



CONTRACT INFO SHEET

Monroe County Division of Purchasing
200 County Office Building, Rochester NY 14614

CONTRACT EXTENSION 2

DATE: September 9, 2016

BID TITLE: Heavy Electrical Maintenance

BID PROJECT: BP0807-14
SAP CONTRACT: 4700007148

BUYER: GREG HART
PHONE: 753-1135
FAX: 753-1104

CONTRACT DATES: 11/12/14-09/30/17

VENDOR: V#111168
Industrial Electrical & Technical Services, Inc.
7265 Slocum Road
Lima, N.Y. 14485-9455
PHONE: 585-624-2790
FAX: 585-624-2799

Contract is extended through September 30, 2017 with a 2.2% overall increase.

Greg Hart
Buyer

BP0807-14
Heavy Electrical Maintenance

KEY CONTACT PERSONS:

Daryl Maslanka Contract Project Manager
Monroe County Department of Environmental Services
City Place
50 West Main Street
Rochester N.Y. 14614
(585) 753-7514 – Office
(585) 509-2834-Cell
e-mail: dmaslanka@monroecounty.gov

SUPERVISOR OF ELECTRICAL OPERATIONS (locations A-G)

Phil Lupia
Monroe County Department of Environmental Services
FEV Treatment Facility
1574 Lakeshore Blvd.
Rochester, N.Y. 14617
(585) 753-7669 – Office
(585) 303-6450-Cell
e-mail: plupia@monroecounty.gov

SUPERVISOR OF ELECTRICAL OPERATIONS (locations H-L)

Mark Payne
Monroe County Department of Environmental Services
City Place
50 West Main Street
Rochester N.Y. 14614
(585) 753-7679 – Office
(585) 202-5695
e-mail: mpayne@monroecounty.gov

BP0807-14
TERMS AND CONDITIONS

BID ITEM:

HEAVY ELECTRICAL MAINTENANCE

FOR:

DEPARTMENT OF ENVIRONMENTAL SERVICES (DES)

PURCHASING CONTACT:

The Buyer, identified below, is the sole point of contact regarding this Bid from the date of issuance until the bids are opened and the results made public.

Gregory Hart
Monroe County Division of Purchasing
200 County Office Building
39 West Main Street
Rochester, NY 14614
ghart@monroecounty.gov

All requests for bid clarification must be submitted in writing to the Buyer referenced above and received no later than close of business (5:00 PM Eastern Standard Time) on 08/22/2014.

All questions will be answered and documented in writing as an Addendum to the Bid. These will be sent out to all Bidders who received the original Bid no later than 08/28/2014.

DUPLICATE COPIES:

PLEASE SUBMIT YOUR BID IN DUPLICATE; THE ORIGINAL AND ONE (1) COPY.

BID INFORMATION:

At the time of bid, the bidder shall supply detailed specifications covering the item(s) contained herein and shall clearly indicate any areas in which item or items offered do not fully comply with the specifications contained herein.

SUBMITTAL OF FORMAL PROPOSAL:

Bid proposal must be legible and submitted in the original form, bearing an original signature. **EMAILS AND FACSIMILES ARE NOT ACCEPTABLE.**

All bidders must submit proof that they have obtained the required **Workers' Compensation and disability benefits** coverage or **PROOF** that they are exempt. (Visit www.wcb.ny.gov for forms.)

SPECIFICATION ALTERATIONS:

Specifications will be construed to be complete and be considered the entire description of the goods or services upon which Monroe County is now seeking bids. **Only formal written addenda can materially alter this set of specifications.** No verbal statement made by a Monroe County employee or anyone else is binding nor shall such statement be considered an official part of this public bid proposal.

WAGE RATES:

Contractor agrees to comply with the provisions of the New York State Labor Law relating to the payment of prevailing wage rates to the extent that such rules may be applicable to the Contractor. Wage rates may be obtained at www.labor.state.ny.us.

QUANTITIES:

The quantities listed are the estimated annual hourly requirements; equipment will be maintained over the course of the entire contract. These estimates should not be construed to represent guaranteed maximum or minimum quantities to be purchased during the contract period. All unit prices bid will be extended for the actual number of units serviced.

QUALIFIED BIDDER:

Each bidder must be prepared to present satisfactory proof of his capacity and ability to perform this contract. Such proof may include, but is not limited to, an inspection of the bidder's facilities and equipment, financial statements, references and performance of similar contracts. **The Purchasing Manager reserves the right to reject any bid where the bidder cannot satisfy the County as to their ability to perform. Monroe County reserves the right to reject any and all bids if the Monroe County Purchasing Manager deems said action to be in the best interest of Monroe County.**

EMERGENCY WORK REQUESTS:

The Contractor must maintain a telephone number when he can be reached twenty-four (24) hours per day, seven (7) days per week.

METHOD OF AWARD:

Monroe County intends to award a contract to the lowest responsive and responsible bidder, based on the **Total**. Bidders must bid on every item in order to be considered. The County reserves the right to reject any and all bids if the Purchasing Manager deems said action to be in the best interest of the County.

CONTRACT TERM:

Contract will start with the date of the contract award and run through **September 30, 2015** with the option to renew the contract up to four (4) additional twelve (12) month periods at the mutual consent of both parties.

PRICE CHANGES:

Price changes may be proposed by either party no later than forty-five (45) days prior to contract extension, based upon manufacturer price changes which must be supported with documentation. Should price changes not be acceptable to both parties, the contract will not be extended. Prices may change only at the time of extension

MINIMUM ORDER:

No minimum order is specified for this contract. Agencies must be able to order as needed. **Political subdivisions and others authorized by law may participate in this contract.**

DELIVERY:

All deliveries to be F.O.B. Monroe County to agency as specified by a Purchase Order. Delivery costs must be built into the unit prices bid. Deliveries must be made within **two (2) weeks** after receipt of purchase order number. The County reserves the right to terminate the contract in the event the specified delivery time is not met.

PURCHASE ORDER ISSUANCE:

No work shall proceed against nor shall any items be delivered against this contract until the Contractor has received a purchase order or a purchase order number. **Items supplied or services rendered that are not part of this contract will not be paid for by Monroe County.**

MATERIAL COSTS:

All materials for emergency work shall be itemized on each invoice and billed at **five percent (5%)** above the Contractor's cost. Each item must include the full description including manufacturer, stock number, and unit price as well as a copy of the invoice paid. The County will reimburse the Contractor for incoming freight charges for items needed for emergency repairs. There will be no surcharge for freight. The County reserves the right to audit the Contractor's records to determine that the County is being charged no more than five percent (5%) of the Contractor's cost.

WRITTEN ESTIMATES:

In every instance that the Contractor anticipates that an emergency job may cost \$1000.00 or more, the Contractor must, prior to commencing work, give a written estimate for the work to the department, at no charge to the ordering agency. The estimate must show labor and materials cost. The County reserves the right to independently purchase any equipment or supplies needed to execute an emergency job. The Contractor may not proceed with the work until approval is given by the department. If the estimate is considered too high, the County maintains the option of obtaining open market quotations, providing materials or changing the scope of the work. The County maintains the right to cancel a request.

BILLING PROCEDURE:

All invoices for items sold any authorized agency as a result of this contract must be billed in the following manner: Purchase Order #, Quantity, Description of Item Purchased, Stock or Catalog #, List Price, Discount, Extension and Total. **ALL INVOICES MUST BE MARKED WITH THE PURCHASE ORDER NUMBER. INVOICES WITHOUT THIS INFORMATION WILL NOT BE PROCESSED FOR PAYMENT.**

WARRANTY/GUARANTEE:

All warranties by manufacturer shall apply. Bidder shall, as part of its proposal, furnish its warranty/guarantee for all goods/services to be furnished hereunder. As a minimum, Bidder shall warrant all goods for a period of one (1) year from date of acceptance. Bidder shall be obligated to repair or replace all defects in material or workmanship which are discovered or exist during said period. All labor, parts and transportation shall be at Bidder's expense.

SECURITIES AND INSURANCE:

Any Certificate of Insurance, Bonds or other forms of security required by this bid are to be submitted to the Purchasing Manager no later than ten (10) normal business days following the date of notification of award. Documents must be received by the close of business, 5:00 PM on that day.

UNCONTEMPLATED PURCHASES:

Monroe County reserves the right to request separate bids for such quantities of items on this contract that may be best procured via separate public bid offering and to otherwise act in furthering its own best interests.

COMPLIANCE WITH THE LAW:

The Contractor agrees to procure all necessary licenses and permits. The Contractor shall comply with all laws, rules, and regulations pertaining to the payment of wages and all other matters applicable to the work performed under this contract.

SUBCONTRACT:

The Contractor shall not subcontract any work without first obtaining the written consent of the Purchasing Manager of Monroe County.

RELATED ITEMS:

The County reserves the right to add related items to this contract during the contract term upon agreement by both parties as to the price. Approval must be given in writing by the Purchasing Manager or his Designee.

REPORT OF PURCHASE:

The Contractor must, upon request, provide the County purchasing Manager with detailed information showing how much of each item was delivered to any and all agencies under this contract. This includes deliveries to not only the County but any other municipality or agency which orders from this contract.

OTHER AGENCIES:

The Contractor(s) **must** honor the prices, terms and conditions of this contract with political subdivisions or districts located in whole or in part within Monroe County. In addition, the contractor may, but is not required to, extend the prices, terms and conditions of this contract to any political subdivision or district located in New York State. Usage of this contract by any of these other political subdivisions or districts will have to be coordinated between that subdivision or district and the contractor. Orders placed against this contract between any subdivision or district will be contracts solely between the Contractor(s) and those entities. Monroe County will not be responsible for, nor will it have any liability or other obligation for, such contract between the Contractor(s) and any third party.

INDEMNIFICATION:

The Contractor agrees to defend, indemnify and save harmless the County, its officers, agents, servants and employees from and against any and all liability, damages, costs or expenses, causes of action, suits, judgments, losses and claims of every name not described, including attorneys' fees and disbursements, brought against the County which may arise, be sustained, or occasioned directly or indirectly by any person, firm or corporation arising out of or resulting from the performance of the services by the Contractor, arising from any act, omission or negligence of the Contractor, its agents and employees or arising from any breach or default by the Contractor under this Agreement. Nothing herein is intended to relieve the County from its own negligence or misfeasance or to assume any such liability for the County by the Contractor.

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HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION

1.00 **GENERAL:**

1.01 **SCOPE:**

The Monroe County Department of Environmental Services is seeking a qualified bidder to perform **Preventive Maintenance and Repair on Heavy Electrical Switchgear**. Preventive maintenance work will be done on availability and as-needed basis of equipment. The work to be done under this contract and in accordance with these specifications consists of furnishing of equipment, material, supervision, labor, technical knowledge and skills necessary to satisfactorily and safely complete the job. The repair work will be done as needed for the specific equipment. The bidder shall perform all work required for a thorough maintenance, inspection, cleaning, testing, calibration, adjustment and function check of the specified equipment; including the furnishing of all engineering necessary for the layout and execution of the work in accordance with the specifications. The bidder shall submit to the **Supervisor of Electrical Operations** for approval, a complete checklist of specified work for each piece of equipment in every location, prior to execution of the contract. All calibrations, readings, observations, adjustments and recommendations for repair and any other work done shall be recorded on the aforementioned checklist. The list shall be resubmitted to the **Supervisor of Electrical Operations** for approval after completion of work. The Contract resulting from this bid will be available to all Monroe County departments and political subdivisions. It is anticipated that the Department of Environmental Services will request the majority of the work.

1.02 **LOCATIONS:**

- A **COUNTY OF MONROE
FRANK E. VAN LARE FACILITY
1574 LAKESHORE BLVD.
ROCHESTER, N.Y. 14617**

- B **COUNTY OF MONROE
IRONDEQUOIT BAY PUMP STATION
1574 LAKESHORE BLVD.
ROCHESTER, N.Y. 14617**

- C **COUNTY OF MONROE
NORTHWEST QUADRANT FACILITY
170 PAYNE BEACH RD.
HILTON, N.Y. 14468**

- D **COUNTY OF MONROE
FLEET CENTER
145 PAUL ROAD
ROCHESTER, N.Y. 14624**

- E **COUNTY OF MONROE
RESOURCE RECOVERY FACILITY
1845 EMERSON ST.
ROCHESTER, N.Y. 14606**

- F **COUNTY OF MONROE
CHARLOTTE PUMPING STATION
556 RIVER ST.
ROCHESTER, N.Y. 14612**

- G **COUNTY OF MONROE
CENTRAL GATES PUMPING STATION
1150 BUFFALO ROAD
ROCHESTER, N.Y. 14606**

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- H **HHS BUILDING
111 WESTFALL RD.
ROCHESTER, N.Y. 14620**

- I **COUNTY OF MONROE
CIVIC CENTER COMPLEX
REFRIGERATION BUILDING
99 EXCHANGE BLVD.
ROCHESTER, N.Y. 14614**

- J **COUNTY OF MONROE
CIVIC CENTER COMPLEX
HALL OF JUSTICE
99 EXCHANGE BLVD.
ROCHESTER, N.Y. 14614**

- K **COUNTY OF MONROE
CIVIC CENTER COMPLEX
PUBLIC SAFETY BUILDING
99 EXCHANGE BLVD.
ROCHESTER, N.Y. 14614**

- L **COUNTY OF MONROE
CIVIC CENTER COMPLEX
JAIL MAINFRAME SHU
99 EXCHANGE BLVD.
ROCHESTER, N.Y. 14614**

- M **PROTECTIVE RELAYS ALL FACILITIES
COUNTY OF MONROE**

1.03 SUBMITTALS:

A) Project Schedule:

Prior to the performance of the work, the bidder shall supply a work schedule. All work to be performed during normal working hours, **7:30 A.M. TO 3:30 P.M.** No work shall be done at any facility without the expressed written consent of the **Facility Operator** and must be approved at least twenty-four (24) hours in advance.

All test results shall be reported on forms of the style recommended by the **National Electrical Testing Association**. The results shall be in the proper units or dimensions. The bidder shall submit with his schedule a list of all tests to be performed. Additionally, the bidder shall submit samples of each of their report forms for the County's approval. The report forms shall include a discussion of the acceptable ranges and limits of each parameter.

All switching shall be approved or done by **Monroe County Personnel** and only with the direction of the **Supervisor of Electrical Operations** or his designee.

All work shall be coordinated through the **Supervisor of Electrical Operations**. Any work-related problems shall be brought immediately to the attention of the **Supervisor of Electrical Operations**.

B) Experience:

Bidders are reminded that they shall submit with their bid a description of their firm as it pertains to the preventive maintenance, service and testing of heavy electrical switchgear.

C) Qualifications of Electrical Power Distribution Equipment Preventive Maintenance and Repair Bidder:

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- 1) The bidder shall be a corporately-and-financially-independent contractor organization which can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers and installers of equipment or systems evaluated by the bidder.
- 2) The bidder shall be regularly engaged in the testing of electrical equipment devices, installations and systems.
- 3) The bidder shall meet OSHA regulation CFR 29 1910.7 Appendix A or be a full member company of the International Electrical Testing Association.
- 4) The lead Electrical Test Technician (ETT) shall be at the inspection and or testing site and hold the following or equivalent certifications: (Equivalency certifications shall be submitted **with the bid** and shall be verified by Monroe County Department of Engineering before awarding the contract.)
 - a) NETA (International Electric Testing Association) certified Technician Level III or certified Senior Technician Level IV (as per ANSI/NETA ETT-2000 Requirements)
- 5) The bidder shall utilize technicians who are regularly employed by the firm for testing services.
- 6) The bidder shall have the ability to hire a professional electrical engineer licensed in New York State for testing services.
- 7) The bidder shall have documented experience in testing high voltage transformation, distribution and protective equipment.
- 8) The bidder shall be capable of performing short circuit and protective device coordination studies in house.
- 9) The bidder shall be capable of modeling and assessing ground grid installations in house.
- 10) The bidder shall have an office in the Rochester area and have an emergency response time of two (2) hours.
- 11) The bidder shall submit proof of the above qualifications with bid documents.
- 12) The terms used herewith, such as test agency, test contractor, testing laboratory or contractor Test Company, shall mean the bidder.

D) Safety Practices:

- 1) Safety practices shall include, but are not limited to, the following requirements:
 - a. Occupational Safety and Health Act.
 - b. Accident Prevention Manual for Industrial Operations, National Safety Council.
 - c. Applicable state and local safety operating procedures.
 - d. County's safety practices.
 - e. National Fire Protection Assoc. - NFPA 70 E.
 - f. American National Standards for Personnel Protection.
- 2) All tests shall be performed with apparatus de-energized. Exceptions must be thoroughly reviewed to identify safety hazards and devise adequate safeguards.
- 3) The bidder shall have a designated safety representative on the project to supervise the testing operations with respect to safety.

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E) Suitability of Test Equipment:

- 1) All test equipment shall be in good mechanical and electrical condition.
- 2) Selection of metering equipment should be based on knowledge of the waveform of the variable being measured. Digital multimeters must be root mean square (RMS) sensing and may include or exclude the dc component. When the variable contains harmonics or dc offset and in general, any deviation from a pure sine wave, average sensing and average measuring RMS scaled meters may be misleading. Use of true RMS measuring meters is required.
- 3) Field test metering used to check power system meter calibration must have accuracy higher than that of the instrument being checked.
- 4) Accuracy of metering in test equipment shall be appropriate for the test being performed.
- 5) Waveshape and frequency of test equipment output waveforms shall be appropriate for the test and tested equipment.

F) Test Instrument Standards:

- 1) All equipment used for testing and calibration shall exhibit the following characteristics:
 - a. Maintained in good visual and mechanical condition.
 - b. Maintained in safe operating condition.
- 2) Test equipment should have operating accuracy equal to or better than, the following limits:
 - a. Portable multimeters should be true RMS measuring.
 - b. Multimeters should have the following accuracy limits or better.
 - (1) AC voltage ranges: .75% +/-3 last single digits @ 60 Hz.
 - (2) AC current ranges: .90% +/-3 last single digits @ 60 Hz, including adapters, transducers.
 - (3) DC voltage ranges: .25% +/-1 last single digit.
 - (4) DC current ranges: .75% +/-1 last single digit.
 - (5) Resistance ranges: .50% +/-1 last single digit.
 - (6) Frequency range: .10% +/- 1 last single digit @ 60 Hz.
- 3) Clamp-on ammeters: ac current +/-3% of range +/-1 single digit @ 60 Hz.
- 4) Dissipation/power factor field equipment:
 - a. +/-0.1% power factor for power factor values up to 2.0%.
 - b. 5% of the reading for power factor values above 2.0%.
- 5) Low range dc resistance equipment: 1.0% of reading, +/-2 last single digits.
- 6) Transfer turns-ratio test equipment: 0.5% or better @ 60 Hz.

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- 7) Ground electrode test equipment: +/-2% of range
- 8) Insulation test sets: 0-1000V dc +/-20% of reading at mid-scale.
- 9) Electrical load survey equipment.
 - a. +/-5% total error, including sensors.
 - b. 1% resolution.
 - c. Current transformers +/-2% of range @ 60 Hz.
 - d. Voltage transformers +/-0.5% of range @ 60 Hz.

- 10) Liquid dielectric strength test equipment: +/-2% of scale.
- 11) Infrared scanning equipment: sensitivity of 2 deg. C.
- 12) Phase shifting equipment: +/-1.0% degree over entire range.
- 13) High current test equipment: +/-2% of range.
- 14) DC high potential test equipment: +/-2% of full scale.
- 15) AC high potential test equipment (60 Hz): +/-2% of full scale.

G) Test Instrument Calibration:

- 1) The testing firm shall have a calibration program, which assures that all applicable test instruments are maintained within rated accuracy.
- 2) The accuracy shall be directly traceable to the **National Institute of Standards and Technology**.
- 3) Instruments shall be calibrated in accordance with the following frequency schedule:
 - a. Field instruments: six (6) months maximum.
 - b. Laboratory instruments: twelve (12) months.
 - c. Leased specialty equipment: twelve (12) months
(Where accuracy is guaranteed by lessor).
- 4) Dated calibration labels shall be visible on all test equipment.
- 5) Records, which show date and result of instruments calibrated or tested, must be kept up-to-date.
- 6) Up-to-date instrument calibration instructions and procedures shall be maintained for each test instrument.
- 7) Calibrating standard shall be of higher accuracy than that of the instrument tested.

H) Test Instrument Report:

- 1) The test report shall include the following:
 - a. Summary of project.
 - b. Listing of equipment tested.

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c. Test results.

d. Recommendations.

2) Furnish copies of the complete report to the **County/Engineer's Representative** as directed in the contract documents.

1.04 EQUIPMENT REQUIRED:

a) Bidder shall have their own portable generators for the purpose of supplying 120 volts for testing and lighting.

b) Bidder shall have an Insulation Power Factor test set capable of producing up to 10 Kv for testing of oil filled transformers.

c) Bidder shall have computer controlled synthesized sources to ensure accuracy of signal magnitudes and waveforms for protective relay testing.

1.05 PAYMENT SCHEDULE:

Progress payments will be acceptable for this work. Partial payments may be necessary for the work because weather conditions and operational requirements will dictate the work schedule. Five percent (5%) will be withheld until all final reports are submitted to the **County** and are acceptable to the **County**.

2.00 QUALITY ASSURANCE:

2.01 APPLICABLE CODES and STANDARDS and REFERENCES:

A) All inspections and tests shall be in accordance with the following codes and standards except as provided otherwise herein.

- | | | |
|----------------------------------------------------|---|------------|
| 1) National Electrical Manufacturers Assoc. | - | NEMA |
| 2) American Society for Testing & Materials | - | ASTM |
| 3) Institute of Electrical & Electronic Engineers- | | IEEE |
| 4) International Electrical Testing Assoc. | - | NETA |
| Maintenance Testing Specifications | - | MTS - 1989 |
| 5) American National Standards Institute | - | ANSI-C2 |
| National Electrical Safety Code | | |
| 6) State and local codes and ordinances. | | |
| 7) Insulated Cable Engineers Association | - | ICEA |
| 8) Assoc. Of Edison Illuminating Companies | - | AEIC |
| 9) Occupational Safety & Health Admin. | - | OSHA |
| 10) National Fire Protection Assoc. | - | NFPA |
-
- | | | |
|--------------|------|-------------------------------------------------------------|
| a. ANSI/NFPA | 70: | National Electrical Code |
| b. ANSI/NFPA | 70B: | Electrical Equipment Maintenance |
| c. NFPA | | 70E: Electrical Safety Requirements for Employee Workplaces |
| d. ANSI/NFPA | 78: | Lighting Protection Code |
| e. ANSI/NFPA | 101: | Life Safety Code |

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2.02 STANDARD PRODUCTS:

All replacement materials retrofit equipment and accessories shall be new and unused. Remanufactured equipment may be acceptable in some cases, but only with the approval of the Supervisor of Electrical Operations or his designee. They shall be essentially the standard product of a manufacturer regularly engaged in the production of such material or equipment, and shall essentially duplicate material or equipment that has been in satisfactory operation at least five (5) years. The County reserves the right to reject any material or equipment manufacturer who, although he meets the above requirements, does not provide satisfactory evidence indicating adequate and prompt post installation and repair maintenance service as required to suit the operational requirement of the County.

2.03 REPLACEMENT PART PRICES:

If incidental replacement parts are required to expedite the service requested and authorized by the **Supervisor of Electrical Operations or his Designee**, the bidder will be able to purchase these items. The parts will be priced at the bidder's net cost plus 5% markup. The County reserves the right to conduct an audit or to request documentary evidence to substantiate any prices billed for replacement parts.

3.00 WORK TO BE PERFORMED:

A) The following general procedures apply to all work performed:

1. As the work proceeds, list all major items that will need immediate repair and submit the list to the **Supervisor of Electrical Operations** on a daily basis.
2. In an instance that the **bidder** finds equipment that is in need of immediate repair the **bidder** must, prior to commencing work; give a written estimate for the work to the **Supervisor of Electrical Operations** or his designee. The estimate must show labor and materials cost. The **bidder** may not proceed with the work until the **Supervisor of day-to-day Electrical Operations** or his designee gives written approval. If the estimate is considered too high, the **County** maintains the option of providing materials or changing the scope of the work. The **County** also maintains the right to cancel a request. The **Bidder** shall be capable and willing to work with our **electrical maintenance contractor**.

3.01 INDEX OF SCHEDULES:

Schedule

- A. Switchgear and Switchgear Assemblies.
- B. Air switches, medium voltage and metal enclosures.
- C. Circuit breakers, medium voltage, air.
- D. 34.5 KV oil circuit breakers & guide for high voltage oil circuit breakers (OCBs).
- E. Protective Relays or Solid State Trip Devices.
- F: Grounding Systems.
- G. Surge Arrestors.
- H. Capacitors.
- I. Outdoor Bus Structures - Aerials and Switches.
- J. Transformers.
- K. Motor Control - Medium Voltage.
- L. Standoff Insulators.
- M. Low Voltage Bus Duct.
- N. Circuit Breakers, Low Voltage, Air.

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3.02 THE PRINCIPLE SCHEDULES OF WORK ARE DESCRIBED BELOW:

The descriptions are general only and should not be construed as a complete listing of every item of work required.

A) Schedule A: Switchgear and Switchgear Assemblies:

1) Visual and Mechanical Inspection:

- a. Inspect for physical, electrical and mechanical condition.
- b. Inspect all doors, panels and sections for paint, dents, scratches, fit and missing hardware.
- c. Inspect all bus connections for high resistance. Use low-resistance ohmmeter or check tightness of bolted bus joints by using a calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.
- d. Clean entire switchgear, insulators and standoffs using manufacturer's approved methods and materials.
- e. Inspect insulators for evidence of physical damage or contaminated surfaces.
- f. Verify proper barrier and shutter installation and operation.
- g. Lubrication:
 - (1) Verify appropriate contact lubricant on moving current carrying parts.
 - (2) Verify appropriate lubrication on moving and sliding surfaces.
- h. Exercise all active components.
- i. Inspect all mechanical indicating devices for proper operation.
- j. All power cable terminations to be checked for tightness and cleaned.
- k. All air passages and grillwork will be cleaned and cleared. The heaters will be checked. The operating face and window will be detergent cleaned.

2) Electrical Tests:

- a. Perform insulation-resistance tests on each bus section, phase-to-phase and phase-to-ground for one (1) minute. Test voltages and minimum resistances shall be in accordance with **Table A-2**.
- b. Perform an overpotential test on each bus section, each phase-to-ground, for one (1) minute at values indicated in **Table A-3** or manufacturer's recommended potential. Refer to Schedule A. 3. b. before performing test.
- c. Perform current injection tests on the entire current circuit in each section of switchgear.
 - (1) Perform current tests by primary injection, where possible, with magnitudes such that a minimum of 1.0 ampere flows in the secondary circuit.
 - (2) Where primary injection is impractical, utilize secondary injection with a minimum current of 1.0 ampere.
 - (3) Test current at each device.

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d. Determine accuracy of all meters.

e. Control Power Transformers - Dry - Type

- (1) Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring and overall general condition.
- (2) Perform insulation-resistance tests. Perform measurements from winding-to-winding and windings-to-ground. Test voltages and minimum resistances shall be in accordance with **Table A-4**. Results shall be temperature corrected in accordance with **Table A-5**.

3) Test Values:

a. Bolt-torque levels shall be in accordance with **Table A-1**, unless otherwise specified by manufacturer.

b. Insulation-resistance test shall be performed in accordance with **Table A-2**. Values of insulation resistance less than this table or manufacturer's minimum should be investigated. Over-potential tests should not proceed until insulation-resistance levels are raised above minimum values.

c. Over-potential test voltages shall be applied in accordance with **Table A-3** (derived from ANSI/IEEE C37.20.2).

Test results are evaluated on a pass/fail basis by slowly raising the test voltage to the require value. The final test voltage shall be applied for one (1) minute.

B) Schedule B: Air Switches, Medium Voltage and Metal Enclosures

1) Visual and Mechanical Inspection:

- a. Inspect for physical and mechanical condition.
- b. Check for proper anchorage and required area clearances.
- c. Record fuse sizes and types.
- d. Perform mechanical operator tests in accordance with manufacturer's instructions.
- e. Check blade alignment and arc interrupter operation.
- f. Verify that expulsion-limiting devices are in place on all holders having expulsion-type elements.
- g. Check each fuse holder for adequate mechanical support for each fuse.
- h. Inspect all bus connections for tightness of bolted bus joints by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.
- i. Test all electrical and mechanical interlock system for proper operation and sequencing.
- j. Clean entire switch, insulator and standoffs using approved methods and materials.
- k. Verify proper phase barrier materials and installation.
- l. Lubricate per manufacturer recommendations.
- m. Check switch blade clearances with manufacturer's published data.
- n. Inspect all indicating devices for proper operation.

2) Electrical Tests:

- a. Perform insulation-resistance tests on each pole, phase-to-phase and phase-to-ground, for one (1) minute. Test voltage and minimum resistances should be in accordance with **Table B-1**.
- b. Perform a dc over-potential test on each pole with switch closed. Test each pole-to-ground with other poles grounded for one (1) minute at values indicated in **Table A-3** or manufacturer's recommended values.

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c. Perform contact-resistance test across each switch blade and fuse holder.

3) Test Values:

a. Perform insulation-resistance in accordance with **Table A-2**. Investigate values of insulation resistance less than this table or manufacturer's minimum. Do not perform over-potential tests unless insulation resistance exceeds values in table.

b. Bolt-torque levels shall be in accordance with **Table A-1** unless otherwise specified by manufacturer.

c. Investigate any contact resistance exceeding 100 microhms or any values, which deviate from adjacent poles or similar switches by more than fifty percent (50%).

d. Over-potential test shall be evaluated as pass/fail.

C) Schedule C: Circuit Breakers, Medium Voltage and Air

1) Visual and Mechanical Inspection:

a. Inspect for physical damage.

b. Inspect anchorage, alignment and grounding.

c. Perform all mechanical operator and contact alignment tests on both the breaker and its operating mechanism.

d. Check tightness of bolted bus joints by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.

e. Check cell fit and element alignment.

f. Check racking mechanism.

g. Verify that primary and secondary contact wipe and other dimensions vital to satisfactory operation of the breaker are correct.

h. Lubricate all moving current carrying parts per manufacturer recommendations.

i. Check for proper operation of the cubicle shutter.

j. Vacuum out cubicle.

k. Check feeder cables for tightness, corona damage and ground wires for proper connections.

l. Clean all insulators and standoffs using approved methods and materials.

2) Electrical Tests:

a. Measure contact resistance.

b. Measure insulation resistance pole-to-pole, pole-to-ground and across open poles. Use a minimum test voltage of 2500 volts.

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- c. Perform an over-potential test with breaker in closed position. Test each pole-to-ground with other poles grounded for one (1) minute at values in **Table A-3** or manufacturer's recommended level.
- d. Perform minimum pickup voltage tests on trip and close coils.
- e. With breaker in test position, make the following test:

(1) Trip and close breaker with the control switch.

3) Test Values:

- a. Determine contact resistance in microhms. Investigate deviations of more than fifty percent (50%) compared to other poles and similar breakers.
- b. Minimum insulation resistance should comply with **Table A-2**.
- c. Over-potential tests shall be evaluated as pass/fail.

D) Schedule D: 34.5 KV Oil Circuit Breakers:

Note: Maintenance procedures for high voltage OCBs have not been explicitly defined. This schedule for medium voltage OCBs has been offered as a guide only. The maintenance performed on the 34.5 KV OCBs should only be that which can be done **SAFELY** and which would be of practical value.

1) Visual and Mechanical Inspection:

- a. Inspect for physical damage and compare nameplate data with drawings and specifications.
- b. Inspect anchorage, alignment and grounding.
- c. Perform all mechanical operation and contact alignment tests on both the circuit breaker and its operating mechanism in accordance with manufacturer's instructions.
- d. Check tightness of bolted connections by using calibrated torque wrench. Refer to manufacturer's instructions of **Table A-1** for proper torque levels.
- e. Test pressure switch alarms and lockouts for pneumatic and/or hydraulic operators as recommended by the manufacturer.
- f. Perform circuit breaker time-travel analysis.
- g. Drain air tank and check for water.
- h. Clean all insulators and standoffs using approved methods and materials.

2) Electrical Tests:

- a. Measure Contact Resistance.
- b. Sample insulating fluid. Sample shall be laboratory tested for:

(1) Dielectric breakdown voltage: **ASTM D-877**

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(2) Color: **ASTM D-1500**

(3) Power factor: **ASTM D-924**

(4) Interfacial tension: **ASTM D-971 or D-2285**

(5) Visual conditions: **ASTM D-1524**

- c. Perform power-factor tests on each phase with breaker open and each phase with breaker closed. Determine tank loss index.
- d. Perform power-factor tests on each bushing. Use conducive strap and hot collar procedures if bushings are not equipped with a power-factor tap.
- e. Perform an over-potential test on each pole with breaker in closed position. Test each pole-to-ground with other poles grounded for one (1) minute at values in **Table A-3** or manufacturer's recommended level.

3) Test Values:

- a. Determine contact resistance in microhms. Resistance values should in no case exceed one hundred fifty percent (150%) of the high limit of the normal range as indicated in the manufacturer's published data.
- b. Compare circuit breaker travel and velocity values to manufacturer's acceptable limits.
- c. Insulating-liquid tests shall comply with **Table D-1**.
- d. Power-factor and capacitance test results shall be within ten percent (10%) of nameplate rating for bushings. Tank loss index shall not exceed the manufacturer's allowable value.
- e. Over-potential test shall be evaluated as pass/fail.

E) Schedule E: Protective Relays or Solid State Trip Devices:

1) Visual and Mechanical Inspection:

- a. Inspect relays for physical damage.
- b. Inspect cover gasket for proper seal; clean cover glass; check for foreign material, particularly in disc slots of permanent and electromagnets; check disk clearance; check condition of spiral spring and case contacts.
- c. Check for freedom of movement, proper travel and alignment and tightness of mounting hardware and tap plugs.
- d. Set relays in accordance with County's/Engineer's provided settings.
- e. Record actual value of test results.

2) Electrical Tests:

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a. Perform the following tests on the nominal settings specified by the County's/User's **Electrical Engineer**:

(1) Pick up parameters on each operating element.

(2) Perform timing test at two (2) points on time-current curve.

(3) Pick up target and seal-in units.

(4) Special tests as required to check operation of restraint, directional and other elements per manufacturer's instruction manual.

F) Schedule F: Grounding Systems:

1) Visual and Mechanical Inspection:

Inspect ground system for compliance with drawings and specifications.

2) Electric Tests (Small Systems):

Perform ground-impedance measurements utilizing the fall-of-potential method per **ANSI/IEEE Standard 81** "IEEE Guide for Measuring Earth Resistivity, Ground Impedance and Earth Surface Potentials of a Ground System." Instrumentation utilized shall be as defined in Section 12 of the above guide and shall be specifically designed for ground impedance testing. Provide sufficient spacing so that plotted curves flatten in the sixty two percent (62%) area of the distance between the item under test and the current electrode.

3) Electrical Tests (Large Systems):

When sufficient spacing of electrodes per **Schedule F. 2.** is impractical, perform ground-impedance measurements utilizing either the intersecting curves method or the slope method. (**Ref. Nos. 40 and 41 in IEEE Std. 81.**)

4) Equipment Grounds:

Utilize two-point method of **IEEE Std. 81.** Measure between equipment ground being tested and known low-impedance grounding electrode or system.

5) Test Values:

The main ground electrode system impedance-to-ground should be no greater than five (5) ohms for commercial or industrial systems and one (1) ohm or less for generating stations, transmission stations and large industrial systems. Equipment grounds, depending on size and length of grounding conductor, should be only fractionally higher than system ground.

G) Schedule G: Surge Arresters:

1) Medium and High Voltage Surge-Protection Devices:

a. Visual and Mechanical Inspection:

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- (1) Inspect for physical damage.
- (2) Check tightness of connections by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.
- (3) Check ground lead on each device for individual attachment to ground bus or ground electrode.

b. Electrical Tests:

- (1) Test grounding electrode in accordance with **Schedule F** of this specification.

H) Schedule H: Capacitors:

1) Visual and Mechanical Inspection:

- a. Inspect capacitors for physical damage, proper mounting and required clearances.
- b. Verify than capacitors are electrically connected in the proper configuration.
- c. Inspect all bus or cable connections for tightness by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.

I) Schedule I: Outdoor Bus Structures - Aerials and Switches:

1) Visual and Mechanical Inspection:

- a. Examine bus and supports for defects, such as cracked welds, chipped porcelains, etc.
- b. Clean all insulators and standoffs using approved methods and materials.
- c. Check blade alignment and arc interrupter operation.
- d. Perform mechanical operator tests in accordance with manufacturer's instructions.
- e. Lubricate per manufacturer recommendations.
- f. Check tightness of accessible bolted bus joints by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.

2) Electrical Tests:

- a. Perform over-potential test on each bus phase-to-phase and phase-to-ground. Potential application shall be for one (1) minute. Test voltage shall be in accordance with **Table N-1** or manufacturer's recommendations.
- b. Measure insulation resistance pole-to-pole, pole-to-ground and across open poles. Use a minimum test voltage of 2500 volts.
- c. Measure contact resistance.

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3) Test Values:

- a. Bolt-torque levels shall be in accordance with manufacturer's recommendations or **Table A-1**.
- b. Minimum insulation-resistance shall be in accordance with **Table B-2**.
- c. Over-potential test voltage shall be in accordance with **Table N-1** evaluated as pass/fail.
- d. Compare measured bus connector joint resistance to calculated resistance of bus. Investigate resistances above one hundred fifteen percent (115%) of calculated value.
- e. Determine contact resistance in microhms. Investigate deviations of more than fifty percent (50%) compared to other poles and similar breakers.

J) Schedule J: Transformers:

1) Transformers - Dry Type (larger than 100 kVA single-phase or 300 kVA three-phase)

a. Visual and Mechanical Inspection:

- (1) Inspect for physical damage, cracked insulators, tightness of connections, defective wiring and general mechanical and electrical conditions.
- (2) Clean all insulators and standoffs using approved methods and materials.
- (3) Verify proper operation of auxiliary devices such as fans and indicators.
- (4) Check tightness of accessible bolted electrical joints in accordance with **Table A-1**.
- (5) Verify proper core grounding.
- (6) Verify proper equipment grounding.
- (7) Thoroughly clean unit prior to testing.
- (8) Inspect and clean fuse holders and assemblies.

b. Electrical Tests:

- (1) Perform insulation-resistance tests, winding-to-winding and windings-to-ground, utilizing a meg-ohm-meter with test voltage output as shown in **Table A-4**. Test duration shall be ten (10) minutes with resistances tabulated at thirty (30) seconds. Dielectric absorption ratio and polarization index shall be calculated.
- (2) Perform power-factor or dissipation-factor tests in accordance with the manufacturer's instruction manual.
- (3) Perform a turns-ratio test for each winding at all tap settings.
- (4) Perform tests and adjustments for fans, controls and alarm functions.
- (5) Verify that the tap-changer is set at specified ratio.

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- (6) Verify proper secondary voltage phase-to-phase and phase-to-neutral after energization and prior to leading.

c. Test Values:

- (1) Perform insulation-resistance tests in accordance with **Table J-3**. Results shall be temperature corrected in accordance with **Table J-4**.
 - (2) The polarization index shall be used for future reference.
 - (3) Turns-ratio test results should not deviate more than one-half percent (0.5%) from either the adjacent coils or the calculated ration.
-
- (4) CH and CL power-factor values will vary due to support insulators and bus work utilized on dry transformers. The following should be expected for CHL power factors:

Power Transformers: 2% or less
Distribution Transformers: 3% or less

- (5) Excitation current test data pattern: Two (2) similar current readings for outside coils and a dissimilar current reading for the center coil of a three-phase unit.

2) Transformers - Liquid-Filled:

a. Visual and Mechanical Inspection:

- (1) Inspect for physical damages, cracked insulators, leaks, tightness of connections and general mechanical and electrical conditions.
- (2) Clean all insulators and standoffs using approved methods and materials.
- (3) Verify proper auxiliary device operation.
- (4) Check tightness of accessible bolted electrical connections in accordance with **Table A-1**.
- (5) Perform specific inspections and mechanical tests as recommended by manufacturer.
- (6) Verify proper equipment grounding
- (7) Transformers with 3 position oil-filled switching devices:
 - (a) Check for proper operation of switch.
 - (b) Measure contact resistance.
 - (c) Check tightness of terminations and clean switch bushings.
 - (d) Clean all insulators and standoffs using approved methods and materials.
 - (e) Check oil level.
 - (f) Take oil sample and test per spec section b,3 Electrical Tests bullets 3,4,5.
- (8) Transformers with fuses and fuse holders.

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- a) Check tightness of terminations and fuse holders.
- b) Visually inspect and clean fuses and fuse holders.

(9) De-tape primary connections on transformers with 3 position switches if they are not already done and clean and reboot with insulating material that is approved by owner.

b. Electrical Tests:

- (1) Perform insulation-resistance tests, winding-to-winding and windings-to-ground, utilizing a meg-ohm-meter with test voltage output as shown in **Table B-3**. Test duration shall be for ten (10) minutes with resistances tabulated at 30 seconds, 1 minute and 10 minutes. Calculate dielectric absorption ratio and polarization index.
- (2) Perform a turns-ratio test between windings at all tap positions. The final tap setting is to be determined by the County's/User's electrical engineer and set by the testing firm.
- (3) Sample insulating liquid in accordance with **ASTM D-923**. Sample shall be laboratory testing for:
 - a) Dielectric breakdown voltage: **ASTM D-877 or ASTM D-1816**.
 - b) Acid neutralization number: **ASTM D-974**.
 - c) Specify gravity: **ASTM D-1298**.
 - d) Interfacial tension: **ASTM D-971 or ASTM 2285**.
 - e) Color: **ASTM D-1500**.
 - f) Visual Condition: **ASTM D-1524**.
 - g) Power Factor: **ASTM D-924** (required on 46 kV or higher voltages).
 - h) Water content: **ASTM D-1533** (required on 25kV or higher voltages and on all silicone filled units).
- (4) Perform dissolved gas analysis (**DGA**) in accordance with **ANSI/IEEE C57.104 or ASTM D-3612**.
- (5) Measure total combustible gas (TCG) content in accordance with **ANSI/EEEC.57.104 or ASTM D-3284**.
- (6) Perform insulation power-factor tests or dissipation-factor tests on all windings and bushings. Determine overall dielectric-loss and power factor **C(H), C (L), (CHL)**. Test voltages should be limited to the line-to-ground voltage rating of the transformer winding.
- (7) Perform individual excitation current tests on each phase.
- (8) Perform tests and adjustments on fan and pump controls and alarm functions.
- (9) Verify proper core grounding if accessible.

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(10) Perform percent oxygen test on the nitrogen blanket.

c. Test Values:

- (1) Insulation-resistance and absorption test. Test voltages shall be in accordance with **Table J-3**. Resistance values shall be in temperature corrected in accordance with **Table J-4**.
- (2) The polarization index should be used for future reference.
- (3) Turns-ratio test results shall not deviate more than one-half percent (0.5%) from either the adjacent coils or the calculated ratio.
- (4) Maximum power factor of liquid-filled transformers corrected to twenty (20) degrees C shall be in accordance with manufacturer's specification. Representative values are indicated in **Table J-1**.
- (5) Bushing power factors and capacitances that vary from nameplate values by more than ten percent (10%) should be investigated.
- (6) Excitation current test data pattern: Two (2) similar current readings for outside coils and a dissimilar current reading for the center coil of a three-phase unit.
- (7) Dielectric fluid should comply with **Table J-2**.

3) Transformers-Small Dry-Type, air-cooled (600 Volt & Below) (less than 100 kVA single-phase or 300 kVA three-phase)

- a. Inspect for physical damage, broken insulation, tightness of connections, defective wiring and general condition.
- b. Thoroughly clean unit prior to making any tests.
- c. Perform insulation-resistance test. Calculate dielectric absorption ratio and polarization index. Make measurements from winding-to-winding and windings-to-ground. Test voltages and minimum resistance shall be in accordance with **Table J-3**. Results shall be temperature corrected in accordance with **Table J-4**.
- d. Verify taps and connect transformer to desired tap, if applicable.
- e. Energize primary winding with system voltage. Measure secondary voltage with the secondary load disconnected. Record results.

K) Schedule K: Motor Control - Medium Voltage

1) Visual and Mechanical Inspection:

- a. Inspect for physical, electrical and mechanical condition.
- b. Check for proper anchorage, required area clearances, physical damage and proper alignment.
- c. Inspect all doors, panels and sections for paint, dents, scratches, fit and missing hardware.

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- d. Record fuse sizes and types.
- e. Verify that instrument transformer ratios correspond to drawings.
- f. Check all bus and cable connections. Use low-resistance ohmmeter or check bolt tightness by using calibrated torque wrench.
- g. Test all electrical and mechanical interlock systems for proper operation and sequencing.
- h. Clean entire motor control, insulators and standoffs, using manufacturers approved methods and materials.
- i. Inspect insulators for evidence of damaged contaminated surfaces.
- j. Verify proper barrier and shutter installation and operation.
- k. Verify and/or apply proper lubricant on stabs, finger assemblies and other moving and sliding surfaces.
- l. Exercise all active components and confirm proper operation of all indicating devices.
- m. Inspect contactors:
 - (1) Check mechanical operation.
 - (2) Inspect/adjust contact gap, wipe, alignment and pressure, etc., as applicable per manufacturer's requirements.
 - (3) Check tightness of all connections by using calibrated torque wrench. (See Table A-1)
- n. Compare overload protection rating with motor to verify proper size. Set adjustable devices per protective device coordination study.

2) Electrical Tests:

- a. Perform insulation-resistance tests on each bus section, phase-to-phase and phase-to-ground for one (1) minute per **Table B-1**.
- b. Perform insulation-resistance tests on contact phase to ground and across the open contacts for one (1) minute per **Table B-1**.
- c. For vacuum contactor, perform bottle integrity test on each pole per manufacturer procedure.
- d. Measure contact resistance.
- e. Energize contactor using an auxiliary source. Adjust armature to minimize operating hum where applicable.

3) Test Values:

- a. Minimum insulation-resistance values shall be per **Table B-1**.
- b. Compare contact resistance to adjacent poles and similar contactors. Investigate deviations of more than fifty percent (50%) or if values exceed manufacturer's recommendations.
- c. Bolt-torque values shall be per **Table A-1** unless otherwise specified by manufacturer.

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L) Schedule L: Stand Off Insulators

- 1) Clean standoffs and insulators.
- 2) Tighten connections according to torque specs.

M) Schedule M: Low Voltage Outdoor Bus Structures

1) Visual and Mechanical Inspection:

- a. Examine bus and supports for defects, such as cracked welds, etc.
- b. Check tightness of accessible bolted bus joints by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels

2) Electrical Tests:

- a. Over Potential Test: Perform over potential test on each bus phase-to-phase and phase-to-ground. Potential application shall be for one (1) minute. Test voltage shall be in accordance with **Table N-1** or manufacturer's recommendations.

3) Test Values:

- a. Bolt-torque levels shall be in accordance with manufacturer's recommendations or **Table A-1**.
- b. Minimum insulation-resistance shall be in accordance with **Table B-2**.
- c. Over potential test voltage shall be in accordance with **Table N-1** evaluated as pass/fail.
- d. Compare measured bus connector joint resistance to calculated resistance of bus. Investigate resistances above one hundred fifteen percent (115%) of calculated value.

N) Schedule N: Circuit Breakers, Low Voltage, Air

1) Visual and Mechanical Inspection:

- a. Inspect for physical damage.
- b. Inspect anchorage, alignment and grounding.
- c. Perform all mechanical operator and contact alignment tests on both the breaker and its operating mechanism.
- d. Check tightness of bolted bus joints by using calibrated torque wrench. Refer to manufacturer's instructions or **Table A-1** for proper torque levels.
- e. Check cell fit and element alignment.
- f. Check racking mechanism.
- g. Verify that primary and secondary contact wipe and other dimensions vital to satisfactory operation of the breaker are correct.

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- h. Lubricate all moving current carrying parts per manufacturer's recommendations.
- i. Check for proper operation of the cubicle shutter.
- j. Vacuum out cubicle.
- k. Check feeder cables for tightness, corona damage and ground wires for proper connections.

2) Electrical Tests:

- a. Measure contact resistance.
- b. Measure insulation resistance pole-to-pole, pole-to-ground and across open poles. Use a minimum test voltage of 2500 volts.
- c. Perform a Primary Injection test on trip unit with breaker in closed position when possible. If breaker is a bolt on unit, then a test of trip unit using manufacturer's recommended practices and instruments will be sufficient. Test each pole and record values.
- d. Perform minimum pickup voltage tests on trip coils.

3) Test Values:

- a. Determine contact resistance in microhms. Investigate deviations of more than fifty percent (50%) compared to other poles and similar breakers.
- b. Minimum insulation resistance should comply with **Table A-2**.

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TABLE A - 1

**U.S. STANDARD
 BOLT TORQUE VALUES FOR BUS CONNECTIONS
 HEAT-TREATED STEEL - CADMIUM OR ZINC-PLATED**

<u>GRADE</u>	<u>SAE</u>	<u>SAE</u>	<u>SAE</u>	<u>SAE</u>
	1&2	5	6	8
<u>Minimum Tensile Strength (PSI)</u>	64K	105K	133K	150K

<u>Diameter (Inches)</u>	<u>Bolt</u>	<u>Torque (foot pounds)</u>		
1/4	4.0	5.6	8.0	8.4
5/16	7.2	11.2	15.2	17.6
3/8	12.0	20.0	27.2	29.6
7/16	19.2	32.0	44.0	48.0
1/2	29.6	48.0	68.0	73.6
9/16	42.4	70.4	96.0	105.6
5/8	59.2	96.0	133.6	144.0
3/4	96.0	160.0	224.0	236.8
7/8	152.0	241.6	352.0	378.4
1	225.6	372.8	528.0	571.2

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TABLE A-1
BOLT TORQUE VALUES FOR BUS CONNECTIONS
SILICON BRONZE FASTENERS*

Torque (Foot Pounds)

<u>Diameter</u>	<u>Non-Lubricated</u>	<u>Lubricated</u>
5/16	15	10
3/8	20	14
1/2	40	25
5/8	55	40
3/4	70	60

*Bronze alloy bolts shall have a minimum tensile strength of 70,000 lbs. per inch.

ALUMINUM ALLOY FASTENERS **

Torque (Foot Pounds)

<u>Diameter</u>	<u>Lubricated</u>
5/15	8.0
3/8	11.2
1/2	20.0
5/8	32.0
3/4	48.0

**Aluminum alloy bolts shall have a minimum tensile strength of 55,000 lbs. per square inch.

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TABLE A-1

**BOLT TORQUE VALUES FOR BUS CONNECTIONS
STAINLESS STEEL FASTENERS*****

Torque (Foot Pounds)

<u>Diameter</u>	<u>Uncoated</u>
5/16	14
3/8	25
1/2	45
5/8	60
3/4	90

***Bolts, cap screws, nuts, flat washers, locknuts: Belleville washers: 302 alloy

TABLE A-2

SWITCHGEAR INSULATION-RESISTANCE TEST VOLTAGES

Voltage Rating	Minimum dc Test Voltage	Recommended Minimum Insulation Resistance In Megohms
0 - 250V	500V	50
251 - 601V	1000V	100
601 - 5000V	2500V	1000
5001 - 15000V	2500V	5000
15001 - 39000V	5000V	20000

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TABLE A-3

FIELD OVERPOTENTIAL TEST VOLTAGES*

Type of Apparatus	Rated kV	Test	
		ac	dc
MC	4.76	14.3	20.3
(Metal Clad	8.25	27.0	37.5
Switchgear)	15.0	27.0	37.5
	38.0	60.0	+
SC	15.5	37.5	+
Station type	38.0	60.0	+
Cubicle	72.5	120.0	+
Switchgear			
MEI	4.76	14.3	20.3
Metal Enclosed	8.25	19.5	27.8
Interrupter	15.0	27.0	37.5
Switchgear	15.5	37.5	52.5
	25.8	45.0	+
	38.0	60.0	+
MEB	0.6	1.6	2.3
Metal Enclosed	5.0	14.3	20.3
Bus	15.0	27.0	37.5
	25.0	45.0	+
	35.0	60.0	+

*Consult Manufacturer's Specifications.

*Derived from ANSI/IEEE C37.20.2 and C37.20.3

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TABLE A-4

TRANSFORMER INSULATION-RESISTANCE TEST VOLTAGES

<u>Transformer Coil Rating</u>	<u>Test Voltage</u>	<u>Minimum dc</u>	
		<u>Recommended Minimum Insulation Resistance in Megohms</u>	
		<u>Liquid-Filled</u>	<u>Dry-Type</u>
0 - 600 V	1000 V	100	500
601 - 5000 V	2500 V	1000	5000
5001 - 15000 V	5000 V	5000	25000
15001 - 39000 V	10000 V	_____	_____
Over 39000 Volts 1	5000 V	_____	_____

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TABLE A-5

Transformer Insulation Resistance
Temperature Correction Factors to 20 Degrees C

<u>Temperature</u>		<u>Transformer</u>	
<u>C</u>	<u>F</u>	<u>Oil</u>	<u>Dry</u>
0	32	.50	.00
5	41	.36	.45
10	50	.50	.50
15	59	.75	.75
20	68	1.00	1.00
25	77	1.40	1.30
30	86	1.98	1.60
35	95	2.80	2.05
40	104	3.95	2.50
45	113	5.60	3.25
50	122	7.85	4.00
55	131	11.20	5.20
60	140	15.85	6.40
65	149	22.40	8.70
70	158	31.75	10.00
75	167	44.70	13.00
80	176	63.50	16.00

**BP0807-14
HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION**

TABLE B-1

**INSULATION RESISTANCE TEST VOLTAGES
FOR ELECTRICAL APPARATUS**

Maximum Voltage Rating of Equipment	Minimum Test Voltage, dc	Recommended Minimum Insulation Resistance in Megohms
250 Volts	500 Volts	25
600 Volts	1,000 Volts	100
5,000 Volts	2,500 Volts	1,000
8,000 Volts	2,500 Volts	2,000
15,000 Volts	2,500 Volts	5,000
25,000 Volts	5,000 Volts	20,000
35,000 Volts	15,000 Volts	100,000
46,000 Volts	15,000 Volts	100,000
69,000 Volts	15,000 Volts	100,000

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HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION**

**TABLE D-1
INSULATING LIQUID TEST VALUES**

	Oil	High Molecular Weight Hydrocarbon	Silicone	Tetrachlor-ethylene
Dielectric Breakdown ASTM D-1816 @ 0.04" gap	30 kV	30 kV	30 kV	30 kV
34.5 kV & below	20 kV Min.	_____	_____	26 kV Min.
Above 34.5	25 kV Min.	_____	_____	_____
Neutralization # ASTM D-974	0.04 mgKOH/g Max.	0.03 mgKOH/g Max.	.01 mgKOH/g Max.	0.25 mgKOH/g Max.
Interfacial Tension ASTM-D974 or D-2285	35 dynes/ cm Min.	33 dynes/ cm Min.	_____	_____
Color ASTM-D 1500	1.0 Max.	N/A	0.05 Max. (D-2129)	_____
Visual Condition ASTM D-1524	Clear, Bright Pale Straw	N/A	Crystal Clear (D-2129)	Clear, Slight Pink Iridescent
Power Factor ASTM D-924 25 degrees C	0.01% Max.	0.1% Max.	0.1% Max.	2.0% Max.
Water Content ASTM D-1533 15 kV & below	35 PPM* Max.	35 PPM Max.	80 PPM Max.	25 PPM Max.
Above 15 kV BELOW 115 kV 2	5 PPM* Max.	_____	_____	_____
115 kV-230 kV	20 PPM* Max.	_____	_____	_____
Above 230 kV	15 PPM Max.	_____	_____	_____

*Or in accordance with manufacturer's requirements. Some manufacturers recommend 15-PPM maximum for all transformers.

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**HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
 TECHNICAL SPECIFICATION**

TABLE F-1
INSTRUMENT TRANSFORMER DIELECTRIC TEST VOLTAGE

Nominal System Voltage	BIL (kV)	Dielectric Withstandability Field Test Voltage (Kv)		
		<u>ac</u>	<u>dc</u>	
2.4	45		11.3	15
4.8	60		14.3	19
8.32 75		19.5	26	
13.8 95		25.5	34	
13.8 110		25.5	34	
25	125		30.0	40
25	150		37.5	50
34.5 150		37.5	50	
34.5 200		52.5	70	
46	250		71.3	+
69	350		105	+
115	450		138	+
115	550		172	+
138	550		172	+
138	650		206	+
161	650		206	+
161	750		243	+
230	900		296	+
230	1050		345	+

Table is derived from paragraph 8.8.2 and tables 2 and 7 of ANSI/IEEE C 57.13, "Standard Requirements for Instrument Transformers".

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HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION**

**TABLE N - 1
OVERPOTENTIAL TEST VOLTAGES FOR
ELECTRICAL APPARATUS OTHER THAN INDUCTIVE EQUIPMENT**

Nominal System (Line) Voltage * (kV)	Insulation Class	AC Factory Test (kV)	Maximum Field Applied AC Test (kV)	Maximum Field Applied DC Test (kV)
1.2	1.2	10	6.0	8.5
2.4	2.5	15	9.0	12.7
4.8	5.0	19	11.4	16.1
8.3	8.7	26	15.6	22.1
14.4 15.0	34	20.4	28.8	
18.0 18.0	40	24.0	33.9	
25.0 25.0	50	30.0	42.4	
34.5 35.0	70	42.0	59.4	
46.0 46.0	95	57.0	80.6	
69.0 69.0	140	84.0	118.8	

*Intermediate voltage ratings are placed in the next higher insulation class.

**BP0807-14
HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION**

TABLE J - 1

LIQUID-FILLED TRANSFORMER INSULATION POWER FACTOR VALUES

	Oil	Silicone Tetrachlorethylene	High Fire Point Hydrocarbon	
New Power Transformers	0.5%	0.5%	3.0%	0.5%
New Distribution Transformers	1.0%	0.5%	3.0%	1.0%
Remanufactured Power Transformers	1.0%	1.0%	_____	_____

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 TECHNICAL SPECIFICATION**

**TABLE J - 2
 INSULATING LIQUID TEST VALUES**

	Oil	High Molecular Weight Hydrocarbon	Silicone	Tetra-Chlorethylene
Dielectric Breakdown ASTM - D877	30 kV Min.	30 kV Min.	30 kV Min.	30 kV Min.
Dielectric Breakdown ASTM D-1816 @ 0.04 gap				
34.5 kV & below	20 kV Min.	_____	_____	26 kV Min.
Above 34.5 kV	25 kV Min.	_____	_____	_____
Neutralization# ASTM d-974	0.04 mgKOH/g Max.	0.03 mgKOG/g Max.	0.01 mgKOH/g Max.	0.25 mgKOH/g Max.
Interfacial Tension ASTM D-974	35 dynes/cm Min.	33 dynes/cm Min.	_____	_____
Color ASTM-D-1500	1.0 Max.	N/A	0.05 Max. (D-2129)	_____
Visual Condition ASTM D-1524	Clear, Bright Pale Straw	N/A	Crystal Clear (D-2129)	Clear, Slight Pink Iridescent
Power Factor ASTM D-924 @ 25 Degrees C	0.1% Max.	0.1% Max.	0.1% Max.	2.0% Max.
Water Content ASTM D-1533 15 kV & below	35 PPM* Max.	35 PPM Max.	.80 PPM Max.	25 PPM Max.
Above 15 kV below 115 Kv	5 PPM* Max.	_____	_____	_____
115 kV - 230 kV	20 PPM* Max.	_____	_____	_____
Above 230 kV	15 PPM	_____	_____	_____

*Or in accordance with manufacturer's requirements. Some manufacturers recommend 15 PPM maximum for all transformers.

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HEAVY ELECTRICAL MAINTENANCE TERM CONTRACT
TECHNICAL SPECIFICATION**

TABLE J - 3

TRANSFORMER INSULATION-RESISTANCE TEST VOLTAGES

Transformer Coil Rating	Minimum dc Test Voltage	Recommended Minimum Insulation Resistance in Megohms Liquid Filled Dry - Type
0 - 600 Volts	1000 Volts	100
601 - 5000 Volts	2500 Volts	1000
5001 - 15000 Volts	5000 Volts	5000
15001 - 39000 Volts	10000 Volts	_____
Over 39000 Volts 1	5000 Volts	_____

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TECHNICAL SPECIFICATION

TABLE J - 4

TRANSFORMER INSULATION RESISTANCE

TEMPERATURE CORRECTION FACTORS
TO 20 DEGREES C

TEMPERATURE

C	F	OIL	DRY
0	32	.25	.40
5	41	.36	.45
10	50	.50	.50
15	59	.75	.75
20	68	1.00	1.00
25	77	1.40	1.30
30	86	1.98	1.60
35	95	2.80	2.05
40	104	3.95	2.50
45	113	5.60	3.25
50	122	7.85	4.00
55	131	11.20	5.20
60	140	15.85	6.40
65	149	22.40	8.70
70	158	31.75	10.00
75	167	44.70	13.00
85	176	63.50	16.00

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(c) LABOR - EMERGENCIES:

1. Emergency Call (M-F, 7:00 am - 6:00 pm):

BID PRICE \$ 100.70 per hour x 10 hours \$ 1,007.00
EXTENSION

2. Emergency Call (M-F, 6:00 pm - 7:00 am):

BID PRICE \$ 132.50 per hour x 5 hours \$ 662.50
EXTENSION

3. Emergency Call (Weekends/Holidays):

BID PRICE \$ 201.40 per hour x 5 hours \$ 1,007.00
EXTENSION

Total of Section 7.00 Additional Labor:

\$ 2,676.50

TRANSFER TOTAL TO FRONT PROPOSAL PAGE

8.00 EQUIPMENT TO BE MAINTAINED:

The principle items to be maintained and their schedules of work are described below. The descriptions are general only and should not be construed as a complete listing of every item of work required.

SECTION 8.01: EQUIPMENT (other than relays) see pages 43-124.

SECTION 8.02: EQUIPMENT (relays only) see pages 125-132.

BUTTONWOOD PUMP STATION, 15 N GREECE ROAD, HILTON

CIR-00070	CIRCUIT BREAKER (MOLDED CASE)	MM # 1026151	BID PRICE \$ 566.04
LOCATION:	BUTTONWOOD PS - POWER DISTRIBUTION - SUBSTATION CONTROL HOUSE - CIRCUIT BREAKER #4 (LV M1) - INSIDE		
MANUFACTURER:	SQUARE D		
MODEL #:	SERIES 3B		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	4000		
FRAME SIZE (CIRCUIT BREAKER):	1200		
TRIP UNIT MANUFACTURER:	SQUARE D		
TRIP UNIT MODEL NUMBER:	SERIES B		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00071	CIRCUIT BREAKER (MOLDED CASE)	MM # 1026152	BID PRICE \$ 566.04
LOCATION:	BUTTONWOOD PS - POWER DISTRIBUTION - SUBSTATION CONTROL HOUSE - CIRCUIT BREAKER #5 (LV M2) - INSIDE		
MANUFACTURER:	SQUARE D		
MODEL #:	SERIES 3B		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	4000		
FRAME SIZE (CIRCUIT BREAKER):	1200		
TRIP UNIT MANUFACTURER:	SQUARE D		
TRIP UNIT MODEL NUMBER:	SERIES B		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
GRO-00004	GROUNDING SYSTEM	MM # 1026312	BID PRICE \$ 1,034.56
LOCATION:	BUTTONWOOD PS - POWER DISTRIBUTION - SUBSTATION CONTROL HOUSE - GROUNDING SYSTEM #1		
PM SCHEDULE(S) REQUIRED:	F		
TRA-00061	TRANSFORMER	MM # 1026286	BID PRICE \$ 844.82
LOCATION:	BUTTONWOOD PS - POWER DISTRIBUTION - SUBSTATION CONTROL HOUSE - TRANSFORMER #1 (T-1) - OUTSIDE		
MANUFACTURER:	SQUARE D		
PRIMARY VOLTAGE:	12470 AC		
AMPS (PRIMARY):	115		
SECONDARY VOLTAGE:	480 AC		
AMPS (SECONDARY):	3004		
KVA RATING:	2500		
CLASS:	OA		
OIL CAPACITY (GALLONS):	490		
IMPEDANCE PERCENTAGE	5.42		
DEGREES OF RISE (C):	55		
PM SCHEDULE(S) REQUIRED:	F,J		
TRA-00062	TRANSFORMER	MM # 1026287	BID PRICE \$ 844.82
LOCATION:	BUTTONWOOD PS - POWER DISTRIBUTION - SUBSTATION CONTROL HOUSE - TRANSFORMER #2 (T-2) - OUTSIDE		
MANUFACTURER:	SQUARE D		
PRIMARY VOLTAGE:	12470 AC		
AMPS (PRIMARY):	115		
SECONDARY VOLTAGE:	480 AC		
AMPS (SECONDARY):	3004		
KVA RATING:	2500		
CLASS:	OA		
OIL CAPACITY (GALLONS):	490		
IMPEDANCE PERCENTAGE	5.42		
DEGREES OF RISE (C):	55		
PM SCHEDULE(S) REQUIRED:	F,J		
Section total:	BUTTONWOOD PUMP STATION		\$ 6,315.48

CENTRAL GATES PUMP STATION, 1150 BUFFALO ROAD, ROCHESTER

CIR-00200 **CIRCUIT BREAKER (AIR TYPE)** **MM # 7 1038106** **BID PRICE \$ 344.10**

LOCATION: **CENTRAL GATES PS - POWER DISTRIBUTION - WET WEATHER - CIRCUIT BREAKER 1 - MAIN FLOOR**

MANUFACTURER: **SQUARE D**
MODEL #: **SED361200LIGES1E8**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00201 **CIRCUIT BREAKER (AIR TYPE)** **MM # 7 1038107** **BID PRICE \$ 344.10**

LOCATION: **CENTRAL GATES PS - POWER DISTRIBUTION - WET WEATHER - CIRCUIT BREAKER 2 - MAIN FLOOR**

MANUFACTURER: **SQUARE D**
MODEL #: **SED361200LIGES1E8**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00202 **CIRCUIT BREAKER (AIR TYPE)** **MM # 7 1038108** **BID PRICE \$ 344.10**

LOCATION: **CENTRAL GATES PS - POWER DISTRIBUTION - WET WEATHER - CIRCUIT BREAKER 3 - MAIN FLOOR**

MANUFACTURER: **SQUARE D**
MODEL #: **SED361200LIGES1E8**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

Section total: **CENTRAL GATES PUMP STATION** **\$ 1,032.30**

CHARLOTTE PUMP STATION, 556 RIVER ST, ROCHESTER

CIR-00114 **CIRCUIT BREAKER** **MM # 1026138** **BID PRICE \$ 766.38**
 (VACUUM TYPE)

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - MAIN FLOOR - CIRCUIT BREAKER #1

MANUFACTURER: GENERAL ELECTRIC
MODEL #: TYPE VB4.16-250-3
SERIAL #: 0129A8002-001-01
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
INTERRUPT RATING (KA): 48
PM SCHEDULE(S) REQUIRED: A,C,F

CIR-00115 **CIRCUIT BREAKER** **MM # 1026310** **BID PRICE \$ 766.38**

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - MAIN FLOOR - CIRCUIT BREAKER #2

MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA
SERIAL #: 175040471100601
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: MICRO VERSA TRIP
PM SCHEDULE(S) REQUIRED: N

CIR-00116 **CIRCUIT BREAKER** **MM # 1026311** **BID PRICE \$ 766.38**

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - MAIN FLOOR - CIRCUIT BREAKER #3

MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA
SERIAL #: 175040471300701
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: MICRO VERSA TRIP
PM SCHEDULE(S) REQUIRED: N

GRO-00011 **GROUNDING SYSTEM** **MM # 1026216** **BID PRICE \$ 1,246.56**

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - MAIN FLOOR - GROUNDING SYSTEM #1

PM SCHEDULE(S) REQUIRED: F

TRA-00073 **TRANSFORMER** **MM # 1026298** **BID PRICE \$ 959.30**

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - MAIN FLOOR - TRANSFORMER #1

MANUFACTURER: FEDERAL PACIFIC
PRIMARY VOLTAGE: 4160 AC
SECONDARY VOLTAGE: 480/277 AC
KVA RATING: 1000/1333
CLASS: AA/FFA
IMPEDANCE PERCENTAGE: 6.1
PM SCHEDULE(S) REQUIRED: F,J

Section total: **CHARLOTTE PUMP STATION** **\$ 4,505.00**

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00268 **CIRCUIT BREAKER (AIR TYPE)** *1038109* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 01 - MAIN B

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00269 **CIRCUIT BREAKER (AIR TYPE)** *1038110* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 02 - LIGHTING FEEDER A

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00270 **CIRCUIT BREAKER (AIR TYPE)** *1038111* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 03 - BUS TIE

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00271 **CIRCUIT BREAKER (AIR TYPE)** *1038112* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 04 - MCC2

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

SERIAL #: 156A5085-217-XU

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00272 **CIRCUIT BREAKER (AIR TYPE)** *1038113* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 05 - MCC3

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00273 **CIRCUIT BREAKER (AIR TYPE)** *1038114* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 06 - PP5

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

SERIAL #: 156A5085-218-XU

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00274 **CIRCUIT BREAKER (AIR TYPE)** *1038115* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 07 - SPARE

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25-1

SERIAL #: 209A2237-201-LD

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

TRIP UNIT MANUFACTURER: AC-PRO

PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00275 **CIRCUIT BREAKER (AIR TYPE)** *1038116* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - CIRCUIT BREAKER 08 - MAIN A

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00276 **CIRCUIT BREAKER (AIR TYPE)** *1038117* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 09 - MAIN B

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00277 **CIRCUIT BREAKER (AIR TYPE)** *1038118* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 10 - LIGHTING FEEDER B

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00278 **CIRCUIT BREAKER (AIR TYPE)** **1038119** **BID PRICE \$ 266.06**

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 11 - BUS TIE

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-50

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 1600

FRAME SIZE (CIRCUIT BREAKER): 1600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00279 **CIRCUIT BREAKER (AIR TYPE)** **1038120** **BID PRICE \$ 266.06**

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 12 - MCC1

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

SERIAL #: 156A5085-216-XU

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00280 **CIRCUIT BREAKER (AIR TYPE)** **1038121** **BID PRICE \$ 266.06**

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 13 - LIGHTING FEEDER C

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

SERIAL #: 156A5085-219-XU

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00281 **CIRCUIT BREAKER (AIR TYPE)** **1038122** **BID PRICE \$ 344.10**

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 14 - SPARE

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

TRIP UNIT MANUFACTURER: AC-PRO

PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00282 **CIRCUIT BREAKER (AIR TYPE)** **1038123** **BID PRICE \$ 266.06**

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 15 - PP9

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25

SERIAL #: 156A5085-221-XU

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00283 **CIRCUIT BREAKER (AIR TYPE)** *1038124* **BID PRICE \$** 266.06
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - CIRCUIT BREAKER 16 - MAIN A
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-50
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00284 **CIRCUIT BREAKER (AIR TYPE)** *1038125* **BID PRICE \$** 266.06
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 01 - MAIN A1A
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00285 **CIRCUIT BREAKER (AIR TYPE)** *1038126* **BID PRICE \$** 344.10
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 02 - SPARE
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-15
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 225
FRAME SIZE (CIRCUIT BREAKER): 225A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00286 **CIRCUIT BREAKER (AIR TYPE)** *1038127* **BID PRICE \$** 266.06
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 03 - BUS TIE
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00287 **CIRCUIT BREAKER (AIR TYPE)** *1038128* **BID PRICE \$** 266.06
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 04 - LL28D
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-15
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 225
FRAME SIZE (CIRCUIT BREAKER): 225A
PM SCHEDULE(S) REQUIRED: A,F,N

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00288 **CIRCUIT BREAKER (AIR TYPE)** **1038/29** **BID PRICE \$ 266.06**

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 05 - UL14C**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00289 **CIRCUIT BREAKER (AIR TYPE)** **1038/30** **BID PRICE \$ 266.06**

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 06 - LL14C**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00290 **CIRCUIT BREAKER (AIR TYPE)** **1038/31** **BID PRICE \$ 266.06**

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 07 - B14B**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00291 **CIRCUIT BREAKER (AIR TYPE)** **1038/32** **BID PRICE \$ 266.06**

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 08 - B14C**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00292 **CIRCUIT BREAKER (AIR TYPE)** **1038/33** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 09 - MCCT1**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00293 **CIRCUIT BREAKER (AIR TYPE)** *1038134* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 10 - MAIN B1A

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00294 **CIRCUIT BREAKER (AIR TYPE)** *1038135* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 - CIRCUIT BREAKER 01 - MAIN B1

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00295 **CIRCUIT BREAKER (AIR TYPE)** *1038136* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 - CIRCUIT BREAKER 02 - BUS TIE

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
SERIAL #: 127A2649-219-05
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00296 **CIRCUIT BREAKER (AIR TYPE)** *1038137* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 - CIRCUIT BREAKER 03 - PDP LL16

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-15
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 225
FRAME SIZE (CIRCUIT BREAKER): 225A
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00297 **CIRCUIT BREAKER (AIR TYPE)** *1038138* **BID PRICE \$** 266.06

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 - CIRCUIT BREAKER 04 - PDP LL23

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-15
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 225
FRAME SIZE (CIRCUIT BREAKER): 225A
PM SCHEDULE(S) REQUIRED: A,F,N

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00298 **CIRCUIT BREAKER (AIR TYPE)** *1038139* **BID PRICE \$** 344.10

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 - CIRCUIT BREAKER 05 - MP1**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00299 **CIRCUIT BREAKER (AIR TYPE)** *1038140* **BID PRICE \$** 266.06

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 - CIRCUIT BREAKER 06 - LL29V**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00300 **CIRCUIT BREAKER (AIR TYPE)** *1038141* **BID PRICE \$** 266.06

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 - CIRCUIT BREAKER 07 - LL14P**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00301 **CIRCUIT BREAKER (AIR TYPE)** *1038142* **BID PRICE \$** 266.06

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 - CIRCUIT BREAKER 08 - LL14U**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00302 **CIRCUIT BREAKER (AIR TYPE)** *1038143* **BID PRICE \$** 344.10

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 - CIRCUIT BREAKER 09 - MAIN A1**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00303 **CIRCUIT BREAKER (AIR TYPE)** *1038144* **BID PRICE \$** 344.10

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 - CIRCUIT BREAKER 10 - SPARE**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-15**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **225**
FRAME SIZE (CIRCUIT BREAKER): **225A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00327 **CIRCUIT BREAKER (AIR TYPE)** *1038145* **BID PRICE \$** 344.10

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 - CIRCUIT BREAKER 11 - GRAND JURY**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **CUTLER HAMMER**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

SWI-00140 **SWITCH,LOAD INTERRUPTING AIR** *1038146* **BID PRICE \$** 202.99

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - SWITCH 01 - B3**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **IS2020 LVP SG1 AC**
PRIMARY VOLTAGE: **11500 AC**
PM SCHEDULE(S) REQUIRED: **A,B**

SWI-00141 **SWITCH,LOAD INTERRUPTING AIR** *1038147* **BID PRICE \$** 202.99

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - SWITCH 02 - A3**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **IS2020 LVP SG1 AC**
PRIMARY VOLTAGE: **11500 AC**
PM SCHEDULE(S) REQUIRED: **A,B**

SWI-00142 **SWITCH,LOAD INTERRUPTING AIR** *1038148* **BID PRICE \$** 202.99

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - SWITCH 03 - B3**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **IS2020 LVP SG1 AC**
PRIMARY VOLTAGE: **11500 AC**
PM SCHEDULE(S) REQUIRED: **A,B**

SWI-00143 **SWITCH,LOAD INTERRUPTING AIR** *1038149* **BID PRICE \$** 202.99

LOCATION: **CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 02 - SWITCH 04 - A3**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **IS2020 LVP SG1 AC**
PRIMARY VOLTAGE: **11500 AC**
PM SCHEDULE(S) REQUIRED: **A,B**

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

SWI-00144 SWITCH,LOAD 1038150 BID PRICE \$ 202.99
 INTERRUPTING AIR
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 -
 SWITCH 01 - A1A
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

SWI-00145 SWITCH,LOAD 1038151 BID PRICE \$ 202.99
 INTERRUPTING AIR
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 -
 SWITCH 02 - B1A
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

SWI-00146 SWITCH,LOAD 1038152 BID PRICE \$ 202.99
 INTERRUPTING AIR
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 01 -
 SWITCH 01 - B1
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

SWI-00147 SWITCH,LOAD 1038153 BID PRICE \$ 202.99
 INTERRUPTING AIR
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 -
 SWITCH 02 - A1
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

TRA-00124 TRANSFORMER 1038154 BID PRICE \$ 981.35
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 -
 TRANSFORMER 01 - B3
MANUFACTURER: GENERAL ELECTRIC
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 750/1000
CLASS: AA/FA
DEGREES OF RISE (C): 80
PM SCHEDULE(S) REQUIRED: F,J

TRA-00126 TRANSFORMER 1038155 BID PRICE \$ 981.35
LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 -
 TRANSFORMER 02 - A3
MANUFACTURER: GENERAL ELECTRIC
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 750/1000
CLASS: AA/FA
DEGREES OF RISE (C): 80
PM SCHEDULE(S) REQUIRED: F,J

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

TRA-00132

TRANSFORMER

1038161

BID PRICE \$ 981.35

LOCATION:

CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 103 - PANEL 02 -
TRANSFORMER 02 - A1

MANUFACTURER:

GENERAL ELECTRIC

SERIAL #:

C-865284A

PRIMARY VOLTAGE:

11500 AC

SECONDARY VOLTAGE:

480 AC

KVA RATING:

300/400

CLASS:

AA

DEGREES OF RISE (C):

80

PM SCHEDULE(S) REQUIRED:

F,J

Section total:

CIVIC CENTER GARAGE

\$ 20,099.34

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00120 **CIRCUIT BREAKER (AIR TYPE)** **1038162** **BID PRICE \$ 349.74**
LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 01 - CIRCUIT BREAKER 01 - "A" BUS MAIN BREAKER**
MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AM-13.8-500-3**
SERIAL #: **12A4362-5**
PRIMARY VOLTAGE: **13800 AC**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00121 **CIRCUIT BREAKER (AIR TYPE)** **1038163** **BID PRICE \$ 349.74**
LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 02 - CIRCUIT BREAKER 01 - "B" BUS MAIN BREAKER**
MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AM-13.8-500-3**
SERIAL #: **12A4362-7**
PRIMARY VOLTAGE: **13800 AC**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00122 **CIRCUIT BREAKER (AIR TYPE)** **1038164** **BID PRICE \$ 349.74**
LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 01 - RB G1 AND G2 FEEDER A1**
MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AM-13.8-500-3**
SERIAL #: **12A4362-9**
PRIMARY VOLTAGE: **13800 AC**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00123 **CIRCUIT BREAKER (AIR TYPE)** **1038165** **BID PRICE \$ 349.74**
LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 02 - PSB FEEDER A2**
MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AM-13.8-500-3**
SERIAL #: **12A4362-3**
PRIMARY VOLTAGE: **13800 AC**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00124 **CIRCUIT BREAKER (AIR TYPE)** **1038166** **BID PRICE \$ 349.74**
LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 03 - HOJ FEEDER A3**
MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AM-13.8-500-3**
SERIAL #: **12A4362-6**
PRIMARY VOLTAGE: **13800 AC**
AMPS (PRIMARY): **1200**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00125 **CIRCUIT BREAKER (AIR TYPE)** *1038167* **BID PRICE \$** 349.74
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER D4 - CHILLER PLANT FEEDER A4
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-11
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00126 **CIRCUIT BREAKER (AIR TYPE)** *1038168* **BID PRICE \$** 349.74
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 05 - BUS TIE BREAKER
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-13
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00127 **CIRCUIT BREAKER (AIR TYPE)** *1038169* **BID PRICE \$** 349.74
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 06 - CHILLER PLANT FEEDER B4
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-14
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00128 **CIRCUIT BREAKER (AIR TYPE)** *1038170* **BID PRICE \$** 349.74
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 07 - HOJ FEEDER B3
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-12
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00129 **CIRCUIT BREAKER (AIR TYPE)** *1038171* **BID PRICE \$** 349.74
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 08 - PSB FEEDER B2
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-10
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00130 **CIRCUIT BREAKER (AIR TYPE)** *1038172* **BID PRICE \$** 349.74

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 03 - CIRCUIT BREAKER 09 - RB G1 AND G2 FEEDER B1

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AM-13.8-500-3
SERIAL #: 12A4362-B
PRIMARY VOLTAGE: 13800 AC
AMPS (PRIMARY): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00131 **CIRCUIT BREAKER (AIR TYPE)** *1038173* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 01 - MAIN B

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-1-50-9
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00132 **CIRCUIT BREAKER (AIR TYPE)** *1038174* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 02 - CONDENSING PUMP 10

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00133 **CIRCUIT BREAKER (AIR TYPE)** *1038175* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 03 - CHILLED WATER PUMP 1

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00134 **CIRCUIT BREAKER (AIR TYPE)** *1038176* **BID PRICE \$** 344.10

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 04 - CONDENSING PUMP 11

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-25
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00135 **CIRCUIT BREAKER (AIR TYPE)** **1038177** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 05 - MCC A**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
SERIAL #: **127A2649-231-05**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00136 **CIRCUIT BREAKER (AIR TYPE)** **1038178** **BID PRICE \$ 266.06**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 06 - TIE BREAKER**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-1-50-9**
SERIAL #: **127A2649-216-05**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **1600**
FRAME SIZE (CIRCUIT BREAKER): **1600A**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00137 **CIRCUIT BREAKER (AIR TYPE)** **1038179** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 07 - CHILLED WATER PUMP 2**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00138 **CIRCUIT BREAKER (AIR TYPE)** **1038180** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 08 - CONDENSING PUMPS 8 AND 9**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00139 **CIRCUIT BREAKER (AIR TYPE)** **1038181** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 09 - CHILLED WATER PUMP 3**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK-2-25**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600A**
TRIP UNIT MANUFACTURER: **AC-PRO**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00140 **CIRCUIT BREAKER (AIR TYPE)** **1038182** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - CIRCUIT BREAKER 10 - MCC B**

MANUFACTURER: **GENERAL ELECTRIC**

MODEL #: **AK-2-25**

SERIAL #: **127A2649-230-05**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **600**

FRAME SIZE (CIRCUIT BREAKER): **600A**

TRIP UNIT MANUFACTURER: **AC-PRO**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00141 **CIRCUIT BREAKER (AIR TYPE)** **1038183** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 : PANEL 04 - CIRCUIT BREAKER 11 - MAIN A**

MANUFACTURER: **GENERAL ELECTRIC**

MODEL #: **AK-1-50-9**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **1600**

FRAME SIZE (CIRCUIT BREAKER): **1600A**

TRIP UNIT MANUFACTURER: **AC-PRO**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00144 **CIRCUIT BREAKER (AIR TYPE)** **1038184** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - CIRCUIT BREAKER 01 - SPARE**

MANUFACTURER: **GENERAL ELECTRIC**

MODEL #: **7160A118G**

PRIMARY VOLTAGE: **4160 AC**

AMPS (PRIMARY): **600**

FRAME SIZE (CIRCUIT BREAKER): **600A**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00146 **CIRCUIT BREAKER (AIR TYPE)** **1038185** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - CIRCUIT BREAKER 03 - CHILLER 2**

MANUFACTURER: **GENERAL ELECTRIC**

MODEL #: **7160A118G**

PRIMARY VOLTAGE: **4160 AC**

AMPS (PRIMARY): **600**

FRAME SIZE (CIRCUIT BREAKER): **600A**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00147 **CIRCUIT BREAKER (AIR TYPE)** **1038186** **BID PRICE \$ 344.10**

LOCATION: **CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - CIRCUIT BREAKER 04 - CHILLER 1**

MANUFACTURER: **GENERAL ELECTRIC**

MODEL #: **7160A118G**

PRIMARY VOLTAGE: **4160 AC**

AMPS (PRIMARY): **600**

FRAME SIZE (CIRCUIT BREAKER): **600A**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

SWI-00128 SWITCH,LOAD INTERRUPTING AIR 1038187 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - SWITCH 01 - B1

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00129 SWITCH,LOAD INTERRUPTING AIR 1038188 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 04 - SWITCH 02 - A1

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00130 SWITCH,LOAD INTERRUPTING AIR 1038189 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - SWITCH 01 - B4

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00131 SWITCH,LOAD INTERRUPTING AIR 1038190 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - SWITCH 02 - B4 SECONDARY

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 4160 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00132 SWITCH,LOAD INTERRUPTING AIR 1038191 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - SWITCH 03 - TIE SWITCH

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 4160 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00133 SWITCH,LOAD INTERRUPTING AIR 1038192 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - SWITCH 04 - A4 SECONDARY

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 4160 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00134 SWITCH,LOAD INTERRUPTING AIR 1038193 BID PRICE \$ 202.99

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE - ROOM 200 - PANEL 05 - SWITCH 05 - A4

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: IS2020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

CIVIC CENTER REFRIDGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER

TRA-00075 TRANSFORMER *1038194* BID PRICE \$ 981.35
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
ROOM 200 - PANEL 04 - TRANSFORMER 01 - B1
MANUFACTURER: GENERAL ELECTRIC
SERIAL #: C-865283B
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 750/1000
DEGREES OF RISE (C): 80
PM SCHEDULE(S) REQUIRED: F,J

TRA-00076 TRANSFORMER *1038195* BID PRICE \$ 981.35
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
ROOM 200 - PANEL 04 - TRANSFORMER 02 - A1
MANUFACTURER: GENERAL ELECTRIC
SERIAL #: C-865283A
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 750/1000
DEGREES OF RISE (C): 80
PM SCHEDULE(S) REQUIRED: F,J

TRA-00077 TRANSFORMER *1038196* BID PRICE \$ 981.35
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
ROOM 200 - PANEL 05 - TRANSFORMER 01 - B4
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 4160 AC
KVA RATING: 2000/2666
DEGREES OF RISE (C): 150
PM SCHEDULE(S) REQUIRED: F,J

TRA-00078 TRANSFORMER *1038197* BID PRICE \$ 981.35
LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
ROOM 200 - PANEL 05 - TRANSFORMER 02 - A4
PRIMARY VOLTAGE: 11500 AC
SECONDARY VOLTAGE: 4160 AC
KVA RATING: 2000/2666
DEGREES OF RISE (C): 150
PM SCHEDULE(S) REQUIRED: F,J

Section total: CIVIC CENTER REFRIDGERATION BUILDING \$ 13,932.83

DOWNTOWN JAIL MAINFRAME, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00304 **CIRCUIT BREAKER (AIR TYPE)** **1038198** **BID PRICE \$ 344.10**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 01 - MAIN B2

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-75S-2
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 3000
FRAME SIZE (CIRCUIT BREAKER): 3000A
TRIP UNIT MANUFACTURER: EATON DIGITRIP
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00305 **CIRCUIT BREAKER (AIR TYPE)** **1038199** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 02 - MCCBB

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25-1
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00306 **CIRCUIT BREAKER (AIR TYPE)** **1038200** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 03 - PPPES

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25-1
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00307 **CIRCUIT BREAKER (AIR TYPE)** **1038201** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 04 - MCCM

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25-1
SERIAL #: 209A2237-208LD
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00308 **CIRCUIT BREAKER (AIR TYPE)** **1038202** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 05 - SPARE

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25-1
SERIAL #: 209A2237-207LD
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
PM SCHEDULE(S) REQUIRED: A,F,N

DOWNTOWN JAIL MAINFRAME, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00309 **CIRCUIT BREAKER (AIR TYPE)** **1038203** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 08 BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 06 - PPBB

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25-1

PRIMARY VOLTAGE: 480 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00310 **CIRCUIT BREAKER (AIR TYPE)** **1038204** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 08 BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 07 - LIGHTING

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25-1

SERIAL #: 209A2237-206LD

PRIMARY VOLTAGE: 208 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00311 **CIRCUIT BREAKER (AIR TYPE)** **1038205** **BID PRICE \$ 266.06**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 08 BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 08 - MCCPHB

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25-1

PRIMARY VOLTAGE: 208 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00312 **CIRCUIT BREAKER (AIR TYPE)** **1038206** **BID PRICE \$ 344.10**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 08 BASEMENT - ROOM B209 - PANEL 01 - CIRCUIT BREAKER 09 - BUS TIE

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-75S-2

PRIMARY VOLTAGE: 208 AC

AMPS (PRIMARY): 3000

FRAME SIZE (CIRCUIT BREAKER): 3000A

TRIP UNIT MANUFACTURER: EATON DIGITRIP

PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00313 **CIRCUIT BREAKER (AIR TYPE)** **1038207** **BID PRICE \$ 344.10**

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 08 BASEMENT - ROOM B209 - PANEL 02 - CIRCUIT BREAKER 10 - PPBA

MANUFACTURER: GENERAL ELECTRIC

MODEL #: AK-2A-25-1

SERIAL #: 224A9670-37BG

PRIMARY VOLTAGE: 208 AC

AMPS (PRIMARY): 600

FRAME SIZE (CIRCUIT BREAKER): 600A

TRIP UNIT MANUFACTURER: CARRIERE

TRIP UNIT MODEL NUMBER: FB600E

PM SCHEDULE(S) REQUIRED: A,E,F,N

DOWNTOWN JAIL MAINFRAME, 130 S PLYMOUTH AVE, ROCHESTER

CIR-00319 **CIRCUIT BREAKER (AIR TYPE)** **1038214** **BID PRICE \$ 344.10**
LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 02 - CIRCUIT BREAKER 16 - PPBC
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-25-1
SERIAL #: 209A2237-203LD
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: CARRIERE
TRIP UNIT MODEL NUMBER: FB600E
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00320 **CIRCUIT BREAKER (AIR TYPE)** **1038215** **BID PRICE \$ 344.10**
LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 02 - CIRCUIT BREAKER 17 - ATS PPEB
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-7A-25-1
SERIAL #: 0347A820-001-001
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600A
TRIP UNIT MANUFACTURER: MICROVERSA TRIP
TRIP UNIT MODEL NUMBER: RMS-9
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00321 **CIRCUIT BREAKER (AIR TYPE)** **1038216** **BID PRICE \$ 344.10**
LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 02 - CIRCUIT BREAKER 18 - MAIN A2
MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2A-75S-2
PRIMARY VOLTAGE: 208 AC
AMPS (PRIMARY): 3000
FRAME SIZE (CIRCUIT BREAKER): 3000A
TRIP UNIT MANUFACTURER: EATON DIGITRIP
PM SCHEDULE(S) REQUIRED: A,E,F,N

SWI-00148 **SWITCH,LOAD INTERRUPTING AIR** **1038217** **BID PRICE \$ 202.99**
LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 01 - SWITCH 01 - B2
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

SWI-00149 **SWITCH,LOAD INTERRUPTING AIR** **1038218** **BID PRICE \$ 202.99**
LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 02 - SWITCH 02 - A2
MANUFACTURER: GENERAL ELECTRIC
MODEL #: IS2020 LVP SG1 AC
PRIMARY VOLTAGE: 11500 AC
PM SCHEDULE(S) REQUIRED: A,B

DOWNTOWN JAIL MAINFRAME, 130 S PLYMOUTH AVE, ROCHESTER

TRA-00133

TRANSFORMER

1038219

BID PRICE \$ 981.35

LOCATION:

DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 01 - TRANSFORMER 01 - B2

MANUFACTURER:

GENERAL ELECTRIC

SERIAL #:

F-965515B

PRIMARY VOLTAGE:

11500 AC

SECONDARY VOLTAGE:

208 AC

KVA RATING:

750/1000

CLASS:

AA

DEGREES OF RISE (C):

150

PM SCHEDULE(S) REQUIRED:

F,J

TRA-00134

TRANSFORMER

1038220

BID PRICE \$ 981.35

LOCATION:

DOWNTOWN JAIL MAINFRAME - FLOOR 0B BASEMENT - ROOM B209 -
PANEL 02 - TRANSFORMER 02 - A2

MANUFACTURER:

GENERAL ELECTRIC

SERIAL #:

F-965515A

PRIMARY VOLTAGE:

11500 AC

SECONDARY VOLTAGE:

208 AC

KVA RATING:

750/1000

CLASS:

AA

DEGREES OF RISE (C):

150

PM SCHEDULE(S) REQUIRED:

F,J

Section total:

DOWNTOWN JAIL MAINFRAME

\$ 7,704.04

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

BUS-00002 **BUS STRUCTURE (OUTDOOR)** **MM # 1026221** **BID PRICE \$ 1,051.52**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - OUTDOOR BUS STRUCTURE #1 - OUTSIDE

MANUFACTURER: GENERAL ELECTRIC
PRIMARY VOLTAGE: 34500 AC
PM SCHEDULE(S) REQUIRED: F,I

BUS-00003 **BUS DUCT (OUTDOOR)** **MM # 1026300** **BID PRICE \$ 272.42**

LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - OUTSIDE - NORTH OF BUILDING - OUTDOOR BUS STRUCTURE

MANUFACTURER: GENERAL ELECTRIC
PRIMARY VOLTAGE: 600 AC
AMPS (PRIMARY): 2500
SECONDARY VOLTAGE: 600 AC
AMPS (SECONDARY): 2500
PM SCHEDULE(S) REQUIRED: F,M

CIR-00025 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026108** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #01 (D4) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-11-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00026 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026109** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #02 (D3) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-8-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00027 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026110** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #03 (D2) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-12-11D
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00028 **CIRCUIT BREAKER (AIR** **MM # 1026111** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #04 (D1) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-9-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00029 **CIRCUIT BREAKER (AIR** **MM # 1026112** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #05 (D5) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-6-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00030 **CIRCUIT BREAKER (AIR** **MM # 1026113** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #06 (C6) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-3-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00031 **CIRCUIT BREAKER (AIR** **MM # 1026114** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #07 (C4) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-1-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00032 **CIRCUIT BREAKER (AIR** **MM # 1026115** **BID PRICE \$ 400.68**
TYPE)
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
ENTRANCE ROAD - CIRCUIT BREAKER #08 (C3) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-10-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00033 **CIRCUIT BREAKER (AIR** **MM # 1026116** **BID PRICE \$ 400.68**
TYPE)
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
ENTRANCE ROAD - CIRCUIT BREAKER #09 (C2) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-4-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00034 **CIRCUIT BREAKER (AIR** **MM # 1026117** **BID PRICE \$ 400.68**
TYPE)
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
ENTRANCE ROAD - CIRCUIT BREAKER #10 (C1) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-2-11D
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00035 **CIRCUIT BREAKER (AIR** **MM # 1026118** **BID PRICE \$ 400.68**
TYPE)
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
ENTRANCE ROAD - CIRCUIT BREAKER #11 (C5) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-15-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00036 **CIRCUIT BREAKER (AIR** **MM # 1026119** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #12 (B6) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A2-1-11D**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **3000**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00037 **CIRCUIT BREAKER (AIR** **MM # 1026120** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #13 (B5) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-1-11D**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00038 **CIRCUIT BREAKER (AIR** **MM # 1026121** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #14 (B4) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-16-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00039 **CIRCUIT BREAKER (AIR** **MM # 1026122** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #15 (B3) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-17-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00040 **CIRCUIT BREAKER (AIR** **MM # 1026123** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #16 (B2) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-14-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00041 **CIRCUIT BREAKER (AIR** **MM # 1026124** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #17 (B1) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-3-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00042 **CIRCUIT BREAKER (AIR** **MM # 1026125** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #18 (A6) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-13-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

CIR-00043 **CIRCUIT BREAKER (AIR** **MM # 1026126** **BID PRICE \$ 400.68**
TYPE)
LOCATION: **FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH**
ENTRANCE ROAD - CIRCUIT BREAKER #19 (A5) - INSIDE SUBSTATION
HOUSE
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE 5-HK**
SERIAL #: **47041-A1-19-11C**
PRIMARY VOLTAGE: **4160 AC**
AMPS (PRIMARY): **1200**
KVA RATING: **5**
INTERRUPT RATING (KA): **30.3**
PM SCHEDULE(S) REQUIRED: **A,B,C,F**

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00044 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026127** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #20 (A4) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-2-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00045 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026128** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #21 (A3) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-5-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00046 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026129** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #22 (A2) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-7-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

CIR-00047 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026130** **BID PRICE \$ 400.68**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #23 (A1) - INSIDE SUBSTATION HOUSE

MANUFACTURER: I.T.E.
MODEL #: TYPE 5-HK
SERIAL #: 47041-A1-1B-11C
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 1200
KVA RATING: 5
INTERRUPT RATING (KA): 30.3
PM SCHEDULE(S) REQUIRED: A,B,C,F

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00048	CIRCUIT BREAKER (OIL TYPE)	MM # 1026203	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #24 (OCB E) - OUTSIDE - NORTHWEST CORNER		
MANUFACTURER:	I.T.E.		
MODEL #:	KM-2500-20B		
SERIAL #:	41-20342-2011		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	125/TANK 375 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00049	CIRCUIT BREAKER (OIL TYPE)	MM # 1026204	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #25 (OCB F) - OUTSIDE - MIDDLE		
MANUFACTURER:	I.T.E.		
MODEL #:	KM-2500-20B		
SERIAL #:	41-20342-2021		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	125/TANK 375 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00050	CIRCUIT BREAKER (OIL TYPE)	MM # 1026205	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #26 (OCB G) - OUTSIDE - NORTHEAST CORNER		
MANUFACTURER:	I.T.E.		
MODEL #:	KM-2500-20B		
SERIAL #:	41-20342-2031		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	125/TANK 375 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00051	CIRCUIT BREAKER (OIL TYPE)	MM # 1026206	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #27 (OCB H) - OUTSIDE - NORTHEAST CORNER		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	FK-3B-3600-1		
SERIAL #:	0141A3349-201		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	231/TANK 693 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00052	CIRCUIT BREAKER (OIL TYPE)	MM # 1026207	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - CIRCUIT BREAKER #28 (OCB I) - OUTSIDE - NORTHWEST CORNER		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	FK-3B-3600-1		
SERIAL #:	0141A3349-202		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	231/TANK 693 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00053 **CIRCUIT BREAKER** **MM # 1026303** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #01 (CSP-1)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA
SERIAL #: SGLB36BD0600
PRIMARY VOLTAGE: 600 AC
AMPS (PRIMARY): 600
SECONDARY VOLTAGE: 600 AC
AMPS (SECONDARY): 600
FRAME SIZE (CIRCUIT BREAKER): 600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSI GT MVT
PM SCHEDULE(S) REQUIRED: F,M

CIR-00054 **CIRCUIT BREAKER** **MM # 1026304** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #02 (MMC-SHB-1)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA
SERIAL #: SGLB36BD1200
PRIMARY VOLTAGE: 600 AC
AMPS (PRIMARY): 1200
SECONDARY VOLTAGE: 600 AC
AMPS (SECONDARY): 1200
FRAME SIZE (CIRCUIT BREAKER): 1200 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSI GT MVT
PM SCHEDULE(S) REQUIRED: F,M

CIR-00055 **CIRCUIT BREAKER** **MM # 1026305** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #03 (MAIN)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA
SERIAL #: SSD25B325
PRIMARY VOLTAGE: 600 AC
AMPS (PRIMARY): 2500
SECONDARY VOLTAGE: 600 AC
AMPS (SECONDARY): 2500
FRAME SIZE (CIRCUIT BREAKER): 2500 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSI GT MVT
PM SCHEDULE(S) REQUIRED: F,M

CIR-00117 **CIRCUIT BREAKER** **MM # ~~1026306~~ 1038221** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #04 (CSP-2)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA (NAME PLATE) SGLB36BD0600
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSI GT MVT
PM SCHEDULE(S) REQUIRED: F,M

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

1038222

CIR-00118 **CIRCUIT BREAKER** **MM # NONE-** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #05 (CSP-3)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA (NAME PLATE) SGLB36BD0600
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSIQT MVT
PM SCHEDULE(S) REQUIRED: F,M

1038223

CIR-00119 **CIRCUIT BREAKER** **MM # NONE** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - ELECTRICAL ROOM IN NORTHEAST CORNER OF BASEMENT - CIRCUIT BREAKER #06 (CSP-4)
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SPECTRA (NAME PLATE) SGLB36BD0600
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 600 AMP
TRIP UNIT MANUFACTURER: GENERAL ELECTRIC
TRIP UNIT MODEL NUMBER: LSIQT MVT
PM SCHEDULE(S) REQUIRED: F,M

GRO-00002 **GROUNDING SYSTEM** **MM # 1026210** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - GROUNDING SYSTEM #1 - OUTSIDE
PM SCHEDULE(S) REQUIRED: F

LIG-00002 **LIGHTNING PROTECTION SYSTEM** **MM # 1026218** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - LIGHTNING PROTECTION #1 - OUTSIDE
PM SCHEDULE(S) REQUIRED: F

RES-00003 **RESISTOR BANK** **MM # 1026224** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - RESISTER BANK #1 - OUTSIDE BETWEEN TRANSFORMER 1 AND 2
PM SCHEDULE(S) REQUIRED: F,I,M

RES-00004 **RESISTOR BANK** **MM # 1026225** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - RESISTER BANK #2 - OUTSIDE BETWEEN TRANSFORMER 3 AND 4
PM SCHEDULE(S) REQUIRED: F,I,M

SWI-00006 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026195** **BID PRICE \$ 400.68**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - OUTSIDE - NORTH OF BUILDING - SWITCH #01
MANUFACTURER: GENERAL ELECTRIC
MODEL #: SE-10-2
SERIAL #: 7274A63G12
PRIMARY VOLTAGE: 5000 AC
AMPS (PRIMARY): 600
SECONDARY VOLTAGE: 5000 AC
AMPS (SECONDARY): 600
PM SCHEDULE(S) REQUIRED: B

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

TRA-00006 TRANSFORMER MM # 1026231 BID PRICE \$ 1,051.52
 LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
 ENTRANCE ROAD - TRANSFORMER #1 - WEST END IN STATION
 MANUFACTURER: I.T.E.
 PRIMARY VOLTAGE: 34500 AC
 AMPS (PRIMARY): 125
 SECONDARY VOLTAGE: 4160 AC
 AMPS (SECONDARY): 1040
 KVA RATING: 7500/8400
 CLASS: OA/FFA
 OIL CAPACITY (GALLONS): 1675
 IMPEDANCE PERCENTAGE 6.13
 DEGREES OF RISE (C): 55/65
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00007 TRANSFORMER MM # 1026232 BID PRICE \$ 1,051.52
 LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
 ENTRANCE ROAD - TRANSFORMER #2 - SECOND FROM THE WEST END
 IN STATION
 MANUFACTURER: COOPER
 PRIMARY VOLTAGE: 34500 AC
 AMPS (PRIMARY): 125
 SECONDARY VOLTAGE: 4160 AC
 AMPS (SECONDARY): 1040
 KVA RATING: 7500/8400
 CLASS: OA/FFA
 OIL CAPACITY (GALLONS): 1356
 IMPEDANCE PERCENTAGE 6
 DEGREES OF RISE (C): 55/65
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00009 TRANSFORMER MM # 1026234 BID PRICE \$ 1,051.52
 LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH
 ENTRANCE ROAD - TRANSFORMER #4 - EAST END IN STATION
 MANUFACTURER: I.T.E.
 PRIMARY VOLTAGE: 34500 AC
 AMPS (PRIMARY): 125
 SECONDARY VOLTAGE: 4160 AC
 AMPS (SECONDARY): 1040
 KVA RATING: 7500/8400
 CLASS: OA/FFA
 OIL CAPACITY (GALLONS): 1675
 IMPEDANCE PERCENTAGE 6.13
 DEGREES OF RISE (C): 55/65
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00010 TRANSFORMER MM # 1026235 BID PRICE \$ 1,051.52
 LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 36 - NEW
 PROCESS WATER BUILDING
 MANUFACTURER: SQUARE D
 SERIAL #: 840281-B1
 PRIMARY VOLTAGE: 4160 AC
 SECONDARY VOLTAGE: 480/277 AC
 KVA RATING: 750
 CLASS: OA
 OIL CAPACITY (GALLONS): 256
 IMPEDANCE PERCENTAGE 5.5
 DEGREES OF RISE (C): 65
 PM SCHEDULE(S) REQUIRED: F,J

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

TRA-00015	TRANSFORMER	MM # 1026240	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 04 - OUTSIDE - SOUTHWEST CORNER - TRANSFORMER #05		
MANUFACTURER:	SQUARE D		
SERIAL #:	860397-A1		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	41.6		
SECONDARY VOLTAGE:	480/277 AC		
AMPS (SECONDARY):	361		
KVA RATING:	1000		
CLASS:	OA		
OIL CAPACITY (GALLONS):	161		
IMPEDANCE PERCENTAGE	3.9		
DEGREES OF RISE (C):	65		
PM SCHEDULE(S) REQUIRED:	F,J		
TRA-00016	TRANSFORMER	MM # 1026241	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 37 - OUTSIDE - SOUTHWEST CORNER - TRANSFORMER #06		
MANUFACTURER:	KUHLMAN ELECTRIC		
SERIAL #:	2-51653		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	10.4		
SECONDARY VOLTAGE:	480/277 AC		
AMPS (SECONDARY):	90		
KVA RATING:	75		
CLASS:	OA		
OIL CAPACITY (GALLONS):	227		
IMPEDANCE PERCENTAGE	2.17		
DEGREES OF RISE (C):	65		
PM SCHEDULE(S) REQUIRED:	F,J		
TRA-00017	TRANSFORMER	MM # 1026242	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 28 - OUTSIDE - NORTHWEST CORNER - TRANSFORMER #07		
MANUFACTURER:	KUHLMAN ELECTRIC		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	15.6		
SECONDARY VOLTAGE:	480/277 AC		
AMPS (SECONDARY):	135		
KVA RATING:	112.5		
CLASS:	OA		
OIL CAPACITY (GALLONS):	183		
IMPEDANCE PERCENTAGE	2.42		
DEGREES OF RISE (C):	65		
PM SCHEDULE(S) REQUIRED:	F,J		
TRA-00018	TRANSFORMER	MM # 1026243	BID PRICE \$ <u>1,051.52</u>
LOCATION:	FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 29 - OUTSIDE - NORTHWEST CORNER - TRANSFORMER #08		
MANUFACTURER:	KUHLMAN ELECTRIC		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	15.6		
SECONDARY VOLTAGE:	480/277 AC		
AMPS (SECONDARY):	135		
KVA RATING:	112.5		
CLASS:	OA		
OIL CAPACITY (GALLONS):	183		
IMPEDANCE PERCENTAGE	2.42		
DEGREES OF RISE (C):	65		
PM SCHEDULE(S) REQUIRED:	F,J		

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

TRA-00039 **TRANSFORMER** **MM # 1026264** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 31 - OUTSIDE -
 NORTH OF BUILDING - TRANSFORMER #29
MANUFACTURER: KUHLMAN ELECTRIC
SERIAL #: 5-51628
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 69.4
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 601
KVA RATING: 500
CLASS: OA
OIL CAPACITY (GALLONS): 297
IMPEDANCE PERCENTAGE 4.27
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00040 **TRANSFORMER** **MM # 1026265** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 07 -
 ADMINISTRATION BUILDING
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 69.4
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 601
KVA RATING: 500
CLASS: OA
OIL CAPACITY (GALLONS): 297
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00042 **TRANSFORMER** **MM # 1026267** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 22 - OUTSIDE -
 WEST OF BUILDING - TRANSFORMER #32
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 104
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 902
KVA RATING: 750
CLASS: OA
OIL CAPACITY (GALLONS): 315
IMPEDANCE PERCENTAGE 5.22
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00043 **TRANSFORMER** **MM # 1026268** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 22 - OUTSIDE -
 WEST OF BUILDING - TRANSFORMER #33
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 104
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 902
KVA RATING: 750
CLASS: OA
OIL CAPACITY (GALLONS): 315
IMPEDANCE PERCENTAGE 5.22
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

TRA-00048 **TRANSFORMER** **MM # 1026273** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - AERATION - SOUTH OF CONTROL HOUSE 03 - TRANSFORMER #39
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 139
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 1203
KVA RATING: 1000
CLASS: OA
OIL CAPACITY (GALLONS): 360
IMPEDANCE PERCENTAGE 5.77
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00049 **TRANSFORMER** **MM # 1026274** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - AERATION - SOUTH OF CONTROL HOUSE 03 - TRANSFORMER #39
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 139
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 1203
KVA RATING: 1000
CLASS: OA
OIL CAPACITY (GALLONS): 360
IMPEDANCE PERCENTAGE 5.77
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00050 **TRANSFORMER** **MM # 1026275** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - AERATION - SOUTH OF CONTROL HOUSE 04 - TRANSFORMER #40
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 139
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 1203
KVA RATING: 1000
CLASS: OA
OIL CAPACITY (GALLONS): 360
IMPEDANCE PERCENTAGE 5.77
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

TRA-00051 **TRANSFORMER** **MM # 1026276** **BID PRICE \$ 1,051.52**
LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - AERATION - SOUTH OF CONTROL HOUSE 05 - TRANSFORMER #41
MANUFACTURER: KUHLMAN ELECTRIC
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 139
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 1203
KVA RATING: 1000
CLASS: OA
OIL CAPACITY (GALLONS): 360
IMPEDANCE PERCENTAGE 5.77
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

TRA-00056 **TRANSFORMER** **MM # 1026281** **BID PRICE \$ 1,051.52**

LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - AERATION - NORTH OF CONTROL HOUSE 10 - TRANSFORMER #46

MANUFACTURER: KUHLMAN ELECTRIC

PRIMARY VOLTAGE: 4160 AC

AMPS (PRIMARY): 139

SECONDARY VOLTAGE: 480/277 AC

AMPS (SECONDARY): 1203

KVA RATING: 1000

CLASS: OA

OIL CAPACITY (GALLONS): 360

IMPEDANCE PERCENTAGE 5.77

DEGREES OF RISE (C): 65

PM SCHEDULE(S) REQUIRED: F,J

TRA-00074 **TRANSFORMER** **MM # 1027611** **BID PRICE \$ 1,051.52**

LOCATION: FEV - POWER DISTRIBUTION SUBSTATION - EAST SIDE OF NORTH ENTRANCE ROAD - TRANSFORMER #3 - SECOND FROM THE EAST END IN STATION

MANUFACTURER: HOWARD LEIGHT CO

SERIAL #: 2445822909

PRIMARY VOLTAGE: 34500 AC

AMPS (PRIMARY): 125

SECONDARY VOLTAGE: 4160 AC

AMPS (SECONDARY): 1040

KVA RATING: 7500/8400

CLASS: OANAN/ONAFF

OIL CAPACITY (GALLONS): 1850

IMPEDANCE PERCENTAGE 6.7

DEGREES OF RISE (C): 55/66

PM SCHEDULE(S) REQUIRED: F,J

1038224

TRA-00114 **TRANSFORMER** **BID PRICE \$ 1,051.52**

LOCATION: FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 37 - OUTSIDE - NORTH OF BUILDING - BETWEEN ASH LAGOON AND FUELING STATION

MANUFACTURER: HOWARD LEIGHT CO

SERIAL #: 1278500713

PRIMARY VOLTAGE: 4160 AC

AMPS (PRIMARY): 69

SECONDARY VOLTAGE: 480/277 AC

AMPS (SECONDARY): 601

KVA RATING: 500

CLASS: KNAN

OIL CAPACITY (GALLONS): 204

IMPEDANCE PERCENTAGE 4.6

DEGREES OF RISE (C): 65

PM SCHEDULE(S) REQUIRED: F,J

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER

1038247

TRA-00115
LOCATION:

TRANSFORMER
FEV - POWER DISTRIBUTION PLANTWIDE - BUILDING 23 - OUTSIDE -
NORTH OF BUILDING - TRANSFORMER #47

MM # ~~1026383~~

BID PRICE \$ 1,051.52

MANUFACTURER: COOPER
MODEL #: 00005A14FYJS FR3 OIL
SERIAL #: 1359002513
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 208
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 1805
KVA RATING: 1500
CLASS: OA
OIL CAPACITY (GALLONS): 380
IMPEDANCE PERCENTAGE 5.00
DEGREES OF RISE (C): 65
PM SCHEDULE(S) REQUIRED: F,J

Section total: FEV TREATMENT PLANT

~~76,586.06~~
75,534.57891
\$

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

CIR-00082 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026159** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #01**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
TRIP UNIT MANUFACTURER: AC-PRO
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00083 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026160** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #02**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00084 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026161** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #03**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00085 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026162** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #04**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00086 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026163** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #05**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00087 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026164** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #06**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
PM SCHEDULE(S) REQUIRED: A,E,F,N

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

CIR-00088	CIRCUIT BREAKER (AIR TYPE)	MM # 1026165	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #07		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	600		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00089	CIRCUIT BREAKER (AIR TYPE)	MM # 1026166	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #08		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	600		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00090	CIRCUIT BREAKER (AIR TYPE)	MM # 1026167	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #09		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	600		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00091	CIRCUIT BREAKER (AIR TYPE)	MM # 1026168	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #10		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	600		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00092	CIRCUIT BREAKER (AIR TYPE)	MM # 1026169	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - CIRCUIT BREAKER #11		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	600		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00093	CIRCUIT BREAKER (AIR TYPE)	MM # 1026170	BID PRICE \$ <u>327.54</u>
LOCATION:	FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #01		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-1600-S		
SERIAL #:	48256-B112-1-20		
PRIMARY VOLTAGE:	480 AC		
AMPS (PRIMARY):	1600		
FRAME SIZE (CIRCUIT BREAKER):	1600		
TRIP UNIT MANUFACTURER:	CH DIGITRIP RMS/R510		
TRIP UNIT MODEL NUMBER:	RP6A16A160		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

CIR-00094 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026171** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #02**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
SERIAL #: 48256-C120-1-80
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
TRIP UNIT MANUFACTURER: CH DIGITRIP RMS/R510
TRIP UNIT MODEL NUMBER: RP6A16A160
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00095 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026172** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #03**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
SERIAL #: 48256-B11-1-8C
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
TRIP UNIT MANUFACTURER: AC PRO
TRIP UNIT MODEL NUMBER: CAN/LSAC222NO31M89
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00096 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026173** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #04**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-1600-S
SERIAL #: 48256-0124-1-8C
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600
TRIP UNIT MANUFACTURER: CARRIER TECHN IND
TRIP UNIT MODEL NUMBER: ER26002716
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00097 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026174** **BID PRICE \$ 327.54**

LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #05**

MANUFACTURER: I.T.E.
MODEL #: TYPE K-600-S
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 600
PM SCHEDULE(S) REQUIRED: A,E,F,N

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

CIR-00098 **CIRCUIT BREAKER (AIR** **MM # 1026175** **BID PRICE \$ 327.54**
TYPE)
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND**
BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #06
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE K-1600**
SERIAL #: **48256-C119-2-8C**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **CH DIGITRIP RMS/810**
TRIP UNIT MODEL NUMBER: **RP6A16A160**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00099 **CIRCUIT BREAKER (AIR** **MM # 1026176** **BID PRICE \$ 327.54**
TYPE)
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND**
BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #07
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE K-600-S**
SERIAL #: **48256-0123-1-8C**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600**
TRIP UNIT MANUFACTURER: **CH DIGITRIP RMS/510**
TRIP UNIT MODEL NUMBER: **RP6A04A040**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00100 **CIRCUIT BREAKER (AIR** **MM # 1026177** **BID PRICE \$ 327.54**
TYPE)
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND**
BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #08
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE K-600-S**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
FRAME SIZE (CIRCUIT BREAKER): **600**
TRIP UNIT MANUFACTURER: **ITE S55G4**
TRIP UNIT MODEL NUMBER: **1077**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00101 **CIRCUIT BREAKER (AIR** **MM # 1026178** **BID PRICE \$ 327.54**
TYPE)
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND**
BETWEEN BUILDINGS 9 AND 10 - CIRCUIT BREAKER #09
MANUFACTURER: **I.T.E.**
MODEL #: **TYPE K-600-S**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **600**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

GRO-00007 **GROUNDING SYSTEM** **MM # 1026212** **BID PRICE \$ 874.50**
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF**
BUILDING 4 - GROUNDING SYSTEM #1
PM SCHEDULE(S) REQUIRED: **F**

GRO-00008 **GROUNDING SYSTEM** **MM # 1026213** **BID PRICE \$ 874.50**
LOCATION: **FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND**
BETWEEN BUILDINGS 9 AND 10 - GROUNDING SYSTEM #1
PM SCHEDULE(S) REQUIRED: **F**

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

SWI-00014 SWITCH,LOAD INTERRUPTING AIR MM # 1026077 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 1 - SOUTHEAST OF ENTRANCE GATE - SWITCH #1 (AA-1)

MANUFACTURER: I.T.E.
 MODEL #: HPL-2
 PRIMARY VOLTAGE: 12470 AC
 FUSED OR NON FUSED DISCONNECT: FUSED
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00015 SWITCH,LOAD INTERRUPTING AIR MM # 1026078 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 1 - SOUTHEAST OF ENTRANCE GATE - SWITCH #2 (AA-2)

MANUFACTURER: I.T.E.
 MODEL #: HPL-2
 PRIMARY VOLTAGE: 12470 AC
 FUSED OR NON FUSED DISCONNECT: FUSED
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00016 SWITCH,LOAD INTERRUPTING AIR MM # 1026079 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 1 - SOUTHEAST OF ENTRANCE GATE - SWITCH #3 (AA-3)

MANUFACTURER: I.T.E.
 MODEL #: HPL-2
 PRIMARY VOLTAGE: 12470 AC
 FUSED OR NON FUSED DISCONNECT: FUSED
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00017 SWITCH,LOAD INTERRUPTING AIR MM # 1026080 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 1 - SOUTHEAST OF ENTRANCE GATE - SWITCH #4 (AA-4)

MANUFACTURER: I.T.E.
 MODEL #: HPL-2
 PRIMARY VOLTAGE: 12470 AC
 FUSED OR NON FUSED DISCONNECT: FUSED
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00018 SWITCH,LOAD INTERRUPTING AIR MM # 1026081 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 1 - SOUTHEAST OF ENTRANCE GATE - SWITCH #5 (GCO PUMP STATION)

MANUFACTURER: SQUARE D
 MODEL #: HVL
 PRIMARY VOLTAGE: 12470 AC
 AMPS (PRIMARY): 600
 FUSED OR NON FUSED DISCONNECT: FUSED
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00019 SWITCH,LOAD INTERRUPTING AIR MM # 1026082 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - SWITCH #1

MANUFACTURER: I.T.E.
 MODEL #: HPL-CV
 PRIMARY VOLTAGE: 12470 AC
 AMPS (PRIMARY): 600
 PM SCHEDULE(S) REQUIRED: A,B

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

SWI-00020 SWITCH,LOAD MM # 1026083 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - SWITCH #2

MANUFACTURER: I.T.E.
MODEL #: HPL-CV
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 600
PM SCHEDULE(S) REQUIRED: A,B

SWI-00021 SWITCH,LOAD MM # 1026084 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - SWITCH #1

MANUFACTURER: SQUARE D
MODEL #: HVL
SERIAL #: 44036-325-50
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 600
FUSED OR NON FUSED DISCONNECT: FUSED
PM SCHEDULE(S) REQUIRED: A,B

SWI-00022 SWITCH,LOAD MM # 1026085 BID PRICE \$ 196.10

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND BETWEEN BUILDINGS 9 AND 10 - SWITCH #2

MANUFACTURER: SQUARE D
MODEL #: HVL
SERIAL #: 44036-325-51
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 600
FUSED OR NON FUSED DISCONNECT: FUSED
PM SCHEDULE(S) REQUIRED: A,B

TRA-00067 TRANSFORMER MM # 1026292 BID PRICE \$ 874.50

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - TRANSFORMER #1

MANUFACTURER: I.T.E.
SERIAL #: PDV5562-01
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 23
SECONDARY VOLTAGE: 480 AC
AMPS (SECONDARY): 602
KVA RATING: 500
CLASS: OA
OIL CAPACITY (GALLONS): 161
PM SCHEDULE(S) REQUIRED: F,J

TRA-00068 TRANSFORMER MM # 1026293 BID PRICE \$ 874.50

LOCATION: FLEET CENTER - POWER DISTRIBUTION SUBSTATION 2 - SOUTH OF BUILDING 4 - TRANSFORMER #2

MANUFACTURER: I.T.E.
SERIAL #: PDV5562-02
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 23
SECONDARY VOLTAGE: 480 AC
AMPS (SECONDARY): 602
KVA RATING: 500
CLASS: OA
OIL CAPACITY (GALLONS): 161
PM SCHEDULE(S) REQUIRED: F,J

FLEET CENTER, 145 PAUL ROAD, ROCHESTER

TRA-00069

TRANSFORMER

MM # 1026294

BID PRICE \$ 874.50

LOCATION:

**FLEET CENTER - POWER DISTRIBUTION SUBSTATION 3 - SOUTH OF AND
BETWEEN BUILDINGS 9 AND 10 - TRANSFORMER #1**

MANUFACTURER:

SQUARE D

SERIAL #:

016169-A1

PRIMARY VOLTAGE:

12470 AC

AMPS (PRIMARY):

69

SECONDARY VOLTAGE:

480 AC

AMPS (SECONDARY):

104

KVA RATING:

1500/2250

CLASS:

AA/FA

PM SCHEDULE(S) REQUIRED:

F,J

Section total:

FLEET CENTER

\$ 12,688.20

FLYNN ROAD PUMP STATION, 599 FLYNN ROAD, ROCHESTER

CIR-00075 **CIRCUIT BREAKER** **MM # 1026154** **BID PRICE \$ 347.68**
 (MOLDED CASE)

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT BREAKER #4 (LV M1) - INSIDE PUMP STATION DISTRIBUTATION PANEL

MANUFACTURER: SQUARE D
MODEL #: SERIES 3B
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
TRIP UNIT MANUFACTURER: SQUARE D
TRIP UNIT MODEL NUMBER: MICROLOGIC SERIES B
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00076 **CIRCUIT BREAKER** **MM # 1026155** **BID PRICE \$ 347.68**
 (MOLDED CASE)

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT BREAKER #5 (LV M2) - INSIDE PUMP STATION DISTRIBUTATION PANEL

MANUFACTURER: SQUARE D
MODEL #: SERIES 3B
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
TRIP UNIT MANUFACTURER: SQUARE D
TRIP UNIT MODEL NUMBER: MICROLOGIC SERIES B
PM SCHEDULE(S) REQUIRED: A,E,F,N

GRO-00005 **GROUNDING SYSTEM** **MM # 1026313** **BID PRICE \$ 930.68**

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - SUBSTATION - GROUNDING SYSTEM #1

PM SCHEDULE(S) REQUIRED: F

TRA-00063 **TRANSFORMER** **MM # 1026288** **BID PRICE \$ 930.68**

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - SUBSTATION - TRANSFORMER #1 (T-1) - OUTSIDE

MANUFACTURER: SQUARE D
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 92
SECONDARY VOLTAGE: 480 AC
AMPS (SECONDARY): 2403
KVA RATING: 2000
CLASS: OA
OIL CAPACITY (GALLONS): 490
IMPEDANCE PERCENTAGE: 5.6
DEGREES OF RISE (C): 55
PM SCHEDULE(S) REQUIRED: F,J

TRA-00064 **TRANSFORMER** **MM # 1026289** **BID PRICE \$ 930.68**

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - SUBSTATION - TRANSFORMER #2 (T-2) - OUTSIDE

MANUFACTURER: SQUARE D
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 92
SECONDARY VOLTAGE: 480 AC
AMPS (SECONDARY): 2403
KVA RATING: 2000
CLASS: OA
OIL CAPACITY (GALLONS): 490
IMPEDANCE PERCENTAGE: 5.6
DEGREES OF RISE (C): 55
PM SCHEDULE(S) REQUIRED: F,J

Section total: **FLYNN ROAD PUMP STATION** **\$ 5,225.80**

GCO PUMP STATION, 145 PAUL ROAD, ROCHESTER

CIR-00102 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026179** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #01 (M1)

MANUFACTURER: SQUARE D
MODEL #: TYPE DS-416
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00103 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026180** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #02 (M2)

MANUFACTURER: SQUARE D
MODEL #: TYPE DS-416
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00104 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026181** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #03 (TIE)

MANUFACTURER: SQUARE D
MODEL #: TYPE DS-416
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00105 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026182** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #04 (GENERATOR)

MANUFACTURER: SQUARE D
MODEL #: TYPE DS-416
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00106 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026183** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #05 (MOTOR CONTROL CENTER)

MANUFACTURER: SQUARE D
MODEL #: TYPE DS-206E
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

GCO PUMP STATION, 145 PAUL ROAD, ROCHESTER

CIR-00107 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026184** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #06 (SEWAGE PUMP #2)
MANUFACTURER: SQUARE D
MODEL #: TYPE DS-206E
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00108 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026185** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #07 (SEWAGE PUMP #3)
MANUFACTURER: SQUARE D
MODEL #: TYPE DS-206E
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00109 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026186** **BID PRICE \$ 321.18**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - INSIDE PS - CIRCUIT BREAKER #08 (SEWAGE PUMP #4)
MANUFACTURER: SQUARE D
MODEL #: TYPE DS-206E
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP RMS
PM SCHEDULE(S) REQUIRED: A,E,F,N

GRO-00009 **GROUNDING SYSTEM** **MM # 1026214** **BID PRICE \$ 921.14**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - GROUNDING SYSTEM #1
PM SCHEDULE(S) REQUIRED: F

SWI-00023 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026086** **BID PRICE \$ 201.40**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - OUTSIDE - NORTH OF PS - SWITCH #1
MANUFACTURER: SQUARE D
MODEL #: HVL
SERIAL #: 44036-325-71
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 600
FUSED OR NON FUSED DISCONNECT: FUSED
PM SCHEDULE(S) REQUIRED: A,B

SWI-00024 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026087** **BID PRICE \$ 201.40**

LOCATION: GCO PS - POWER DISTRIBUTION - PUMP STATION - OUTSIDE - NORTH OF PS - SWITCH #2
MANUFACTURER: SQUARE D
MODEL #: HVL
PRIMARY VOLTAGE: 12470 AC
AMPS (PRIMARY): 600
FUSED OR NON FUSED DISCONNECT: FUSED
PM SCHEDULE(S) REQUIRED: A,B

HEALTH AND SOCIAL SERVICES, 111 WESTFALL ROAD, ROCHESTER

CIR-00152 **CIRCUIT BREAKER (AIR TYPE)** **1038227** **BID PRICE \$ 266.06**

LOCATION: HEALTH AND SOCIAL SERVICES - FLOOR 00 BASEMENT - ROOM 018 - PANEL 01 - CIRCUIT BREAKER 05 - MAIN BREAKER 60
MANUFACTURER: I.T.E.
MODEL #: K-3000
SERIAL #: 77217A-01969
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
FRAME SIZE (CIRCUIT BREAKER): 3000A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00168 **CIRCUIT BREAKER (AIR TYPE)** **1038228** **BID PRICE \$ 266.06**

LOCATION: HEALTH AND SOCIAL SERVICES - FLOOR 00 BASEMENT - ROOM 018 - PANEL 02 - CIRCUIT BREAKER 21 - MAIN BREAKER 61
MANUFACTURER: I.T.E.
MODEL #: K-3000
SERIAL #: 53610-F-1-5A
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
FRAME SIZE (CIRCUIT BREAKER): 3000A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00171 **CIRCUIT BREAKER (AIR TYPE)** **1038229** **BID PRICE \$ 266.06**

LOCATION: HEALTH AND SOCIAL SERVICES - FLOOR 00 BASEMENT - ROOM 018 - PANEL 02 - CIRCUIT BREAKER 24 - TIE
MANUFACTURER: I.T.E.
MODEL #: K-3000
SERIAL #: 52898-A-1-3D
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
FRAME SIZE (CIRCUIT BREAKER): 3000A
PM SCHEDULE(S) REQUIRED: A,F,N

TRA-00081 **TRANSFORMER** **1038230** **BID PRICE \$ 981.35**

LOCATION: HEALTH AND SOCIAL SERVICES - FLOOR 00 BASEMENT - ROOM 018 - PANEL 03 - TRANSFORMER 01
MANUFACTURER: NIAGARA TRANSFORMER CORP
SERIAL #: 33725
PRIMARY VOLTAGE: 4160 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 1700
PM SCHEDULE(S) REQUIRED: F,J

TRA-00082 **TRANSFORMER** **1038231** **BID PRICE \$ 981.35**

LOCATION: HEALTH AND SOCIAL SERVICES - FLOOR 00 BASEMENT - ROOM 018 - PANEL 02 - DISTRIBUTION SWITCHGEAR 02 - TRANSFORMER 01
MANUFACTURER: NIAGARA TRANSFORMER CORP
SERIAL #: 33724
PRIMARY VOLTAGE: 4160 AC
SECONDARY VOLTAGE: 480 AC
KVA RATING: 1700
PM SCHEDULE(S) REQUIRED: F,J

Section total: **HEALTH AND SOCIAL SERVICES** **\$ 2,760.88**

IRONDEQUOIT BAY PUMP STATION, 1574 LAKE SHORE BLVD, ROCHESTER

BUS-00011	BUS STRUCTURE (OUTDOOR)	MM # 1026334	BID PRICE \$ <u>161.12</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - OUTDOOR BUS STRUCTURE		
MANUFACTURER:	GENERAL ELECTRIC		
PRIMARY VOLTAGE:	34500 AC		
PM SCHEDULE(S) REQUIRED:	F,I		
CIR-00001	CIRCUIT BREAKER (OIL TYPE)	MM # 1026201	BID PRICE \$ <u>790.76</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - CIRCUIT BREAKER #1		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	FK-3B-3600-1		
SERIAL #:	0141A3350-201		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	231/TANK 693 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00002	CIRCUIT BREAKER (OIL TYPE)	MM # 1026202	BID PRICE \$ <u>790.76</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - CIRCUIT BREAKER #2		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	FK-3B-3600-1		
SERIAL #:	0141A3350-202		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
OIL CAPACITY (GALLONS):	231/TANK 693 OVERALL		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00003	CIRCUIT BREAKER	MM # 1026094	BID PRICE \$ <u>266.06</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - SOUTH OF PUMP STATION - CIRCUIT BREAKER #1 (S1)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	MAGNA BLAST AN416-250-9-H		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	1200		
INTERRUPT RATING (KA):	29		
PM SCHEDULE(S) REQUIRED:	A,B,C,F		
CIR-00004	CIRCUIT BREAKER	MM # 1026095	BID PRICE \$ <u>266.06</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - SOUTH OF PUMP STATION - CIRCUIT BREAKER #2 (S2)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	MAGNA BLAST AN416-250-9-H		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	1200		
INTERRUPT RATING (KA):	29		
CLASS:	OA		
PM SCHEDULE(S) REQUIRED:	A,B,C,F		
CIR-00006	CIRCUIT BREAKER	MM # 1026096	BID PRICE \$ <u>266.06</u>
LOCATION:	IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #01 (N1)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	MAGNA BLAST AN416-250-9-H		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	1200		
INTERRUPT RATING (KA):	29		
PM SCHEDULE(S) REQUIRED:	A,B,C,F		

IRONDEQUOIT BAY PUMP STATION, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00019 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026189** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #14 (CB B)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A50**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**
TRIP UNIT MODEL NUMBER: **DIGITRIP 510 LSG**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00020 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026190** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #15 (CB T)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A50**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**
TRIP UNIT MODEL NUMBER: **DIGITRIP 510 LSG**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00021 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026191** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #16 (CB A1)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A50**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **GENERAL ELECTRIC**
TRIP UNIT MODEL NUMBER: **POWER SENSOR**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00022 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026192** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #17 (CB B1)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A25**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **SYTEK**
TRIP UNIT MODEL NUMBER: **SMART TRIP**
PM SCHEDULE(S) REQUIRED: **A,F,N**

CIR-00023 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026193** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #18 (CB A2)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A25**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **600**
TRIP UNIT MANUFACTURER: **SYTEK**
TRIP UNIT MODEL NUMBER: **SMART TRIP**
PM SCHEDULE(S) REQUIRED: **A,F,N**

IRONDEQUOIT BAY PUMP STATION, 1574 LAKE SHORE BLVD, ROCHESTER

CIR-00024 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026194** **BID PRICE \$ 266.06**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - CIRCUIT BREAKER #19 (CB B2)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **AK3A50**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **42**
FRAME SIZE (CIRCUIT BREAKER): **1600**
TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**
TRIP UNIT MODEL NUMBER: **DIGITRIP 510 LSG**
PM SCHEDULE(S) REQUIRED: **A,F,N**

GRO-00001 **GROUNDING SYSTEM** **MM # 1026209** **BID PRICE \$ 789.70**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - GROUNDING SYSTEM #1**

PM SCHEDULE(S) REQUIRED: **F**

LIG-00001 **LIGHTNING PROTECTION SYSTEM** **MM # 1026217** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - LIGHTNING PROTECTION #1**

PM SCHEDULE(S) REQUIRED: **F**

RES-00001 **RESISTOR BANK** **MM # 1026219** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - RESISTER BANK #1**

PM SCHEDULE(S) REQUIRED: **F**

RES-00002 **RESISTOR BANK** **MM # 1026223** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - RESISTER BANK #2**

PM SCHEDULE(S) REQUIRED: **F,I,M**

SWI-00001 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026196** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - SOUTH OF PUMP STATION - SWITCH #1**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **SE-10-2**
PRIMARY VOLTAGE: **4160 AC**
SECONDARY VOLTAGE: **4160 AC**
INTERRUPT RATING (KA): **40**
PM SCHEDULE(S) REQUIRED: **B,F**

SWI-00002 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026197** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - SWITCH #1 (D51)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **SE-10-2**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **40**
PM SCHEDULE(S) REQUIRED: **B,F**

SWI-00003 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026198** **BID PRICE \$ 161.12**

LOCATION: **IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - SWITCH #1 (D52)**

MANUFACTURER: **GENERAL ELECTRIC**
MODEL #: **SE-10-2**
PRIMARY VOLTAGE: **480 AC**
INTERRUPT RATING (KA): **40**
PM SCHEDULE(S) REQUIRED: **B,F**

IRONDEQUOIT BAY PUMP STATION, 1574 LAKE SHORE BLVD, ROCHESTER

SWI-00004 SWITCH,LOAD MM # 1026199 BID PRICE \$ 161.12

LOCATION: INTERRUPTING AIR
IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - SWITCH #1 (DS5)

MANUFACTURER: GENERAL ELECTRIC
MODEL #: SE-10-2
PRIMARY VOLTAGE: 480 AC
INTERRUPT RATING (KA): 40
PM SCHEDULE(S) REQUIRED: B,F

SWI-00005 SWITCH,LOAD MM # 1026200 BID PRICE \$ 161.12

LOCATION: INTERRUPTING AIR
IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - SWITCH #1 (DS6)

MANUFACTURER: GENERAL ELECTRIC
MODEL #: SE-10-2
PRIMARY VOLTAGE: 480 AC
INTERRUPT RATING (KA): 40
PM SCHEDULE(S) REQUIRED: B,F

TRA-00001 TRANSFORMER MM # 1026226 BID PRICE \$ 790.76

LOCATION: IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - TRANSFORMER #1

MANUFACTURER: GENERAL ELECTRIC
SERIAL #: H-888166A
PRIMARY VOLTAGE: 34500 AC
SECONDARY VOLTAGE: 4160 AC
KVA RATING: 7500
CLASS: OA
OIL CAPACITY (GALLONS): 1540
PM SCHEDULE(S) REQUIRED: F,J

TRA-00002 TRANSFORMER MM # 1026227 BID PRICE \$ 790.76

LOCATION: IBPS - POWER DISTRIBUTION SUBSTATION - NORTHEAST OF PUMP STATION - TRANSFORMER #2

MANUFACTURER: GENERAL ELECTRIC
SERIAL #: H-888166B
PRIMARY VOLTAGE: 34500 AC
SECONDARY VOLTAGE: 4160 AC
KVA RATING: 7500
CLASS: OA
OIL CAPACITY (GALLONS): 1540
PM SCHEDULE(S) REQUIRED: F,J

TRA-00004 TRANSFORMER MM # 1026229 BID PRICE \$ 790.76

LOCATION: IBPS - POWER DISTRIBUTION SUBSTATION - 4TH FLOOR - TRANSFORMER #1

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 9T26F2460G7
PRIMARY VOLTAGE: 4160 AC
AMPS (PRIMARY): 69.4
SECONDARY VOLTAGE: 480/277 AC
AMPS (SECONDARY): 601
KVA RATING: 500
CLASS: AA DRY
IMPEDANCE PERCENTAGE: 4.8
DEGREES OF RISE (C): 150
PM SCHEDULE(S) REQUIRED: F,J

ISLAND COTTAGE PUMP STATION, 390 ISLAND COTTAGE ROAD, ROCHESTER

BUS-00008 **BUS DUCT (OUTDOOR)** **MM # 1026308** **BID PRICE \$ 235.32**
LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION -
 OUTDOOR BUS STRUCTURE #1
MANUFACTURER: SQUARE D
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
PM SCHEDULE(S) REQUIRED: F,M

BUS-00009 **BUS DUCT (OUTDOOR)** **MM # 1026309** **BID PRICE \$ 235.32**
LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION -
 OUTDOOR BUS STRUCTURE #2
MANUFACTURER: SQUARE D
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
PM SCHEDULE(S) REQUIRED: F,M

CIR-00077 **CIRCUIT BREAKER** **MM # 1026092** **BID PRICE \$ 349.80**
(VACUUM TYPE)
LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT
 BREAKER #1 (M1) - OUTSIDE
MANUFACTURER: CUTLER-HAMMER
MODEL #: 380VCP-W16
SERIAL #: 99100470
PRIMARY VOLTAGE: 34500 AC
AMPS (PRIMARY): 600
INTERRUPT RATING (KA): 16
FRAME SIZE (CIRCUIT BREAKER): 600
PM SCHEDULE(S) REQUIRED: A,B,C,E,F

CIR-00078 **CIRCUIT BREAKER** **MM # 1026093** **BID PRICE \$ 349.80**
(VACUUM TYPE)
LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT
 BREAKER #2 (M2) - OUTSIDE
MANUFACTURER: CUTLER-HAMMER
MODEL #: 150VCP-W500
SERIAL #: 99100932
PRIMARY VOLTAGE: 15000 AC
AMPS (PRIMARY): 1200
INTERRUPT RATING (KA): 23
FRAME SIZE (CIRCUIT BREAKER): 1200
PM SCHEDULE(S) REQUIRED: A,B,C,E,F

CIR-00079 **CIRCUIT BREAKER** **MM # 1026156** **BID PRICE \$ 349.80**
(MOLDED CASE)
LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT
 BREAKER #3 (LV TIE) - INSIDE PUMP STATION DISTRIBUTION PANEL
MANUFACTURER: SQUARE D
MODEL #: SERIES 3B
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 3000
TRIP UNIT MANUFACTURER: SQUARE D
TRIP UNIT MODEL NUMBER: MICROLOGIC SERIES B
PM SCHEDULE(S) REQUIRED: A,E,F,N

ISLAND COTTAGE PUMP STATION, 390 ISLAND COTTAGE ROAD, ROCHESTER

CIR-00080 **CIRCUIT BREAKER** **MM # 1026157** **BID PRICE \$ 349.80**
(MOLDED CASE)
LOCATION: **ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT**
 BREAKER #4 (LV M1) - INSIDE PUMP STATION DISTRIBUTATION PANEL
MANUFACTURER: **SQUARE D**
MODEL #: **SERIES 3B**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **3000**
TRIP UNIT MANUFACTURER: **SQUARE D**
TRIP UNIT MODEL NUMBER: **MICROLOGIC SERIES B**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00081 **CIRCUIT BREAKER** **MM # 1026158** **BID PRICE \$ 349.80**
(MOLDED CASE)
LOCATION: **ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION - CIRCUIT**
 BREAKER #5 (LV M2) - INSIDE PUMP STATION DISTRIBUTATION PANEL
MANUFACTURER: **SQUARE D**
MODEL #: **SERIES 3B**
PRIMARY VOLTAGE: **480 AC**
AMPS (PRIMARY): **3000**
TRIP UNIT MANUFACTURER: **SQUARE D**
TRIP UNIT MODEL NUMBER: **MICROLOGIC SERIES B**
PM SCHEDULE(S) REQUIRED: **A,E,F,N**

GRO-00006 **GROUNDING SYSTEM** **MM # 1026314** **BID PRICE \$ 701.72**
LOCATION: **ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION -**
 GROUNDING SYSTEM #1
PM SCHEDULE(S) REQUIRED: **F**

TRA-00065 **TRANSFORMER** **MM # 1026290** **BID PRICE \$ 701.72**
LOCATION: **ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION -**
 TRANSFORMER #1 (T-1) - OUTSIDE
MANUFACTURER: **SUNBELT**
SERIAL #: **ST110A10863-1-1**
PRIMARY VOLTAGE: **34500 AC**
AMPS (PRIMARY): **33**
SECONDARY VOLTAGE: **480 AC**
AMPS (SECONDARY): **2403**
KVA RATING: **2000**
CLASS: **OA**
OIL CAPACITY (GALLONS): **585**
IMPEDANCE PERCENTAGE **5.8**
DEGREES OF RISE (C): **55**
PM SCHEDULE(S) REQUIRED: **F,J**

TRA-00066 **TRANSFORMER** **MM # 1026291** **BID PRICE \$ 701.72**
LOCATION: **ISLAND COTTAGE PS - POWER DISTRIBUTION - SUBSTATION -**
 TRANSFORMER #2 (T-2) - OUTSIDE
MANUFACTURER: **SQUARE D**
PRIMARY VOLTAGE: **12470 AC**
AMPS (PRIMARY): **92**
SECONDARY VOLTAGE: **480 AC**
AMPS (SECONDARY): **2403**
KVA RATING: **2000**
CLASS: **OA**
OIL CAPACITY (GALLONS): **490**
IMPEDANCE PERCENTAGE **5.42**
DEGREES OF RISE (C): **55**
PM SCHEDULE(S) REQUIRED: **F,J**

Section total: **ISLAND COTTAGE PUMP STATION** **\$ 4,324.80**

NWQ TREATMENT PLANT, 170 PAYNE BEACH ROAD, HILTON

CIR-00056	CIRCUIT BREAKER (AIR TYPE)	MM # 1026139	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - ADMINISTRATION BUILDING BASEMENT - CIRCUIT BREAKER #01		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-1600-S		
SERIAL #:	46921-05-11-110		
PRIMARY VOLTAGE:	208 AC		
SECONDARY VOLTAGE:	208 AC		
TRIP UNIT MANUFACTURER:	I.T.E.		
TRIP UNIT MODEL NUMBER:	POWER SHIELD SS-5G		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00057	CIRCUIT BREAKER (AIR TYPE)	MM # 1026140	BID PRICE \$ <u>338.14</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - SECONDARY DOGHOUSE - BUILDING 4 - CIRCUIT BREAKER #02 (SECONDARY PUMP STATION)		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-1600-S		
SERIAL #:	46921-A5-1-5B		
PRIMARY VOLTAGE:	480 AC		
SECONDARY VOLTAGE:	480 AC		
TRIP UNIT MANUFACTURER:	SYTEK		
TRIP UNIT MODEL NUMBER:	SMART TRIP		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00058	CIRCUIT BREAKER (AIR TYPE)	MM # 1026141	BID PRICE \$ <u>338.14</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - SECONDARY DOGHOUSE - BUILDING 4 - CIRCUIT BREAKER #03 (LIME SLUDGE PUMP STATION)		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
SERIAL #:	46921-A7-1-5B		
PRIMARY VOLTAGE:	480 AC		
SECONDARY VOLTAGE:	480 AC		
FRAME SIZE (CIRCUIT BREAKER):	600		
TRIP UNIT MANUFACTURER:	I.T.E.		
TRIP UNIT MODEL NUMBER:	POWER SHIELD SS-5G		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		
CIR-00059	CIRCUIT BREAKER (AIR TYPE)	MM # 1026142	BID PRICE \$ <u>338.14</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - SECONDARY DOGHOUSE - BUILDING 4 - CIRCUIT BREAKER #01 (PRIMARY PUMP STATION)		
MANUFACTURER:	I.T.E.		
MODEL #:	TYPE K-600-S		
SERIAL #:	46921-A7-2-5B		
PRIMARY VOLTAGE:	480 AC		
SECONDARY VOLTAGE:	480 AC		
FRAME SIZE (CIRCUIT BREAKER):	600		
TRIP UNIT MANUFACTURER:	SYTEK		
TRIP UNIT MODEL NUMBER:	SMART TRIP		
PM SCHEDULE(S) REQUIRED:	A,E,F,N		

NWQ TREATMENT PLANT, 170 PAYNE BEACH ROAD, HILTON

CIR-00060 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026143** **BID PRICE \$ 338.14**

LOCATION: **NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #01 (MAIN BREAKER)**

MANUFACTURER: **CUTLER-HAMMER**

MODEL #: **MAGNUM DS-616**

SERIAL #: **4135324818001001**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **1600**

SECONDARY VOLTAGE: **480 AC**

FRAME SIZE (CIRCUIT BREAKER): **1600**

TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**

TRIP UNIT MODEL NUMBER: **DIGITRIP 1150**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00061 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026144** **BID PRICE \$ 338.14**

LOCATION: **NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #02 (CSP-2)**

MANUFACTURER: **CUTLER-HAMMER**

MODEL #: **MAGNUM DS-616**

SERIAL #: **PCI47476004004**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **1600**

SECONDARY VOLTAGE: **480 AC**

FRAME SIZE (CIRCUIT BREAKER): **1600**

TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**

TRIP UNIT MODEL NUMBER: **DIGITRIP 1150**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00062 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026145** **BID PRICE \$ 338.14**

LOCATION: **NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #03 (INCINERATOR MCC)**

MANUFACTURER: **CUTLER-HAMMER**

MODEL #: **MAGNUM DS-608**

SERIAL #: **4135324816001002**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **800**

SECONDARY VOLTAGE: **480 AC**

FRAME SIZE (CIRCUIT BREAKER): **800**

TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**

TRIP UNIT MODEL NUMBER: **DIGITRIP 1150**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

CIR-00063 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026146** **BID PRICE \$ 338.14**

LOCATION: **NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #04 (SHB MCC)**

MANUFACTURER: **CUTLER-HAMMER**

MODEL #: **MAGNUM DS-616**

SERIAL #: **4135324820001001**

PRIMARY VOLTAGE: **480 AC**

AMPS (PRIMARY): **1600**

SECONDARY VOLTAGE: **480 AC**

TRIP UNIT MANUFACTURER: **CUTTLER HAMMER**

TRIP UNIT MODEL NUMBER: **DIGITRIP 1150**

PM SCHEDULE(S) REQUIRED: **A,E,F,N**

NWQ TREATMENT PLANT, 170 PAYNE BEACH ROAD, HILTON

CIR-00064 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026147** **BID PRICE \$ 338.14**

LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #05 (TRUCK LOADING MCC)

MANUFACTURER: CUTLER-HAMMER
MODEL #: MAGNUM DS-608
SERIAL #: 4135324819001001
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
SECONDARY VOLTAGE: 480 AC
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP 1150
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00065 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026148** **BID PRICE \$ 338.14**

LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #06 (CENTRIFUGE MCC)

MANUFACTURER: CUTLER-HAMMER
MODEL #: MAGNUM DS-608
SERIAL #: 4135324816001001
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
SECONDARY VOLTAGE: 480 AC
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP 1150
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00066 **CIRCUIT BREAKER (AIR TYPE)** **MM # 1026149** **BID PRICE \$ 338.14**

LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - CIRCUIT BREAKER #07 (COMPRESSOR ROOM)

MANUFACTURER: CUTLER-HAMMER
MODEL #: MAGNUM DS-608
SERIAL #: 4135324817001001
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 800
SECONDARY VOLTAGE: 480 AC
TRIP UNIT MANUFACTURER: CUTTLER HAMMER
TRIP UNIT MODEL NUMBER: DIGITRIP 1150
PM SCHEDULE(S) REQUIRED: A,E,F,N

GRO-00003 **GROUNDING SYSTEM** **MM # 1026211** **BID PRICE \$ 804.54**

LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - MAIN - NORTHWEST CORNER OF AERATION DECK - GROUNDING SYSTEM #1
PM SCHEDULE(S) REQUIRED: F

SWI-00007 **SWITCH,LOAD INTERRUPTING AIR** **MM # 1026131** **BID PRICE \$ 224.72**

LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - MAIN - NORTHWEST CORNER OF AERATION DECK - SWITCH #1 (MAIN DISCONNECT)

MANUFACTURER: I.T.E.
PRIMARY VOLTAGE: 12470 AC
FUSED OR NON FUSED DISCONNECT: FUSED
PM SCHEDULE(S) REQUIRED: A,B,F

NWQ TREATMENT PLANT, 170 PAYNE BEACH ROAD, HILTON

SWI-00008	SWITCH,LOAD INTERRUPTING AIR	MM # 1026132	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - MAIN - NORTHWEST CORNER OF AERATION DECK - SWITCH #2 (ADMINISTRATION BUILDING)		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
FUSED OR NON FUSED DISCONNECT:	FUSED		
PM SCHEDULE(S) REQUIRED:	A,B,F		
SWI-00009	SWITCH,LOAD INTERRUPTING AIR	MM # 1026133	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - MAIN - NORTHWEST CORNER OF AERATION DECK - SWITCH #3 (SECONDARY PUMP STATION)		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
FUSED OR NON FUSED DISCONNECT:	FUSED		
PM SCHEDULE(S) REQUIRED:	A,B,F		
SWI-00010	SWITCH,LOAD INTERRUPTING AIR	MM # 1026134	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - MAIN - NORTHWEST CORNER OF AERATION DECK - SWITCH #4 (SOLIDS HANDLING BUILDING)		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
FUSED OR NON FUSED DISCONNECT:	FUSED		
PM SCHEDULE(S) REQUIRED:	A,B,F		
SWI-00011	SWITCH,LOAD INTERRUPTING AIR	MM # 1026074	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - ADMINISTRATION BUILDING BASEMENT - SWITCH #1		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
PM SCHEDULE(S) REQUIRED:	A,B		
SWI-00012	SWITCH,LOAD INTERRUPTING AIR	MM # 1026075	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - SECONDARY DOGHOUSE - BUILDING 4 - SWITCH #1		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
PM SCHEDULE(S) REQUIRED:	A,B		
SWI-00013	SWITCH,LOAD INTERRUPTING AIR	MM # 1026076	BID PRICE \$ <u>224.72</u>
LOCATION:	NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING BUILDING FIRST FLOOR - SWITCH #1		
MANUFACTURER:	I.T.E.		
PRIMARY VOLTAGE:	12470 AC		
PM SCHEDULE(S) REQUIRED:	A,B		

NWQ TREATMENT PLANT, 170 PAYNE BEACH ROAD, HILTON

TRA-00058 TRANSFORMER MM # 1026283 BID PRICE \$ 826.80
 LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - ADMINISTRATION
 BUILDING BASEMENT - TRANSFORMER #1
 MANUFACTURER: I.T.E.
 SERIAL #: 20514-C01
 PRIMARY VOLTAGE: 12470 AC
 AMPS (PRIMARY): 23
 SECONDARY VOLTAGE: 208 AC
 AMPS (SECONDARY): 1388
 KVA RATING: 500
 CLASS: XF
 OIL CAPACITY (GALLONS): 150
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00059 TRANSFORMER MM # 1026284 BID PRICE \$ 826.80
 LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - SECONDARY DOGHOUSE -
 BUILDING 4 - TRANSFORMER #1
 MANUFACTURER: FEDERAL PACIFIC
 SERIAL #: 50321
 PRIMARY VOLTAGE: 12470 AC
 AMPS (PRIMARY): 92
 SECONDARY VOLTAGE: 480 AC
 AMPS (SECONDARY): 1800
 KVA RATING: 1500/2000
 CLASS: XF
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00060 TRANSFORMER MM # 1026285 BID PRICE \$ 826.80
 LOCATION: NWQ - POWER DISTRIBUTION SUBSTATION - SOLIDS HANDLING
 BUILDING FIRST FLOOR - TRANSFORMER #1
 MANUFACTURER: I.T.E.
 SERIAL #: 20514-B01
 PRIMARY VOLTAGE: 12470 AC
 AMPS (PRIMARY): 92
 SECONDARY VOLTAGE: 480 AC
 AMPS (SECONDARY): 1800
 KVA RATING: 1000
 CLASS: XF
 OIL CAPACITY (GALLONS): 250
 PM SCHEDULE(S) REQUIRED: F,J

Section total: NWQ TREATMENT PLANT \$ 8,464.10

PUBLIC SAFETY BUILDING, 150 S PLYMOUTH AVE, ROCHESTER

CIR-00322 **CIRCUIT BREAKER (AIR TYPE)** *1038232* **BID PRICE \$** 344.10

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 01 - CIRCUIT BREAKER 01 - MAIN A2

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-50-1
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
TRIP UNIT MANUFACTURER: MICROVERSA TRIP
TRIP UNIT MODEL NUMBER: RMS-9
PM SCHEDULE(S) REQUIRED: A,E,F,N

CIR-00323 **CIRCUIT BREAKER (AIR TYPE)** *1038233* **BID PRICE \$** 266.06

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 01 - CIRCUIT BREAKER 02 - FEEDER A

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-50-1
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00324 **CIRCUIT BREAKER (AIR TYPE)** *1038234* **BID PRICE \$** 266.06

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 02 - CIRCUIT BREAKER 03 - BUS TIE

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-50-1
SERIAL #: 148A6938-218
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00325 **CIRCUIT BREAKER (AIR TYPE)** *1038235* **BID PRICE \$** 266.06

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 02 - CIRCUIT BREAKER 04 - MAIN B2

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-50-1
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
PM SCHEDULE(S) REQUIRED: A,F,N

CIR-00326 **CIRCUIT BREAKER (AIR TYPE)** *1038236* **BID PRICE \$** 266.06

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 02 - CIRCUIT BREAKER 05 - FEEDER B

MANUFACTURER: GENERAL ELECTRIC
MODEL #: AK-2-50-1
PRIMARY VOLTAGE: 480 AC
AMPS (PRIMARY): 1600
FRAME SIZE (CIRCUIT BREAKER): 1600A
PM SCHEDULE(S) REQUIRED: A,F,N

PUBLIC SAFETY BUILDING, 150 S PLYMOUTH AVE, ROCHESTER

SWI-00150 SWITCH,LOAD INTERRUPTING AIR 1038237 BID PRICE \$ 202.99

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM 88 - PANEL 01 - SWITCH 01 - A2

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: 152020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

SWI-00151 SWITCH,LOAD INTERRUPTING AIR 1038239 BID PRICE \$ 202.99

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM 88 - PANEL 02 - SWITCH 02 - B2

MANUFACTURER: GENERAL ELECTRIC
 MODEL #: 152020 LVP SG1 AC
 PRIMARY VOLTAGE: 11500 AC
 PM SCHEDULE(S) REQUIRED: A,B

TRA-00135 TRANSFORMER 1038239 BID PRICE \$ 981.35

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM 88 - PANEL 01 - TRANSFORMER 01 - A2

MANUFACTURER: GENERAL ELECTRIC
 SERIAL #: C-865880A
 KVA RATING: 1000/1333
 DEGREES OF RISE (C): 80
 PM SCHEDULE(S) REQUIRED: F,J

TRA-00136 TRANSFORMER 1038240 BID PRICE \$ 981.35

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM 88 - PANEL 02 - TRANSFORMER 02 - B2

MANUFACTURER: GENERAL ELECTRIC
 SERIAL #: C-865880B
 KVA RATING: 1000/1333
 DEGREES OF RISE (C): 80
 PM SCHEDULE(S) REQUIRED: F,J

Section total: PUBLIC SAFETY BUILDING

\$ 3,777.0302 Bal

RESOURCE RECOVERY FACILITY, 1845 EMERSON ST, ROCHESTER

BUS-00010	BUS STRUCTURE (OUTDOOR)	MM # 1026222	BID PRICE \$ <u>178.08</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - OUTDOOR BUS STRUCTURE #1		
MANUFACTURER:	GENERAL ELECTRIC		
PRIMARY VOLTAGE:	34500 AC		
PM SCHEDULE(S) REQUIRED:	F,I		
CIR-00110	CIRCUIT BREAKER (OIL TYPE)	MM # 1026208	BID PRICE \$ <u>608.44</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - CIRCUIT BREAKER #01		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	FGA-38-22000-6		
SERIAL #:	0141A6329-201		
PRIMARY VOLTAGE:	34500 AC		
AMPS (PRIMARY):	2000		
PM SCHEDULE(S) REQUIRED:	D		
CIR-00111	CIRCUIT BREAKER (VACUUM TYPE)	MM # 1026135	BID PRICE \$ <u>290.44</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - CIRCUIT BREAKER #02 - INSIDE CONTROL HOUSE (MAIN)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	TYPE VB4.16		
SERIAL #:	0269A6710-002-01		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	2000		
INTERRUPT RATING (KA):	32		
PM SCHEDULE(S) REQUIRED:	A,C,F		
CIR-00112	CIRCUIT BREAKER (VACUUM TYPE)	MM # 1026136	BID PRICE \$ <u>290.44</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - CIRCUIT BREAKER #03 - INSIDE CONTROL HOUSE (LINE 1 SUBSTATION FEEDER #1)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	TYPE VB4.16		
SERIAL #:	0269A6710-001-02		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	1200		
INTERRUPT RATING (KA):	32		
PM SCHEDULE(S) REQUIRED:	A,C,F		
CIR-00113	CIRCUIT BREAKER (VACUUM TYPE)	MM # 1026137	BID PRICE \$ <u>290.44</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - CIRCUIT BREAKER #04 - INSIDE CONTROL HOUSE (LINE 2 SUBSTATION FEEDER #2)		
MANUFACTURER:	GENERAL ELECTRIC		
MODEL #:	TYPE VB4.16		
SERIAL #:	0269A6710-001-05		
PRIMARY VOLTAGE:	4160 AC		
AMPS (PRIMARY):	1200		
INTERRUPT RATING (KA):	32		
PM SCHEDULE(S) REQUIRED:	A,C,F		
GRO-00010	GROUNDING SYSTEM	MM # 1026215	BID PRICE \$ <u>552.26</u>
LOCATION:	RRF - POWER DISTRIBUTION - WEST SIDE OF NORTHWEST PARKING LOT - GROUNDING SYSTEM #1		
PM SCHEDULE(S) REQUIRED:	F		

8.02 EQUIPMENT (RELAYS ONLY)

BUTTONWOOD PUMP STATION, 15 N GREECE ROAD, HILTON

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: BUTTONWOOD PS - POWER DISTRIBUTION - RELAYS - ELECTRONIC
MANUFACTURER: ABB *1027189*
MODEL #: 474M0321-6000
INSTRUCTION BOOK REFERENCE: IMRA474126-M18
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94

Section total: 2 Relays at: BUTTONWOOD PUMP STATION \$ 104.94

RELAYS FOR:

CHARLOTTE PUMP STATION, 556 RIVER ST, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: CHARLOTTE PS - POWER DISTRIBUTION - RELAYS - ELECTRONIC
MANUFACTURER: SCHWEITZER *1027190*
MODEL #: SEL-551
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 53.00 QTY: 1 EXTENDED TOTAL \$ 53.00

Section total: 1 Relay at: CHARLOTTE PUMP STATION \$ 53.00

RELAYS FOR:

CIVIC CENTER GARAGE, 130 S PLYMOUTH AVE, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 113 - PANEL 01 - *1038244*
CIRCUIT BREAKER 01 - MAIN B - RELAY 1 - VOLTAGE RELAY
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV51L3A
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 4 EXTENDED TOTAL \$ 209.88

LOCATION: CIVIC CENTER GARAGE - FLOOR 1 BASEMENT - ROOM 105 - PANEL 01 -
CIRCUIT BREAKER 01 - MAIN A1A - RELAY 1 - VOLTAGE RELAY
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV53L1A *mm see above*
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 4 EXTENDED TOTAL \$ 209.88

Section total: 8 Relays at: CIVIC CENTER GARAGE \$ 419.76

CIVIC CENTER REFRIGERATION BUILDING, 130 S PLYMOUTH AVE, ROCHESTER
RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
 ROOM 200 - PANEL 01 - CIRCUIT BREAKER 01 - "A" BUS MAIN BREAKER
 - RELAY 1 - PHASE A

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAC51A1A *1038243*
RELAY MODEL TYPE: IAC
PM SCHEDULE(S) REQUIRED: E

BID PRICE EACH \$ 51.94 **QTY:** 6 **EXTENDED TOTAL \$** 311.64

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
 ROOM 200 - PANEL 01 - CIRCUIT BREAKER 01 - "A" BUS MAIN BREAKER
 - RELAY 4 - GROUND FAULT

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAC51A2A *MM See Above*
RELAY MODEL TYPE: IAC
PM SCHEDULE(S) REQUIRED: E

BID PRICE EACH \$ 51.94 **QTY:** 14 **EXTENDED TOTAL \$** 727.16

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
 ROOM 200 - PANEL 03 - CIRCUIT BREAKER 01 - RB G1 AND G2 FEEDER
 A1 - RELAY 1 - PHASE A

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAC51B4A *MM See Above*
RELAY MODEL TYPE: IAC
PM SCHEDULE(S) REQUIRED: E

BID PRICE EACH \$ 51.94 **QTY:** 12 **EXTENDED TOTAL \$** 623.28

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
 ROOM 200 - PANEL 03 - CIRCUIT BREAKER 01 - RB G1 AND G2 FEEDER
 A1 - RELAY 4 - GROUND FAULT

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAC55A2A *MM See Above*
RELAY MODEL TYPE: IAC
PM SCHEDULE(S) REQUIRED: E

BID PRICE EACH \$ 51.94 **QTY:** 8 **EXTENDED TOTAL \$** 415.52

LOCATION: CIVIC CENTER REFRIGERATION BUILDING - FLOOR 1 MEZZANINE -
 ROOM 200 - PANEL 04 - CIRCUIT BREAKER 01 - MAIN B - RELAY 1 -
 VOLTAGE RELAY

MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV531A *1038246*
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E

BID PRICE EACH \$ 52.47 **QTY:** 2 **EXTENDED TOTAL \$** 104.94

Section total: 42 Relays at: **CIVIC CENTER REFRIGERATION BUILDING** \$ 2,182.54

FEV TREATMENT PLANT, 1574 LAKE SHORE BLVD, ROCHESTER
RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: GENERAL ELECTRIC 1027191
 MODEL #: 12BDD15B16A
 RELAY MODEL TYPE: BDD
 RELAY CONTROL VOLTAGE: 48/125 DC
 INSTRUCTION BOOK REFERENCE: GEH-2057
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 12 EXTENDED TOTAL \$ 623.28

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: GENERAL ELECTRIC 1038242
 MODEL #: 12IACS3B806A
 RELAY MODEL TYPE: IAC
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 8 EXTENDED TOTAL \$ 415.52

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: WESTINGHOUSE 1027193
 MODEL #: 187255A
 RELAY MODEL TYPE: CD-7
 INSTRUCTION BOOK REFERENCE: 41-101
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 16 EXTENDED TOTAL \$ 831.04

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: WESTINGHOUSE 1027194
 MODEL #: 1875302K
 RELAY MODEL TYPE: CD-11
 INSTRUCTION BOOK REFERENCE: 41-101
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 60 EXTENDED TOTAL \$ 3,116.40

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: WESTINGHOUSE 1027195
 MODEL #: 1875506A
 RELAY MODEL TYPE: CV-1
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 6 EXTENDED TOTAL \$ 311.64

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
 MANUFACTURER: WESTINGHOUSE 1027196
 MODEL #: 1875594
 RELAY MODEL TYPE: CR-9
 INSTRUCTION BOOK REFERENCE: 41-131
 PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 12 EXTENDED TOTAL \$ 623.28

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: WESTINGHOUSE 1027197
MODEL #: 2396425A13
RELAY MODEL TYPE: CRC-2
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 4 EXTENDED TOTAL \$ 207.76

LOCATION: FEV - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: WESTINGHOUSE 1027198
MODEL #: 671B157A20
RELAY MODEL TYPE: CA-16
INSTRUCTION BOOK REFERENCE: 41-337.3
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 18 EXTENDED TOTAL \$ 934.92

Section total: 136 Relays at: FEV TREATMENT PLANT \$ 7,063.84

RELAYS FOR:
DOWNTOWN JAIL MAINFRAME, 130 S PLYMOUTH AVE, ROCHESTER
 RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: DOWNTOWN JAIL MAINFRAME - FLOOR DB BASEMENT - ROOM B209 -
 PANEL 01 - CIRCUIT BREAKER 01 - MAIN B2 - RELAY 1 - VOLTAGE RELAY 1038241
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV69B2A
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94

Section total: 2 Relays at: DOWNTOWN JAIL MAINFRAME \$ 104.94

RELAYS FOR:
FLYNN ROAD PUMP STATION, 599 FLYNN ROAD, ROCHESTER
 RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: FLYNN ROAD PS - POWER DISTRIBUTION - RELAYS - ELECTRONIC
MANUFACTURER: ABB 1027199
MODEL #: 474M0321-6000
INSTRUCTION BOOK REFERENCE: IMRA474126-M1B
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94

Section total: 2 Relays at: FLYNN ROAD PUMP STATION \$ 104.94

RELAYS FOR:

IRONDEQUOIT BAY PUMP STATION, 1574 LAKE SHORE BLVD, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IACS3A803A
RELAY MODEL TYPE: INSTRUCTION IAC
BOOK REFERENCE: PARTS GEK-34054
BOOK/BULLETIN REFERENCE: PM GEF-4373
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 16 EXTENDED TOTAL \$ 831.04

2 1027200

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IACS3BB11A
RELAY MODEL TYPE: INSTRUCTION IAC
BOOK REFERENCE: PARTS GEK-34054
BOOK/BULLETIN REFERENCE: PM GEF-4373
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 12 EXTENDED TOTAL \$ 623.28

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAC66K8A
RELAY MODEL TYPE: INSTRUCTION IAC
BOOK REFERENCE: PARTS GEI-44233
BOOK/BULLETIN REFERENCE: PM GEF-3883
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 5 EXTENDED TOTAL \$ 259.70

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV53K1A
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 4 EXTENDED TOTAL \$ 209.88

2 1027201

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IAV53L1X
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12ICW51A2A
RELAY MODEL TYPE: INSTRUCTION ICW
BOOK REFERENCE: PARTS GEK-34054
BOOK/BULLETIN REFERENCE: PM GEF-4373
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94

1027202

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC 1027203
MODEL #: 12PVD11C11A
RELAY MODEL TYPE: INSTRUCTION: PVD
BOOK REFERENCE: PARTS: GEH-1770
BOOK/BULLETIN REFERENCE: PM: GEF-3798
SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 12 EXTENDED TOTAL \$ 623.28

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC 1027204
MODEL #: 12STD15C5A
RELAY MODEL TYPE: STD
RELAY CONTROL VOLTAGE: 48/125/250 DC
INSTRUCTION BOOK REFERENCE: GEK-45307
PARTS BOOK/BULLETIN REFERENCE: GEF-4382
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 6 EXTENDED TOTAL \$ 311.64

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC 1027205
MODEL #: 12TMC21B10A
RELAY MODEL TYPE: INSTRUCTION: TMC
BOOK REFERENCE: PARTS: GED-49940
BOOK/BULLETIN REFERENCE: PM: GEF-4046
SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 6 EXTENDED TOTAL \$ 311.64

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: WESTINGHOUSE 1027206
MODEL #: 293B119A09
RELAY MODEL TYPE: BL-1
INSTRUCTION BOOK REFERENCE: 41-553.1
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 51.94 QTY: 15 EXTENDED TOTAL \$ 779.10

LOCATION: IBPS - POWER DISTRIBUTION - RELAYS - ELECTRONIC
MANUFACTURER: SCHWEITZER 1027207
MODEL #: SEL-587
PM SCHEDULE(S) REQUIRED: E
 BID PRICE EACH \$ 53.00 QTY: 1 EXTENDED TOTAL \$ 53.00

Section total: 81 Relay at: IRONDEQUOIT BAY PUMP STATION \$ 4,212.44

RELAYS FOR:

ISLAND COTTAGE PUMP STATION, 390 ISLAND COTTAGE ROAD, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: ISLAND COTTAGE PS - POWER DISTRIBUTION - RELAYS - ELECTRONIC
MANUFACTURER: ABB 1027210
MODEL #: 474M0321-6000
INSTRUCTION BOOK REFERENCE: IMRA474126-MIB
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94
Section total: 2 Relays at: ISLAND COTTAGE PUMP STATION \$ 104.94

RELAYS FOR:

PUBLIC SAFETY BUILDING, 150 S PLYMOUTH AVE, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: PUBLIC SAFETY BUILDING - FLOOR 08 BASEMENT - ROOM B8 - PANEL 1038243
01 - CIRCUIT BREAKER 01 - MAIN A2 - RELAY 1 - VOLTAGE RELAY
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 121AV53L1A
RELAY MODEL TYPE: IAV
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 52.47 QTY: 2 EXTENDED TOTAL \$ 104.94
Section total: 2 Relays at: PUBLIC SAFETY BUILDING \$ 104.94

RELAYS FOR:

RESOURCE RECOVERY FACILITY, 1845 EMERSON ST, ROCHESTER

RELAYS GROUPED BELOW BY LOCATION, MFG AND MODEL:

LOCATION: RRF - POWER DISTRIBUTION - RELAYS - MECHANICAL 1027208
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12ICR53A1A
RELAY MODEL TYPE: ICR
INSTRUCTION BOOK REFERENCE: GEH-1783
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 53.00 QTY: 1 EXTENDED TOTAL \$ 53.00

LOCATION: RRF - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC 1027209
MODEL #: 12IFC53A2A
RELAY MODEL TYPE: INSTRUCTION IFC
BOOK REFERENCE: PARTS GEK-45375
BOOK/BULLETIN REFERENCE: PM GEF-4533
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 8 EXTENDED TOTAL \$ 415.52

LOCATION: RRF - POWER DISTRIBUTION - RELAYS - MECHANICAL
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12IFC53B1A
RELAY MODEL TYPE: INSTRUCTION IFC
BOOK REFERENCE: PARTS GEK-45375
BOOK/BULLETIN REFERENCE: PM GEF-4533
SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 17 EXTENDED TOTAL \$ 882.98

LOCATION: RRF - POWER DISTRIBUTION - RELAYS - MECHANICAL 1027211
MANUFACTURER: GENERAL ELECTRIC
MODEL #: 12STD15C5A REVB
RELAY MODEL TYPE: STD
RELAY CONTROL VOLTAGE: 48/125/250 DC
INSTRUCTION BOOK REFERENCE: GEK-45307
PM SCHEDULE(S) REQUIRED: E
BID PRICE EACH \$ 51.94 QTY: 3 EXTENDED TOTAL \$ 155.82

Section total: 29 Relays at: RESOURCE RECOVERY FACILITY \$ 1,507.32

Grand total of section 8.02: \$ 15,963.60

Transfer Section Grand total to front page

Item	Material	Description	OU	Unit Price
10	1009439	HEAVY ELECTRICAL MAINT-LABOR/STD TIME	HR	\$104.97
20	1009443	HEAVY ELECTRICAL MAINT-LABOR/TIME+1/2	HR	\$138.12
30	1038254	HVY ELE MNT-EMER CALL(M-F 7:00AM-6:00PM)	HR	\$104.97
40	1038255	HVY ELE MNT-EMER CALL(M-F 6:00PM-7:00AM)	HR	\$138.12
50	1038256	HVY ELE MNT-EMER CALL (WEEKEND/HOLIDAY)	HR	\$209.95
55	1013135	HEAVY ELECTRICAL MAINTENANCE-PARTS/	DL	
60	1026301	HVY ELE MNT-PM BUS-00004 (F,M)	EA	\$396.69
70	1026302	HVY ELE MNT-PM BUS-00005 (F,M)	EA	\$396.69
80	1026088	HVY ELE MNT-PM CIR-00067 (A,B,C,E,F)	EA	\$590.06
90	1026089	HVY ELE MNT-PM CIR-00068 (A,B,C,E,F)	EA	\$590.06
100	1026150	HVY ELE MNT-PM CIR-00069 (A,E,F,N)	EA	\$590.06
110	1026151	HVY ELE MNT-PM CIR-00070 (A,E,F,N)	EA	\$590.06
120	1026152	HVY ELE MNT-PM CIR-00071 (A,E,F,N)	EA	\$590.06
130	1026312	HVY ELE MNT-PM GRO-00004 (F)	EA	\$1,078.46
140	1026286	HVY ELE MNT-PM TRA-00061 (F,J)	EA	\$880.67
150	1026287	HVY ELE MNT-PM TRA-00062 (F,J)	EA	\$880.67
160	1038106	HVY ELE MNT-PM CIR-00200 (A,E,F,N)	EA	\$358.70
170	1038107	HVY ELE MNT-PM CIR-00201 (A,E,F,N)	EA	\$358.70
180	1038108	HVY ELE MNT-PM CIR-00202 (A,E,F,N)	EA	\$358.70
190	1026138	HVY ELE MNT-PM CIR-00114 (A,C,F)	EA	\$798.90
200	1026310	HVY ELE MNT-PM CIR-00115 (N)	EA	\$798.90
210	1026311	HVY ELE MNT-PM CIR-00116 (N)	EA	\$798.90
220	1026216	HVY ELE MNT-PM GRO-00011 (F)	EA	\$1,299.46
230	1026298	HVY ELE MNT-PM TRA-00073 (F,J)	EA	\$1,000.02
240	1038109	HVY ELE MNT-PM CIR-00268 (A,F,N)	EA	\$277.35
250	1038110	HVY ELE MNT-PM CIR-00269 (A,F,N)	EA	\$277.35
260	1038111	HVY ELE MNT-PM CIR-00270 (A,F,N)	EA	\$277.35
270	1038112	HVY ELE MNT-PM CIR-00271 (A,F,N)	EA	\$277.35
280	1038113	HVY ELE MNT-PM CIR-00272 (A,F,N)	EA	\$277.35
290	1038114	HVY ELE MNT-PM CIR-00273 (A,F,N)	EA	\$277.35
300	1038115	HVY ELE MNT-PM CIR-00274 (A,E,F,N)	EA	\$277.35
310	1038116	HVY ELE MNT-PM CIR-00275 (A,F,N)	EA	\$358.70
320	1038117	HVY ELE MNT-PM CIR-00276 (A,F,N)	EA	\$277.35
330	1038118	HVY ELE MNT-PM CIR-00277 (A,F,N)	EA	\$277.35
340	1038119	HVY ELE MNT-PM CIR-00278 (A,F,N)	EA	\$277.35
350	1038120	HVY ELE MNT-PM CIR-00279 (A,F,N)	EA	\$277.35
360	1038121	HVY ELE MNT-PM CIR-00280 (A,F,N)	EA	\$277.35
370	1038122	HVY ELE MNT-PM CIR-00281 (A,E,F,N)	EA	\$358.70
380	1038123	HVY ELE MNT-PM CIR-00282 (A,F,N)	EA	\$277.35
390	1038124	HVY ELE MNT-PM CIR-00283 (A,F,N)	EA	\$277.35
400	1038125	HVY ELE MNT-PM CIR-00284 (A,F,N)	EA	\$277.35
410	1038126	HVY ELE MNT-PM CIR-00285 (A,E,F,N)	EA	\$358.70

Item	Material	Description	OU	Unit Price
420	1038127	HVY ELE MNT-PM CIR-00286 (A,F,N)	EA	\$277.35
430	1038128	HVY ELE MNT-PM CIR-00287 (A,F,N)	EA	\$277.35
440	1038129	HVY ELE MNT-PM CIR-00288 (A,F,N)	EA	\$277.35
450	1038130	HVY ELE MNT-PM CIR-00289 (A,F,N)	EA	\$277.35
460	1038131	HVY ELE MNT-PM CIR-00290 (A,F,N)	EA	\$277.35
470	1038132	HVY ELE MNT-PM CIR-00291 (A,F,N)	EA	\$277.35
480	1038133	HVY ELE MNT-PM CIR-00292 (A,E,F,N)	EA	\$358.70
490	1038134	HVY ELE MNT-PM CIR-00293 (A,F,N)	EA	\$277.35
500	1038135	HVY ELE MNT-PM CIR-00294 (A,E,F,N)	EA	\$358.70
510	1038136	HVY ELE MNT-PM CIR-00295 (A,F,N)	EA	\$277.35
520	1038137	HVY ELE MNT-PM CIR-00296 (A,E,F,N)	EA	\$358.70
530	1038138	HVY ELE MNT-PM CIR-00297 (A,F,N)	EA	\$277.35
540	1038139	HVY ELE MNT-PM CIR-00298 (A,E,F,N)	EA	\$358.70
550	1038140	HVY ELE MNT-PM CIR-00299 (A,F,N)	EA	\$277.35
560	1038141	HVY ELE MNT-PM CIR-00300 (A,F,N)	EA	\$277.35
570	1038142	HVY ELE MNT-PM CIR-00301 (A,F,N)	EA	\$277.35
580	1038143	HVY ELE MNT-PM CIR-00302 (A,E,F,N)	EA	\$358.70
590	1038144	HVY ELE MNT-PM CIR-00303 (A,E,F,N)	EA	\$358.70
600	1038145	HVY ELE MNT-PM CIR-00327 (A,E,F,N)	EA	\$358.70
610	1038146	HVY ELE MNT-PM SWI-00140 (A,B)	EA	\$211.60
620	1038147	HVY ELE MNT-PM SWI-00141 (A,B)	EA	\$211.60
630	1038148	HVY ELE MNT-PM SWI-00142 (A,B)	EA	\$211.60
640	1038149	HVY ELE MNT-PM SWI-00143 (A,B)	EA	\$211.60
650	1038150	HVY ELE MNT-PM SWI-00144 (A,B)	EA	\$211.60
660	1038151	HVY ELE MNT-PM SWI-00145 (A,B)	EA	\$211.60
670	1038152	HVY ELE MNT-PM SWI-00146 (A,B)	EA	\$211.60
680	1038153	HVY ELE MNT-PM SWI-00147 (A,B)	EA	\$211.60
690	1038154	HVY ELE MNT-PM TRA-00124 (F,J)	EA	\$1,023.00
700	1038155	HVY ELE MNT-PM TRA-00126 (F,J)	EA	\$1,023.00
710	1038156	HVY ELE MNT-PM TRA-00127 (F,J)	EA	\$1,023.00
720	1038157	HVY ELE MNT-PM TRA-00128 (F,J)	EA	\$1,023.00
730	1038158	HVY ELE MNT-PM TRA-00129 (F,J)	EA	\$1,023.00
740	1038159	HVY ELE MNT-PM TRA-00130 (F,J)	EA	\$1,023.00
750	1038160	HVY ELE MNT-PM TRA-00131 (F,J)	EA	\$1,023.00
760	1038161	HVY ELE MNT-PM TRA-00132 (F,J)	EA	\$1,023.00
770	1038162	HVY ELE MNT-PM CIR-00120 (A,B,C,F)	EA	\$364.58
780	1038163	HVY ELE MNT-PM CIR-00121 (A,B,C,F)	EA	\$364.58
790	1038164	HVY ELE MNT-PM CIR-00122 (A,B,C,F)	EA	\$364.58
800	1038165	HVY ELE MNT-PM CIR-00123 (A,B,C,F)	EA	\$364.58
810	1038166	HVY ELE MNT-PM CIR-00124 (A,B,C,F)	EA	\$364.58
820	1038167	HVY ELE MNT-PM CIR-00125 (A,B,C,F)	EA	\$364.58
830	1038168	HVY ELE MNT-PM CIR-00126 (A,B,C,F)	EA	\$364.58

Item	Material	Description	OU	Unit Price
840	1038169	HVY ELE MNT-PM CIR-00127 (A,B,C,F)	EA	\$364.58
850	1038170	HVY ELE MNT-PM CIR-00128 (A,B,C,F)	EA	\$364.58
860	1038171	HVY ELE MNT-PM CIR-00129 (A,B,C,F)	EA	\$364.58
870	1038172	HVY ELE MNT-PM CIR-00130 (A,B,C,F)	EA	\$364.58
880	1038173	HVY ELE MNT-PM CIR-00131 (A,E,F,N)	EA	\$358.70
890	1038174	HVY ELE MNT-PM CIR-00132 (A,E,F,N)	EA	\$358.70
900	1038175	HVY ELE MNT-PM CIR-00133 (A,E,F,N)	EA	\$358.70
910	1038176	HVY ELE MNT-PM CIR-00134 (A,E,F,N)	EA	\$358.70
920	1038177	HVY ELE MNT-PM CIR-00135 (A,E,F,N)	EA	\$358.70
930	1038178	HVY ELE MNT-PM CIR-00136 (A,F,N)	EA	\$277.35
940	1038179	HVY ELE MNT-PM CIR-00137 (A,E,F,N)	EA	\$358.70
950	1038180	HVY ELE MNT-PM CIR-00138 (A,E,F,N)	EA	\$358.70
960	1038181	HVY ELE MNT-PM CIR-00139 (A,E,F,N)	EA	\$358.70
970	1038182	HVY ELE MNT-PM CIR-00140 (A,E,F,N)	EA	\$358.70
980	1038183	HVY ELE MNT-PM CIR-00141 (A,E,F,N)	EA	\$358.70
990	1038184	HVY ELE MNT-PM CIR-00144 (A,E,F,N)	EA	\$358.70
1000	1038185	HVY ELE MNT-PM CIR-00146 (A,E,F,N)	EA	\$358.70
1010	1038186	HVY ELE MNT-PM CIR-00147 (A,E,F,N)	EA	\$358.70
1020	1038187	HVY ELE MNT-PM SWI-00128 (A,B)	EA	\$211.60
1030	1038188	HVY ELE MNT-PM SWI-00129 (A,B)	EA	\$211.60
1040	1038189	HVY ELE MNT-PM SWI-00130 (A,B)	EA	\$211.60
1050	1038190	HVY ELE MNT-PM SWI-00131 (A,B)	EA	\$211.60
1060	1038191	HVY ELE MNT-PM SWI-00132 (A,B)	EA	\$211.60
1070	1038192	HVY ELE MNT-PM SWI-00133 (A,B)	EA	\$211.60
1080	1038193	HVY ELE MNT-PM SWI-00134 (A,B)	EA	\$211.60
1090	1038194	HVY ELE MNT-PM TRA-00075 (F,J)	EA	\$1,023.00
1100	1038195	HVY ELE MNT-PM TRA-00076 (F,J)	EA	\$1,023.00
1110	1038196	HVY ELE MNT-PM TRA-00077 (F,J)	EA	\$1,023.00
1120	1038197	HVY ELE MNT-PM TRA-00078 (F,J)	EA	\$1,023.00
1130	1038198	HVY ELE MNT-PM CIR-00304 (A,E,F,N)	EA	\$358.70
1140	1038199	HVY ELE MNT-PM CIR-00305 (A,F,N)	EA	\$277.35
1150	1038200	HVY ELE MNT-PM CIR-00306 (A,F,N)	EA	\$277.35
1160	1038201	HVY ELE MNT-PM CIR-00307 (A,F,N)	EA	\$277.35
1170	1038202	HVY ELE MNT-PM CIR-00308 (A,F,N)	EA	\$277.35
1180	1038203	HVY ELE MNT-PM CIR-00309 (A,F,N)	EA	\$277.35
1190	1038204	HVY ELE MNT-PM CIR-00310 (A,F,N)	EA	\$277.35
1200	1038205	HVY ELE MNT-PM CIR-00311 (A,F,N)	EA	\$277.35
1210	1038206	HVY ELE MNT-PM CIR-00312 (A,E,F,N)	EA	\$358.70
1220	1038207	HVY ELE MNT-PM CIR-00313 (A,E,F,N)	EA	\$358.70
1230	1038209	HVY ELE MNT-PM CIR-00314 (A,F,N)	EA	\$277.35
1240	1038210	HVY ELE MNT-PM CIR-00315 (A,F,N)	EA	\$277.35
1250	1038211	HVY ELE MNT-PM CIR-00316 (A,E,F,N)	EA	\$358.70

Item	Material	Description	OU	Unit Price
1260	1038212	HVY ELE MNT-PM CIR-00317 (A,F,N)	EA	\$277.35
1270	1038213	HVY ELE MNT-PM CIR-00318 (A,F,N)	EA	\$277.35
1280	1038214	HVY ELE MNT-PM CIR-00319 (A,E,F,N)	EA	\$358.70
1290	1038215	HVY ELE MNT-PM CIR-00320 (A,E,F,N)	EA	\$358.70
1300	1038216	HVY ELE MNT-PM CIR-00321 (A,E,F,N)	EA	\$358.70
1310	1038217	HVY ELE MNT-PM SWI-00148 (A,B)	EA	\$211.60
1320	1038218	HVY ELE MNT-PM SWI-00149 (A,B)	EA	\$211.60
1330	1038219	HVY ELE MNT-PM TRA-00133 (F,J)	EA	\$1,023.00
1340	1038220	HVY ELE MNT-PM TRA-00134 (F,J)	EA	\$1,023.00
1350	1026221	HVY ELE MNT-PM BUS-00002 (F,I)	EA	\$1,096.15
1360	1026300	HVY ELE MNT-PM BUS-00003 (F,M)	EA	\$283.98
1370	1026108	HVY ELE MNT-PM CIR-00025 (A,B,C,F)	EA	\$417.68
1380	1026109	HVY ELE MNT-PM CIR-00026 (A,B,C,F)	EA	\$417.68
1390	1026110	HVY ELE MNT-PM CIR-00027 (A,B,C,F)	EA	\$417.68
1400	1026111	HVY ELE MNT-PM CIR-00028 (A,B,C,F)	EA	\$417.68
1410	1026112	HVY ELE MNT-PM CIR-00029 (A,B,C,F)	EA	\$417.68
1420	1026113	HVY ELE MNT-PM CIR-00030 (A,B,C,F)	EA	\$417.68
1430	1026114	HVY ELE MNT-PM CIR-00031 (A,B,C,F)	EA	\$417.68
1440	1026115	HVY ELE MNT-PM CIR-00032 (A,B,C,F)	EA	\$417.68
1450	1026116	HVY ELE MNT-PM CIR-00033 (A,B,C,F)	EA	\$417.68
1460	1026117	HVY ELE MNT-PM CIR-00034 (A,B,C,F)	EA	\$417.68
1470	1026118	HVY ELE MNT-PM CIR-00035 (A,B,C,F)	EA	\$417.68
1480	1026119	HVY ELE MNT-PM CIR-00036 (A,B,C,F)	EA	\$417.68
1490	1026120	HVY ELE MNT-PM CIR-00037 (A,B,C,F)	EA	\$417.68
1500	1026121	HVY ELE MNT-PM CIR-00038 (A,B,C,F)	EA	\$417.68
1510	1026122	HVY ELE MNT-PM CIR-00039 (A,B,C,F)	EA	\$417.68
1520	1026123	HVY ELE MNT-PM CIR-00040 (A,B,C,F)	EA	\$417.68
1530	1026124	HVY ELE MNT-PM CIR-00041 (A,B,C,F)	EA	\$417.68
1540	1026125	HVY ELE MNT-PM CIR-00042 (A,B,C,F)	EA	\$417.68
1550	1026126	HVY ELE MNT-PM CIR-00043 (A,B,C,F)	EA	\$417.68
1560	1026127	HVY ELE MNT-PM CIR-00044 (A,B,C,F)	EA	\$417.68
1570	1026128	HVY ELE MNT-PM CIR-00045 (A,B,C,F)	EA	\$417.68
1580	1026129	HVY ELE MNT-PM CIR-00046 (A,B,C,F)	EA	\$417.68
1590	1026130	HVY ELE MNT-PM CIR-00047 (A,B,C,F)	EA	\$417.68
1600	1026203	HVY ELE MNT-PM CIR-00048 (D)	EA	\$1,096.15
1610	1026204	HVY ELE MNT-PM CIR-00049 (D)	EA	\$1,096.15
1620	1026205	HVY ELE MNT-PM CIR-00050 (D)	EA	\$1,096.15
1630	1026206	HVY ELE MNT-PM CIR-00051 (D)	EA	\$1,096.15
1640	1026207	HVY ELE MNT-PM CIR-00052 (D)	EA	\$1,096.15
1650	1026303	HVY ELE MNT-PM CIR-00053 (F,M)	EA	\$417.68
1660	1026304	HVY ELE MNT-PM CIR-00054 (F,M)	EA	\$417.68
1670	1026305	HVY ELE MNT-PM CIR-00055 (F,M)	EA	\$417.68

Item	Material	Description	OU	Unit Price
1680	1038221	HVY ELE MNT-PM CIR-00117 (F,M)	EA	\$417.68
1690	1038222	HVY ELE MNT-PM CIR-00118 (F,M)	EA	\$417.68
1700	1038223	HVY ELE MNT-PM CIR-00119 (F,M)	EA	\$417.68
1710	1026210	HVY ELE MNT-PM GRO-00002 (F)	EA	\$1,096.15
1720	1026218	HVY ELE MNT-PM LIG-00002 (F)	EA	\$417.68
1730	1026224	HVY ELE MNT-PM RES-00003 (F,I,M)	EA	\$417.68
1740	1026225	HVY ELE MNT-PM RES-00004 (F,I,M)	EA	\$417.68
1750	1026195	HVY ELE MNT-PM SWI-00006 (B)	EA	\$417.68
1760	1026231	HVY ELE MNT-PM TRA-00006 (F,J)	EA	\$1,096.15
1770	1026232	HVY ELE MNT-PM TRA-00007 (F,J)	EA	\$1,096.15
1780	1026234	HVY ELE MNT-PM TRA-00009 (F,J)	EA	\$1,096.15
1790	1026235	HVY ELE MNT-PM TRA-00010 (F,J)	EA	\$1,096.15
1800	1026236	HVY ELE MNT-PM TRA-00011 (F,J)	EA	\$1,096.15
1810	1026237	HVY ELE MNT-PM TRA-00012 (F,J)	EA	\$1,096.15
1820	1026238	HVY ELE MNT-PM TRA-00013 (F,J)	EA	\$1,096.15
1830	1026239	HVY ELE MNT-PM TRA-00014 (F,J)	EA	\$1,096.15
1840	1026240	HVY ELE MNT-PM TRA-00015 (F,J)	EA	\$1,096.15
1850	1026241	HVY ELE MNT-PM TRA-00016 (F,J)	EA	\$1,096.15
1860	1026242	HVY ELE MNT-PM TRA-00017 (F,J)	EA	\$1,096.15
1870	1026243	HVY ELE MNT-PM TRA-00018 (F,J)	EA	\$1,096.15
1880	1026244	HVY ELE MNT-PM TRA-00019 (F,J)	EA	\$1,096.15
1890	1026245	HVY ELE MNT-PM TRA-00020 (F,J)	EA	\$1,096.15
1900	1026246	HVY ELE MNT-PM TRA-00021 (F,J)	EA	\$1,096.15
1910	1026247	HVY ELE MNT-PM TRA-00022 (F,J)	EA	\$1,096.15
1920	1026248	HVY ELE MNT-PM TRA-00023 (F,J)	EA	\$1,096.15
1930	1026249	HVY ELE MNT-PM TRA-00024 (F,J)	EA	\$1,096.15
1940	1026250	HVY ELE MNT-PM TRA-00025 (F,J)	EA	\$1,096.15
1950	1026251	HVY ELE MNT-PM TRA-00026 (F,J)	EA	\$1,096.15
1960	1026252	HVY ELE MNT-PM TRA-00027 (F,J)	EA	\$1,096.15
1970	1026253	HVY ELE MNT-PM TRA-00028 (F,J)	EA	\$1,096.15
1980	1026254	HVY ELE MNT-PM TRA-00029 (F,J)	EA	\$1,096.15
1990	1026255	HVY ELE MNT-PM TRA-00030 (F,J)	EA	\$1,096.15
2000	1026256	HVY ELE MNT-PM TRA-00031 (F,J)	EA	\$1,096.15
2010	1026257	HVY ELE MNT-PM TRA-00032 (F,J)	EA	\$1,096.15
2020	1026258	HVY ELE MNT-PM TRA-00033 (F,J)	EA	\$1,096.15
2030	1026259	HVY ELE MNT-PM TRA-00034 (F,J)	EA	\$1,096.15
2040	1026260	HVY ELE MNT-PM TRA-00035 (F,J)	EA	\$1,096.15
2050	1026261	HVY ELE MNT-PM TRA-00036 (F,J)	EA	\$1,096.15
2060	1026262	HVY ELE MNT-PM TRA-00037 (F,J)	EA	\$1,096.15
2070	1026263	HVY ELE MNT-PM TRA-00038 (F,J)	EA	\$1,096.15
2080	1026264	HVY ELE MNT-PM TRA-00039 (F,J)	EA	\$1,096.15
2090	1026265	HVY ELE MNT-PM TRA-00040 (F,J)	EA	\$1,096.15

Item	Material	Description	OU	Unit Price
2100	1026267	HVY ELE MNT-PM TRA-00042 (F,J)	EA	\$1,096.15
2110	1026268	HVY ELE MNT-PM TRA-00043 (F,J)	EA	\$1,096.15
2120	1026269	HVY ELE MNT-PM TRA-00044 (F,J)	EA	\$1,096.15
2130	1026270	HVY ELE MNT-PM TRA-00045 (F,J)	EA	\$1,096.15
2140	1026271	HVY ELE MNT-PM TRA-00046 (F,J)	EA	\$1,096.15
2150	1026272	HVY ELE MNT-PM TRA-00047 (F,J)	EA	\$1,096.15
2160	1026273	HVY ELE MNT-PM TRA-00048 (F,J)	EA	\$1,096.15
2170	1026274	HVY ELE MNT-PM TRA-00049 (F,J)	EA	\$1,096.15
2180	1026275	HVY ELE MNT-PM TRA-00050 (F,J)	EA	\$1,096.15
2190	1026276	HVY ELE MNT-PM TRA-00051 (F,J)	EA	\$1,096.15
2200	1026277	HVY ELE MNT-PM TRA-00052 (F,J)	EA	\$1,096.15
2210	1026278	HVY ELE MNT-PM TRA-00053 (F,J)	EA	\$1,096.15
2220	1026279	HVY ELE MNT-PM TRA-00054 (F,J)	EA	\$1,096.15
2230	1026280	HVY ELE MNT-PM TRA-00055 (F,J)	EA	\$1,096.15
2240	1026281	HVY ELE MNT-PM TRA-00056 (F,J)	EA	\$1,096.15
2250	1027611	HVY ELE MNT-PM TRA-00074 (F,J)	EA	\$1,096.15
2260	1038224	HVY ELE MNT-PM TRA-00114 (F,J)	EA	\$1,096.15
2270	1038247	HVY ELE MNT-PM TRA-00115 (F,J)	EA	\$1,096.15
2280	1026159	HVY ELE MNT-PM CIR-00082 (A,E,F,N)	EA	\$341.44
2290	1026160	HVY ELE MNT-PM CIR-00083 (A,E,F,N)	EA	\$341.44
2300	1026161	HVY ELE MNT-PM CIR-00084 (A,E,F,N)	EA	\$341.44
2310	1026162	HVY ELE MNT-PM CIR-00085 (A,E,F,N)	EA	\$341.44
2320	1026163	HVY ELE MNT-PM CIR-00086 (A,E,F,N)	EA	\$341.44
2330	1026164	HVY ELE MNT-PM CIR-00087 (A,E,F,N)	EA	\$341.44
2340	1026165	HVY ELE MNT-PM CIR-00088 (A,E,F,N)	EA	\$341.44
2350	1026166	HVY ELE MNT-PM CIR-00089 (A,E,F,N)	EA	\$341.44
2360	1026167	HVY ELE MNT-PM CIR-00090 (A,E,F,N)	EA	\$341.44
2370	1026168	HVY ELE MNT-PM CIR-00091 (A,E,F,N)	EA	\$341.44
2380	1026169	HVY ELE MNT-PM CIR-00092 (A,E,F,N)	EA	\$341.44
2390	1026170	HVY ELE MNT-PM CIR-00093 (A,E,F,N)	EA	\$341.44
2400	1026171	HVY ELE MNT-PM CIR-00094 (A,E,F,N)	EA	\$341.44
2410	1026172	HVY ELE MNT-PM CIR-00095 (A,E,F,N)	EA	\$341.44
2420	1026173	HVY ELE MNT-PM CIR-00096 (A,E,F,N)	EA	\$341.44
2430	1026174	HVY ELE MNT-PM CIR-00097 (A,E,F,N)	EA	\$341.44
2440	1026175	HVY ELE MNT-PM CIR-00098 (A,E,F,N)	EA	\$341.44
2450	1026176	HVY ELE MNT-PM CIR-00099 (A,E,F,N)	EA	\$341.44
2460	1026177	HVY ELE MNT-PM CIR-00100 (A,E,F,N)	EA	\$341.44
2470	1026178	HVY ELE MNT-PM CIR-00101 (A,E,F,N)	EA	\$341.44
2480	1026212	HVY ELE MNT-PM GRO-00007 (F)	EA	\$911.61
2490	1026213	HVY ELE MNT-PM GRO-00008 (F)	EA	\$911.61
2500	1026077	HVY ELE MNT-PM SWI-00014 (A,B)	EA	\$204.42
2510	1026078	HVY ELE MNT-PM SWI-00015 (A,B)	EA	\$204.42

Item	Material	Description	OU	Unit Price
2520	1026079	HVY ELE MNT-PM SWI-00016 (A,B)	EA	\$204.42
2530	1026080	HVY ELE MNT-PM SWI-00017 (A,B)	EA	\$204.42
2540	1026081	HVY ELE MNT-PM SWI-00018 (A,B)	EA	\$204.42
2550	1026082	HVY ELE MNT-PM SWI-00019 (A,B)	EA	\$204.42
2560	1026083	HVY ELE MNT-PM SWI-00020 (A,B)	EA	\$204.42
2570	1026084	HVY ELE MNT-PM SWI-00021 (A,B)	EA	\$204.42
2580	1026085	HVY ELE MNT-PM SWI-00022 (A,B)	EA	\$204.42
2590	1026292	HVY ELE MNT-PM TRA-00067 (F,J)	EA	\$911.61
2600	1026293	HVY ELE MNT-PM TRA-00068 (F,J)	EA	\$911.61
2610	1026294	HVY ELE MNT-PM TRA-00069 (F,J)	EA	\$911.61
2620	1026306	HVY ELE MNT-PM BUS-00006 (F,M)	EA	\$362.43
2630	1026307	HVY ELE MNT-PM BUS-00007 (F,M)	EA	\$362.43
2640	1026090	HVY ELE MNT-PM CIR-00072 (A,B,C,E,F)	EA	\$362.43
2650	1026091	HVY ELE MNT-PM CIR-00073 (A,B,C,E,F)	EA	\$362.43
2660	1026153	HVY ELE MNT-PM CIR-00074 (A,E,F,N)	EA	\$362.43
2670	1026154	HVY ELE MNT-PM CIR-00075 (A,E,F,N)	EA	\$362.43
2680	1026155	HVY ELE MNT-PM CIR-00076 (A,E,F,N)	EA	\$362.43
2690	1026313	HVY ELE MNT-PM GRO-00005 (F)	EA	\$970.17
2700	1026288	HVY ELE MNT-PM TRA-00063 (F,J)	EA	\$970.17
2710	1026289	HVY ELE MNT-PM TRA-00064 (F,J)	EA	\$970.17
2720	1026179	HVY ELE MNT-PM CIR-00102 (A,E,F,N)	EA	\$334.81
2730	1026180	HVY ELE MNT-PM CIR-00103 (A,E,F,N)	EA	\$334.81
2740	1026181	HVY ELE MNT-PM CIR-00104 (A,E,F,N)	EA	\$334.81
2750	1026182	HVY ELE MNT-PM CIR-00105 (A,E,F,N)	EA	\$334.81
2760	1026183	HVY ELE MNT-PM CIR-00106 (A,E,F,N)	EA	\$334.81
2770	1026184	HVY ELE MNT-PM CIR-00107 (A,E,F,N)	EA	\$334.81
2780	1026185	HVY ELE MNT-PM CIR-00108 (A,E,F,N)	EA	\$334.81
2790	1026186	HVY ELE MNT-PM CIR-00109 (A,E,F,N)	EA	\$334.81
2800	1026214	HVY ELE MNT-PM GRO-00009 (F)	EA	\$960.23
2810	1026086	HVY ELE MNT-PM SWI-00023 (A,B)	EA	\$209.95
2820	1026087	HVY ELE MNT-PM SWI-00024 (A,B)	EA	\$209.95
2830	1026295	HVY ELE MNT-PM TRA-00070 (F,J)	EA	\$960.23
2840	1026296	HVY ELE MNT-PM TRA-00071 (F,J)	EA	\$960.23
2850	1038227	HVY ELE MNT-PM CIR-00152 (A,F,N)	EA	\$277.35
2860	1038228	HVY ELE MNT-PM CIR-00168 (A,F,N)	EA	\$277.35
2870	1038229	HVY ELE MNT-PM CIR-00171 (A,F,N)	EA	\$277.35
2880	1038230	HVY ELE MNT-PM TRA-00081 (F,J)	EA	\$1,023.00
2890	1038231	HVY ELE MNT-PM TRA-00082 (F,J)	EA	\$1,023.00
2900	1026334	HVY ELE MNT-PM BUS-00011 (F,I,)	EA	\$167.95
2910	1026201	HVY ELE MNT-PM CIR-00001 (D)	EA	\$824.31
2920	1026202	HVY ELE MNT-PM CIR-00002 (D)	EA	\$824.31
2930	1026094	HVY ELE MNT-PM CIR-00003 (A,B,C,F)	EA	\$277.35

Item	Material	Description	OU	Unit Price
2940	1026095	HVY ELE MNT-PM CIR-00004 (A,B,C,F)	EA	\$277.35
2950	1026096	HVY ELE MNT-PM CIR-00006 (A,B,C,F)	EA	\$277.35
2960	1026097	HVY ELE MNT-PM CIR-00007 (A,B,C,F)	EA	\$277.35
2970	1026098	HVY ELE MNT-PM CIR-00008 (A,B,C,F)	EA	\$277.35
2980	1026099	HVY ELE MNT-PM CIR-00009 (A,B,C,F)	EA	\$277.35
2990	1026100	HVY ELE MNT-PM CIR-00010 (A,B,C,F)	EA	\$277.35
3000	1026101	HVY ELE MNT-PM CIR-00011 (A,B,C,F)	EA	\$277.35
3010	1026102	HVY ELE MNT-PM CIR-00012 (A,B,C,F)	EA	\$277.35
3020	1026103	HVY ELE MNT-PM CIR-00013 (A,B,C,F)	EA	\$277.35
3030	1026104	HVY ELE MNT-PM CIR-00014 (A,B,C,F)	EA	\$277.35
3040	1026105	HVY ELE MNT-PM CIR-00015 (A,B,C,F)	EA	\$277.35
3050	1026106	HVY ELE MNT-PM CIR-00016 (A,B,C,F)	EA	\$277.35
3060	1026107	HVY ELE MNT-PM CIR-00017 (A,B,C,F)	EA	\$277.35
3070	1026188	HVY ELE MNT-PM CIR-00018 (A,F,N)	EA	\$277.35
3080	1026189	HVY ELE MNT-PM CIR-00019 (A,F,N)	EA	\$277.35
3090	1026190	HVY ELE MNT-PM CIR-00020 (A,F,N)	EA	\$277.35
3100	1026191	HVY ELE MNT-PM CIR-00021 (A,F,N)	EA	\$277.35
3110	1026192	HVY ELE MNT-PM CIR-00022 (A,F,N)	EA	\$277.35
3120	1026193	HVY ELE MNT-PM CIR-00023 (A,F,N)	EA	\$277.35
3130	1026194	HVY ELE MNT-PM CIR-00024 (A,F,N)	EA	\$277.35
3140	1026209	HVY ELE MNT-PM GRO-00001 (F)	EA	\$823.21
3150	1026217	HVY ELE MNT-PM LIG-00001 (F)	EA	\$167.95
3160	1026219	HVY ELE MNT-PM RES-00001 (F)	EA	\$167.95
3170	1026223	HVY ELE MNT-PM RES-00002 (F,I,M)	EA	\$167.95
3180	1026196	HVY ELE MNT-PM SWI-00001 (B,F)	EA	\$167.95
3190	1026197	HVY ELE MNT-PM SWI-00002 (B,F)	EA	\$167.95
3200	1026198	HVY ELE MNT-PM SWI-00003 (B,F)	EA	\$167.95
3210	1026199	HVY ELE MNT-PM SWI-00004 (B,F)	EA	\$167.95
3220	1026200	HVY ELE MNT-PM SWI-00005 (B,F)	EA	\$167.95
3230	1026226	HVY ELE MNT-PM TRA-00001 (F,J)	EA	\$824.31
3240	1026227	HVY ELE MNT-PM TRA-00002 (F,J)	EA	\$824.31
3250	1026229	HVY ELE MNT-PM TRA-00004 (F,J)	EA	\$824.31
3260	1026230	HVY ELE MNT-PM TRA-00005 (F,J)	EA	\$824.31
3270	1026308	HVY ELE MNT-PM BUS-00008 (F,M)	EA	\$245.31
3280	1026309	HVY ELE MNT-PM BUS-00009 (F,M)	EA	\$245.31
3290	1026092	HVY ELE MNT-PM CIR-00077 (A,B,C,E,F)	EA	\$364.65
3300	1026093	HVY ELE MNT-PM CIR-00078 (A,B,C,E,F)	EA	\$364.65
3310	1026156	HVY ELE MNT-PM CIR-00079 (A,E,F,N)	EA	\$364.65
3320	1026157	HVY ELE MNT-PM CIR-00080 (A,E,F,N)	EA	\$364.65
3330	1026158	HVY ELE MNT-PM CIR-00081 (A,E,F,N)	EA	\$364.65
3340	1026314	HVY ELE MNT-PM GRO-00006 (F)	EA	\$731.50
3350	1026290	HVY ELE MNT-PM TRA-00065 (F,J)	EA	\$731.50

Item	Material	Description	OU	Unit Price
3360	1026291	HVY ELE MNT-PM TRA-00066 (F,J)	EA	\$731.50
3370	1026139	HVY ELE MNT-PM CIR-00056 (A,E,F,N)	EA	\$234.25
3380	1026140	HVY ELE MNT-PM CIR-00057 (A,E,F,N)	EA	\$352.49
3390	1026141	HVY ELE MNT-PM CIR-00058 (A,E,F,N)	EA	\$352.49
3400	1026142	HVY ELE MNT-PM CIR-00059 (A,E,F,N)	EA	\$352.49
3410	1026143	HVY ELE MNT-PM CIR-00060 (A,E,F,N)	EA	\$352.49
3420	1026144	HVY ELE MNT-PM CIR-00061 (A,E,F,N)	EA	\$352.49
3430	1026145	HVY ELE MNT-PM CIR-00062 (A,E,F,N)	EA	\$352.49
3440	1026146	HVY ELE MNT-PM CIR-00063 (A,E,F,N)	EA	\$352.49
3450	1026147	HVY ELE MNT-PM CIR-00064 (A,E,F,N)	EA	\$352.49
3460	1026148	HVY ELE MNT-PM CIR-00065 (A,E,F,N)	EA	\$352.49
3470	1026149	HVY ELE MNT-PM CIR-00066 (A,E,F,N)	EA	\$352.49
3480	1026211	HVY ELE MNT-PM GRO-00003 (F)	EA	\$838.68
3490	1026131	HVY ELE MNT-PM SWI-00007 (A,B,F)	EA	\$234.25
3500	1026132	HVY ELE MNT-PM SWI-00008 (A,B,F)	EA	\$234.25
3510	1026133	HVY ELE MNT-PM SWI-00009 (A,B,F)	EA	\$234.25
3520	1026134	HVY ELE MNT-PM SWI-00010 (A,B,F)	EA	\$234.25
3530	1026074	HVY ELE MNT-PM SWI-00011 (A,B)	EA	\$234.25
3540	1026075	HVY ELE MNT-PM SWI-00012 (A,B)	EA	\$234.25
3550	1026076	HVY ELE MNT-PM SWI-00013 (A,B)	EA	\$234.25
3560	1026283	HVY ELE MNT-PM TRA-00058 (F,J)	EA	\$861.89
3570	1026284	HVY ELE MNT-PM TRA-00059 (F,J)	EA	\$861.89
3580	1026285	HVY ELE MNT-PM TRA-00060 (F,J)	EA	\$861.89
3590	1038232	HVY ELE MNT-PM CIR-00322 (A,E,F,N)	EA	\$358.70
3600	1038233	HVY ELE MNT-PM CIR-00323 (A,F,N)	EA	\$277.35
3610	1038234	HVY ELE MNT-PM CIR-00324 (A,F,N)	EA	\$277.35
3620	1038235	HVY ELE MNT-PM CIR-00325 (A,F,N)	EA	\$277.35
3630	1038236	HVY ELE MNT-PM CIR-00326 (A,F,N)	EA	\$277.35
3640	1038237	HVY ELE MNT-PM SWI-00150 (A,B)	EA	\$211.60
3650	1038238	HVY ELE MNT-PM SWI-00151 (A,B)	EA	\$211.60
3660	1038239	HVY ELE MNT-PM TRA-00135 (F,J)	EA	\$1,023.00
3670	1038240	HVY ELE MNT-PM TRA-00136 (F,J)	EA	\$1,023.00
3680	1026222	HVY ELE MNT-PM BUS-00010 (F,I,)	EA	\$185.64
3690	1026208	HVY ELE MNT-PM CIR-00110 (D)	EA	\$634.26
3700	1026135	HVY ELE MNT-PM CIR-00111 (A,C,F)	EA	\$302.77
3710	1026136	HVY ELE MNT-PM CIR-00112 (A,C,F)	EA	\$302.77
3720	1026137	HVY ELE MNT-PM CIR-00113 (A,C,F)	EA	\$302.77
3730	1026215	HVY ELE MNT-PM GRO-00010 (F)	EA	\$575.70
3740	1026220	HVY ELE MNT-PM RES-00005 (F)	EA	\$185.64
3750	1026297	HVY ELE MNT-PM TRA-00072 (F,J)	EA	\$703.87
3760	1027189	HVY ELE MNT-ABB RELAY;BUTTONWD PS;PM:E	EA	\$54.70
3770	1027190	HVY ELE MNT-SCHW RELAY;CHARLOTTE PS;PN	EA	\$55.25

Item	Material	Description	OU	Unit Price
3780	1038244	HVY ELE MNT-GE IAV RELAY CV CTR GAR;PM:E	EA	\$54.70
3790	1038245	HVY ELE MNT-GE IAC RELAY CV CTR REF;PM:E	EA	\$54.14
3800	1038246	HVY ELE MNT-GE IAV RELAY CV CTR REF;PM:E	EA	\$54.70
3810	1027191	HVY ELE MNT-GE RELAY FEV;PM:E	EA	\$54.14
3820	1038242	HVY ELE MNT-GE IAC RELAY FEV;PM:E	EA	\$54.14
3830	1027193	HVY ELE MNT-WESTINGHS C07 RELAY FEV;PM:	EA	\$54.14
3840	1027194	HVY ELE MNT-WESTNGHS C011 RELAY FEV;PM	EA	\$54.14
3850	1027195	HVY ELE MNT-WESTINGHS CV1 RELAY FEV;PM:	EA	\$54.14
3860	1027196	HVY ELE MNT-WESTINGHS CR9 RELAY FEV;PM	EA	\$54.14
3870	1027197	HVY ELE MNT-WESTINGH CRC2 RELAY FEV;PM	EA	\$54.14
3880	1027198	HVY ELE MNT-WESTINGH CA16 RELAY FEV;PM:	EA	\$54.14
3890	1038241	HVY ELE MNT-GE IAV RELAY JAIL;PM:E	EA	\$54.70
3900	1027199	HVY ELE MNT-ABB RELAY FLYNN RD PS;PM:E	EA	\$54.70
3910	1027200	HVY ELE MNT-GE IAC RELAY IBPS;PM:E	EA	\$54.14
3920	1027201	HVY ELE MNT-GE IAV RELAY IBPS;PM:E	EA	\$54.70
3930	1027202	HVY ELE MNT-GE ICW RELAY IBPS;PM:E	EA	\$54.70
3940	1027203	HVY ELE MNT-GE PVD RELAY IBPS;PM:E	EA	\$54.14
3950	1027204	HVY ELE MNT-GE STD RELAY IBPS;PM:E	EA	\$54.14
3960	1027205	HVY ELE MNT-GE TMC RELAY IBPS;PM:E	EA	\$54.14
3970	1027206	HVY ELE MNT-WESTINGHOUSE RELAY IBPS;PM	EA	\$54.14
3980	1027207	HVY ELE MNT-SCHWEITZER RELAY IBPS;PM:E	EA	\$55.25
3990	1027210	HVY ELE MNT-ABB RELAY ICPS;PM:E	EA	\$54.70
4000	1038243	HVY ELE MNT-GE IAV RELAY PSB;PM:E	EA	\$54.70
4010	1027208	HVY ELE MNT-GE ICR RELAY RRF;PM:E	EA	\$55.25
4020	1027209	HVY ELE MNT-GE IFC RELAY RRF;PM:E	EA	\$54.14
4030	1027211	HVY ELE MNT-GE STD RELAY RRF;PM:E	EA	\$54.14