: ANSI-61 Light Grey
Exterior Paint Color: ANSI-61 Light Grey
Aisle Paint Color: ANSI-61 Light Grey
Rear Door Access: Doors

Rear Door Latching: 3pt Latch w/Padlock
Aisle Fan: Yes
Aisle Heater: Yes
Fluorescent Aisle Light: Yes
Sheltered Aisle Ext.: No
Space Heaters: Yes

Control Power Specifications

Breaker Control Power Source: CPT
Charging Motor Voltage: 120 VAC
Close Coil Voltage: 120 VAC

1st Trip Coil Voltage: 120V Cap-CTD2
2nd Trip Coil Voltage: None
U/V Trip Coil Voltage: None

Wiring Specifications

Control Wire Gauge: Standard #14
CT Wire Gauge: Standard #14
Gnd Wire Gauge: Standard #14
Wiring Type: Wire ID
Marker Type: Adhesive wrap-around

Control Wire Color: Gray
CT Wire Color: Gray
Gnd Wire Color: Green
Terminal Type: Insulated Lock-Fork
Type of Transfer: None

Applicable Standards

Seismic Zone: None
California Code: No

3rd Party Certification: UL
Chicago Code: No

Total of 4 Structures, Total Width of 104 Inches

Split #	Struct #	Width	Height	Depth	Description
1	1	26.00	144.00	168.00	Breakers Structure
1	2	26.00	144.00	168.00	Breakers Structure,Auxilliary over Breaker
1	3	26.00	144.00	168.00	Breakers Structure,Auxilliary over Breaker
1	4	26.00	144.00	168.00	Breakers Structure

Shipping Split Totals:

Structure Weight = 11744 Breaker Weight = 690 for 2 Breakers Width = 104

Str#	Unit	Description/Modifications
1		
2		Lightning arrester distribution class 6 kV - Set of 3
A		Voltage transformer 5 kV, c/w certified test
B		CPT 1-phase 10 kVA 5 kV
D		Breaker Compartment 50 VCPW-ND 250 1200A
3		Lightning arrester distribution class 6 kV - Set of 3
A		Voltage transformer 5 kV, c/w certified test
B		CPT 1-phase 10 kVA 5 kV
D		Breaker Compartment 50 VCPW-ND 250 1200A
4		

1. Failure to use this bid form shall result in bid disqualification.
2. Failure to bid on all items shall result in an "incomplete bid" determination.
3. List value-added considerations on a separate sheet of paper.
4. All bid pricing to include shipping and freight charges.

THIS PAGE MUST BE COMPLETED AND INCLUDED WITH THE BID

The undersigned hereby certifies, on behalf of the respondent named in this Certification (the "Respondent"), that the information provided in this offer submitted to the City of Flint, Department of Purchase and Supplies is accurate and complete, and that I am duly authorized to submit same. I hereby certify that the Respondent has reviewed all documents and requirements included in this offer and accept its terms and conditions.

Terms: _____

Fed. ID #: _____

Company (Respondent): _____

Address: _____

City, State & Zip Code: _____

Phone / Fax Number: _____

FAX: _____

Email: _____

Print Name and Title: _____

(Authorized Representative)

Signed: _____

(Authorized Representative)

❖ **EXHIBIT B - QUALIFICATIONS AND LICENSES REQUIREMENTS**

Please give a synopsis of your qualifications and experience with this service:

Please list Licenses:

How long have you been in business?

Have you done business with the City of Flint?

If yes, please state the project name.

❖ EXHIBIT C – DISCLOSURE OF SUPPLIER RESPONSIBILITY STATEMENT

1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract, or subcontract, or in the performance of such contract or subcontract.

2. List any convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offense indicating a lack of business integrity or business honesty which affect the responsibility of the contractor.

3. List any convictions or civil judgments under state or federal antitrust statutes.

4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.

5. List any prior suspensions or debarments by any government agency.

6. List any contracts not completed on time.

7. List any documented violations of federal or state labor laws, regulations or standards, or occupational safety and health rules.

**❖ EXHIBIT D – LIST OF REFERENCES: (3) SIMILAR SCOPE OF WORK FROM
THE LAST 5 YEARS**

Providing the following contact information enables the City of Flint to contact those accounts as references.

Reference #1:

Company/Municipality: _____

Contact Person: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

Email: _____

Type of Project: _____

Project Timeline (Dates): _____ Budget: _____

Reference #2:

Company/Municipality: _____

Contact Person: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

Email: _____

Type of Project: _____

Project Timeline (Dates): _____ Budget: _____

❖ **EXHIBIT D – LIST OF REFERENCES: (3) SIMILAR SCOPE OF WORK FROM
THE LAST 5 YEARS (CONTINUES)**

Reference #3:

Company/Municipality: _____

Contact Person: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

Email: _____

Type of Project: _____

Project Timeline (Dates): _____ Budget: _____

❖ EXHIBIT E – CERTIFICATE OF INSURANCE**INSURANCE REQUIREMENTS**

The Contractor shall notify all insurance agents and companies retained by the Contractor that these insurance requirements shall be included in any Agreement between the Contractor and the City of Flint.

The Contractor shall purchase and maintain, at its sole expense and as long as it is providing services to the City, the following insurance coverage:

Commercial General Liability - Occurrence form, including coverage for bodily injury, personal injury, property damage (broad form), premises/operations, blanket contractual, and products/completed operations. Coverage shall be endorsed to include the City as an additional insured for work performed by the Contractor in accordance with the Agreement.

Minimum Limits:

- \$1,000,000 per occurrence/\$2,000,000 general aggregate
- \$2,000,000 aggregate for products and completed operations
- \$1,000,000 personal and advertising injury

Automobile - Michigan "no-fault" coverage, and residual automobile liability, comprehensive form, covering owned, hired, and non-owned automobiles. Coverage shall be endorsed to include the City as an additional insured for work performed by the Contractor in accordance with the Agreement.

Minimum Limits:

- No-fault coverages - statutory
- \$500,000 per person/\$1,000,000 per accident - bodily injury
- \$500,000 per occurrence - property damage
- A combined single limit of \$1,000,000 per occurrence

Workers' Compensation and Employer's Liability- Statutory coverage or proof acceptable to the City of approval as a self-insurer by the State of Michigan.

❖ EXHIBIT E – CERTIFICATE OF INSURANCE (CONTINUES)

Minimum Limits:

- Workers' Compensation - statutory
- Employer's Liability - \$100,000 each accident/\$100,000 disease - each employee
- \$500,000 disease - policy limit

Professional Liability – Covering acts, errors or omissions of a professional nature committed or alleged to have been committed by the Contractor or any of its subcontractors. Coverage shall be effective upon the date of the Agreement and shall remain effective for a period of three (3) years after the date of final payment thereunder. Such coverage shall be endorsed to include any subcontractors hired by the City.

Minimum Limits:

- \$1,000,000 per occurrence, \$1,000,000 annual aggregate

Insurance coverage shall cover all claims against the City of Flint, its officials and employees, arising out of the work performed by the Contractor or any subcontractors under the Agreement. Should any work be subcontracted, it shall be the responsibility of the Contractor to maintain Independent Contractor's Protective Liability Insurance with limits equal to those specified above for Commercial General Liability Insurance. In addition, the Contractor shall provide proof of Workers' Compensation Insurance for all subcontractors in compliance with the required statutory limits of the State of Michigan.

Said policies of insurance shall be with companies licensed to do business in the State of Michigan and in a form satisfactory to the City. All insurance companies must maintain a rating of B+, VIII or better from AM. Best Company. Certificates of insurance with a thirty-(30) day cancellation clause shall be filed with and approved by the City at least five (5) days in advance of commencing work under the Agreement. Cancellation, material restriction, non-renewal or lapse of any of the required policies shall be grounds for immediate termination of the Agreement by the City.

The City reserves the right to request a complete certified copy of the policies for the above coverage's.

Any reduction or exhaustion in the limits of required insurance coverage shall not be deemed to limit the indemnification afforded in accordance with the Agreement or any amendments thereto.

Depending on the subject matter of the transaction, the City may require other insurance coverage in addition to the coverage's contained herein.

THE BID NUMBER IS TO APPEAR ON ALL INSURANCE CERTIFICATES

❖ EXHIBIT F – NON-BIDDER’S RESPONSE**VENDOR’S NAME:** _____**NON-BIDDER’S RESPONSE**

For the purpose of facilitating your firm’s response to our invitation to bid, the City of Flint is interested in ascertaining reasons for prospective bidder’s failure to respond to “Invitations to Bid”. If your firm is not responding to this bid, please indicate the reason(s) by checking any appropriate item(s) below and return this form to the above address.

We are **not** responding to this “Invitation to Bid” for the following reason(s):

_____ Items or materials requested not manufactured by us or not available to our company.

_____ Our items and/or materials do not meet specifications.

_____ Specifications not clearly understood or applicable (too vague, too rigid, etc.).

_____ Quantities too Small.

_____ Insufficient time allowed for preparation of bid.

_____ Incorrect address used. Our correct mailing address is:

_____ Our branch / division handles this type of bid. We have forwarded this bid on to them but for the future the correct name and mailing address is: _____

_____ **OTHER:** _____

Thank you for your participation in this bid.

AFFIDAVIT FOR INDIVIDUAL

STATE OF _____

S.S.

COUNTY OF _____

_____being duly sworn,
deposes and says that they are the person making the above bid; and that said bid is genuine and not sham or collusive, and is not made in the interest of or on behalf of any person not therein named, and that they have not directly or indirectly induced or solicited any bidder to put in a sham bid; that they have not directly or indirectly induced or solicited any other person or corporation to refrain from bidding, and that they have not in any manner sought by collusion to secure themselves any advantage over other bidders.

Subscribed and sworn to before me at _____, in said County and State,

this _____ day of _____, A.D. 20_____,

*Notary Public, _____ County, _____

My Commission expires _____, 20_____

FOR CORPORATION

STATE OF _____

S.S.

COUNTY OF _____

_____ being duly sworn, deposes and says that she/he/they
is _____ of _____

(Official Title)

(Name of Corporation)

a corporation duly organized and doing business under the laws of the State of _____
the corporation making the within and foregoing bid; that they executed said bid in behalf of said corporation by
authority of its Board of Directors; that said bid is genuine and not sham or collusive and is not made in the
interests of or on behalf of any person not herein named, and that they have not and said bidder has not directly
or indirectly induced or solicited any other person or corporation to refrain from bidding; that they have not and
said bidder has not in any manner sought by collusion to secure to themselves or to said corporation an advantage
over other bidders.

Subscribed and sworn to before me at _____, in said County and State,

this _____ day of _____, A.D. 20_____,

*Notary Public, _____ County, _____

My Commission expires _____, 20____

FOR PARTNERSHIP

STATE OF _____

S.S.

COUNTY OF _____

_____ being duly sworn,
deposes and says that they are a member of the firm of _____, a co-
partnership, making the above bid; that they are duly authorized to make said bid on behalf of said co-partnership;
that said bid is genuine and not sham or collusive, and is not made in the interest of or on behalf of any person not
therein named, and that they have and said bidder has not directly or indirectly induced or solicited any other
person or corporation to refrain from bidding, and that they have not and said bidder has not in any manner
sought by collusion to secure to themselves or to said bidder any advantage over other bidders.

Subscribed and sworn to before me at _____, in said County and State,

this _____ day of _____, A.D. 20_____,

*Notary Public, _____ County, _____

My Commission expires _____, 20_____

FOR AGENT

STATE OF _____

S.S.

COUNTY OF _____

_____ being duly sworn, deposes and says that they executed the within and foregoing bid in behalf of _____, the bidder therein named, they having been theretofore lawfully authorized, as the agent of said bidder, so to do; that said bid is genuine and not sham or collusive and not made in the interests of or on behalf of any person not therein named, and that they have not and said bidder has not directly or indirectly induced or solicited any bidder to put in a sham bid; that they have not and said bidder has not directly or indirectly induced or solicited any other person or corporation to refrain from bidding, and that they have not and said bidder has not in any manner sought by collusion to secure to themselves or to said bidder any advantage over other bidders.

Subscribed and sworn to before me at _____, in said County and State,

this _____ day of _____, A.D. 20_____,

*Notary Public, _____ County, _____

My Commission expires _____, 20____

NOTE: If executed outside of the State of Michigan, certificate by the Clerk of the Court of Record, authenticating the Notary's Signature and authority should be attached.



**ENGINEERING SERVICES - ELECTRICAL DISTRIBUTION
IMPROVEMENTS - WATER POLLUTION CONTROL**

SUBMITTAL FORM FOR QUESTIONS

Due January 6, 2023 by 10:00 A.M.

- 1.
- 2.
- 3.
- 4.
- 5.

Company Name	
Representative Name	
Address:	
Telephone Number	
Email Address	

(Representative Signature)

Date

Please email this form to the attention of Lauren Rowley, Purchasing Manager

Email: lrowley@cityofflint.com