

Financial Services

June 13, 2016

Dear Bidder:

The City of Auburn is accepting written proposals for the Engine #5 Fire Station for a Lighting System Upgrades Project, located at 651 Center Street, Auburn, ME. The City reserves the right to accept or reject any or all proposals in whole or in part and to waive any informality the City may determine necessary. The City also reserves to itself the exclusive right to accept any proposals when it is deemed by the City to be in its best interest. The City of Auburn is governed by Title 1 M.R.S.A. § 401-410, otherwise known as the Freedom of Information Act, which considers bid specifications as public documents. In awarding any proposal, the City may consider, but not be limited to, any of the following factors: Bidder qualifications, price, experience, financial standing with the City, warranties, references, bonding, delivery date, and service of Bidder. Vendors/Contractors shall be current on all amounts due to the City of Auburn prior to the City entering into any contract agreement. All proposals must include FOB to Auburn, Maine unless otherwise specified.

A <u>mandatory</u> pre-bid meeting to review the work site is scheduled for Tuesday, June 21, 2016 at 11:00 a.m.at the Engine #5 Fire Station, 651 Center Street, Auburn, ME. Please contact Derek Boulanger at <u>dboulanger@auburnmaine.gov</u> to confirm participation. Proposals will not receive consideration unless submitted in accordance with the following instructions to bidders. Please mark sealed envelopes plainly:

"Engine #5 Fire Station, Lighting System Upgrades Project – Bid #2016-037."

Questions regarding this Request for Proposals should be directed to Derek Boulanger, Facilities Manager/Purchasing Agent, at (207) 333-6601, ext. 1135.

Please submit your proposal to the City of Auburn by <u>2:00 p.m. Tuesday, July 12, 2016.</u> Proposals will be opened at 2:00 p.m. Proposals must be delivered to **Derek Boulanger, Facilities Manager/Purchasing Agent, 60 Court Street, Auburn, ME 04210** on or before the date and time appointed. No proposals will be accepted after the time and date listed above.

Sincerely,

Derek Boulanger Facilities Manager/ Purchasing Agent

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CONDITIONS AND INSTRUCTIONS TO BIDDERS

- 1. Bidders shall use the enclosed bid form for quotations. Whenever, in bid forms, an article is defined by using a trade name or catalog number, the term "or approved equal", if not inserted, shall be implied.
- 2. Submit a separate unit price for each item unless otherwise specified in the bid request. Award will be made on a basis of each item, or as a group, whichever is in the best interest of the City. Prices stated are to be "delivered to destination".
- 3. Bid proposals must be completed in full, in ink, and must be signed by firm official. Bid proposal **must be notarized** prior to bid being sealed and will be disqualified if not notarized. Bids may be withdrawn prior to the time set for the official opening.
- 4. Bids will be opened publicly. Bidders or representatives may be present at bid opening.
- 5. Awards will be made to the lowest responsible bidder, considering the quality of the materials, date of delivery, cost which meets specification and is in the best interest to the City of Auburn.
- 6. All transportation charges, including expense for freight, transfer express, mail, etc. shall be prepaid and be at the expense of the vendor unless otherwise specified in the bid.
- 7. The terms and cash discounts shall be specified. Time, in connection with discount offered, will be computed from date of delivery at destination after final inspection and acceptance or from date of correct invoice, whichever is later.
- 8. The City is exempt from payment of Federal Excise Taxes on the articles not for resale, Federal Transportation Tax on all shipments and Maine Sales Tax and Use Taxes. Please quote less these taxes. Upon application, exemption certificate will be furnished with the Purchase Order when required.
- 9. Time of delivery shall be stated. If time is of the essence, the earliest date may be a factor in the bid award.
- 10. No contract may be assigned without the written consent of the Finance Director or her designate. The contract shall not be considered valid until a purchase order has been issued to the successful bidder.
- 11. Please state <u>"Engine #5 Fire Station, Lighting System Upgrades Project Bid #2016-037."</u> on submitted sealed envelope.
- 12. The City of Auburn reserves the right to waive any formality and technicality in bids whichever is deemed best for the interest of the City of Auburn.

GENERAL CONDITIONS

1. Equal Employment Opportunity

The City of Auburn is an Equal Opportunity Employer and shall not discriminate against an applicant for employment, and employee or a citizen because of race, color, sex, marital status, physical and/or mental handicap, religion, age, ancestry or natural origin, unless based upon a bona-fide occupation qualification. Vendors and contractor or their agents doing business with the City shall not violate the above clause or the Civil Rights Acts of 1964. Violations by vendors shall be reviewed on a case-by-case basis and may mean an automatic breach of contract or service to the City of Auburn.

2. Save Harmless

The Bidder agrees to protect and save harmless the owner from all costs, expenses or damages that may arise out of alleged infringement of patents of materials used.

3. Subcontracting

The Bidder shall not subcontract any part of the work or materials or assign any monies due it without first obtaining the written consent of the municipality. Neither party shall assign or transfer its interest in the contract without the written consent of the other party.

4. Warranty

The Bidder warrants that all work will be of good quality and free from faults and defects, and in conformance with the specifications. All work not so conforming to these standards may be considered defective. The Bidder agrees to be responsible for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Bidder.

5. Retainage and Payments

Retainage in the amount of 10% will be held from each progress payment and shall be released at the discretion of the Project Engineer. Payments shall be made by the City to the Contractor 30 days after receipt of the request for payment.

BID PROPOSAL FORM Due Tuesday, July 12, 2016

To: City of Auburn
Derek Boulanger,
Facilities Manager/Purchasing Agent
60 Court Street
Auburn, ME 04210

The undersigned individual/firm/business guarantees this price for Thirty days (30) from the bid due date. The undersigned submits this proposal without collusion with any other person, individual, firm, or agency. The undersigned ensures the authority to act on behalf of the corporation, partnership, or individual they represent; and has read and agreed to all of the terms, requests, or conditions written herein by the City of Auburn. By signing this bid form, the firm listed below hereby affirms that its bid meets the minimum specifications and standards as listed above.

Signature	Name (print)
Title	Company
Address	
Telephone No	Fax No
Email Address:	
STATE OF MAINE	
, SS.	Date:
• • •	and acknowledged the foregoing instrument her capacity and the free act and deed of said company.
	Notary Public
	Print Name
	Commission Expires

SCHEDULE OF VALUES

PROJECT NAME: Engine #5 Fire Station, Lighting System Upgrades Project – Bid #2016-037

BID BREAKDOWN S	SCHEDULE	OF	VALUES
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<u>Item</u>	<u>Description</u>	<u>Value</u>
1.	General Conditions	\$
2.	Bonds (if required) & Insurance	\$
3.	Demolition & Disposal	\$
4.	Type A – 2x4 Troffer Installations	\$
5.	Type B – 4 Foot Medium Lumen Wraparound Installations	\$
6.	Type C – 4 Foot High Lumen Wraparound Installations	\$
7.	Type D – 2 Foot Wall Bracket Fixture Installation	\$
8.	Type E – Exit/Emergency Light Combo Installation	\$
9.	Type F – Exterior Entrance Light Installations	\$
10.	Type G – Wall Pack Safety Light Installation	\$
11.	Type H – 4 Foot Wall Bracket Fixture Installation	\$
12.	Miscellaneous Electrical	\$
13.	Conduit & Wiring	\$
14.	Lift(s)	\$
15.	Other (specify)	\$
16.	Other (specify)	\$
17.	TOTAL BASE BID (Sum of Items 1 through 16)	\$·

TOTAL OF ALL LINE ITEMS IN SCHEDULE OF VALUES MUST EQUAL FINAL BASE BID. THERE MUST BE AMOUNTS IN EACH OF THE SPECIFIED ITEMS ABOVE.

PROJECT SCHEDULE

Estimated Start Date:	Estimated Completion Date:

FAILURE TO PROPERLY COMPLETE THIS ATTACHEMENT MAY BE CONSIDERED A NON RESPONISVE PROPOSAL AND MAY BE REJECTED AT THE OWNERS DISCRETION.

SAMPLE AGREEMENT

THIS AGREEMENT is made this ### day of *Month Year*, by and between the CITY OF AUBURN, a municipal corporation existing under the laws of the State of Maine and located in the County of Androscoggin, State of Maine (hereinafter "CITY"), *Company Name, Address, EIN*, (hereinafter "CONTRACTOR"),

WITNESSETH:

In consideration of the mutual covenants and conditions contained herein, the CITY and the CONTRACTOR agree as follows:

SPECIFICATIONS:

1. The CONTRACTOR shall furnish all of the material and perform all of the work shown on the drawings and described in the specifications entitled: Bid # XXXXX Bid Title which are attached hereto and made a part hereof, and the CONTRACTOR covenants that it shall do everything required by this Agreement, the Special Provisions of the Agreement, the Invitation to Bid and the Specifications in return for payment as provided herein.

COMPLETION DATE:

2. The work to be performed under this Agreement shall be commenced by *Month day*, *year* and fully completed on or before *Month day*, *year*.

CONTRACT PRICE:

3. The CITY shall pay the CONTRACTOR for the performance of the Agreement the sum of \$XXX

PERFORMANCE BOND:

GUARANTEE:

5. The CONTRACTOR shall guarantee his work against any defects in workmanship and materials for a period of one year from the date of the CITY's written acceptance of the project.

PERMITS AND LICENSES:

6. Permits and licenses necessary for the prosecution of the work shall be secured and paid by the CONTRACTOR.

CITY'S RIGHT TO TERMINATE CONTRACT:

7. If the CONTRACTOR should be adjudged a bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if it should fail to make prompt payment to subcontractors or for material or labor, or persistently disregard laws, and ordinances, or otherwise be guilty of a substantial violation of any provision of the Agreement, then the CITY when sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the CONTRACTOR, and his surety, seven (7) days written notice, terminate the employment of the CONTRACTOR and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method it may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Agreement price shall exceed the expense of the finishing the work, including compensation for additional architectural, managerial and administrative services, such excess shall be paid to the CONTRACTOR. If such expense shall exceed such unpaid balance, the CONTRACTOR shall pay the difference to the CITY.

CONTRACTOR'S LIABILITY INSURANCE:

- 8. The CONTRACTOR shall not commence work under this Agreement until he has obtained all insurance required under this paragraph and such insurance has been approved by the CITY, nor shall the CONTRACTOR allow any subcontractor to commence work on his subcontract until all similar insurance required of subcontractor has been so obtained and approved. It is a requirement that the CITY be named as an Additional Insured on the General Liability and Automobile Liability policies.
- (a) Commercial General Liability to include products and completed operations, and blanket contractual. The limits of liability shall be as follows:

Bodily Injury and Property Damage	\$1,000,000
Personal Injury and Advertising Injury	\$1,000,000
Per Project Aggregate	\$1,000,000
General Aggregate	\$2,000,000
Products and Completed Operations Aggregate	\$2,000,000
Medical Payments	\$10,000

(b) Business Automobile Liability

The CONTRACTOR shall maintain and cause all sub-contractors and lower tier contractors to maintain business automobile liability insurance covering all owned, non-owned, leased, rented or hired automobiles (symbol 1). The limits of liability shall be as follows:

Bodily Injury and Property Damage

\$1,000,000

Automobile physical damage coverage shall be at the option of the CONTRACTOR, all sub-contractors and lower tier contractors. The CITY shall not be liable for physical loss or damage to any owned, non-owned, leased, rented or hired automobile.

(c) Workers' Compensation Insurance

The CONTRACTOR shall maintain and cause all sub-contractors and lower tier contractor's to maintain Workers' Compensation and Employers Liability in accordance with the laws and regulations of the State of Maine. The limits of liability provided shall be as follows:

Coverage A: Statutory

Coverage B: \$100,000/\$500,000/\$100,000

(d) Professional Liability

If the CONTRACTOR is an Architect, Engineer or Surveyor, they shall maintain a policy of insurance to pay on their behalf whatever amounts that may become legally required to pay on account of an error, omission or negligent act.

Limits of Liability shall be as follows:

\$1,000,000 per occurrence and in the aggregate site specific.

It is a requirement that this policy be maintained for a period of three (3) years following completion of the project.

- (e) Certificates of Insurance of the types and in the amounts required shall be delivered to the CITY prior to the commencement of any work by the CONTRACTOR, subcontractor or lower tier contractor or any person or entity working at the direction or under control of the CONTRACTOR. The CONTRACTOR shall assume the obligation and responsibility to confirm insurance coverage for all sub-contractors or lower tier contractors who will participate in the project.
- (f) The Certificate of Insurance and the policies of insurance shall include a sixty (60) day notice to the CITY of cancellation, non-renewal or material change in coverage or form.

(g) The CONTRACTOR and his surety shall indemnify and save harmless the CITY, his officers and employees from all suits, actions or claims of any character brought because of any injuries or damage received or sustained by any person, persons or property on account of the operations of the said CONTRACTOR; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in construction of the work; or because of any act or omission, neglect, or misconduct of said CONTRACTOR; or because of any claims or amounts recovered from any infringements or patent trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act" or of any other law, ordinance, order or decree; and so much of the money due to the said CONTRACTOR under and by virtue of his/her contract as shall be considered necessary by the CITY for such purpose, may be retained; or in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims, for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the CITY.

(h) Waiver of Subrogation

Payment of any claim or suit including any expenses incurred in connection therewith by the CITY, or any insurance company on behalf of the CITY shall not constitute a waiver of subrogation against the CONTRACTOR, sub-contractors or any lower tier contractor in the event that such claim or suit was caused by or contributed to as a result of the negligent acts of the CONTRACTOR, any sub-contractors or lower tier contractors.

(i) Construction Agreement

The CONTRACTOR shall and does hereby agree to indemnify, save harmless and defend the CITY from the payment of any sum or sums of money to any person whomsoever on account of claims or suits growing out of injuries to persons, including death, or damages to property, caused by the CONTRACTOR, his employees, agents or sub-contractors or in any way attributable to the performance and execution of the work herein contracted for, including (but without limiting the generality of the foregoing), all claims for service, labor performed, materials furnished, provisions and suppliers, injuries to persons or damage to property, liens, garnishments, attachments, claims, suits, costs, attorney's fees, costs of investigation and defense. It is the intention of this paragraph to hold the CONTRACTOR responsible for the payment of any and all claims, suits, or liens, of any nature character in any way attributable to or asserted against the CITY, or the CITY and the CONTRACTOR, which the City may be required to pay. In the event the liability of the CONTRACTOR shall arise by reason of the sole negligence of the CITY and/or the sole negligence of the CITY's agents, servants or employees, then and only then, the CONTRACTOR shall not be liable under the provisions of this paragraph.

DAMAGES:

9. The CONTRACTOR shall defend, indemnify and save harmless the CITY and all persons acting for or in behalf of it against all claims for injuries (including death), loss or damage, arising out of the performance out this contract.

LIENS:

10. Neither the final payment nor any part of the retained percentage shall become due until the CONTRACTOR, if required, shall deliver to the CITY a complete release of all liens arising out of the Agreement, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as it has knowledge or information the releases and receipts include all the labor and material for which a lien could be filed; but the CONTRACTOR may, if any SUB-CONTRACTOR refuses to furnish a release or receipt in full, furnish a bond satisfactory to the CITY to indemnify it against any lien. If any lien remains unsatisfied after all payments are made, the CONTRACTOR shall refund to the CITY all moneys that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

ASSIGNMENT:

11. Neither party to the Agreement shall assign the Agreement or sublet it as a whole without the written consent of the other, nor shall the CONTRACTOR assign any moneys due or to become due to it hereunder, without the previous written consent of the CITY.

SUBCONTRACTS:

12. The CONTRACTOR shall not sublet any part of this Agreement without the written permission of the CITY. The CONTRACTOR agrees that it is as fully responsible to the CITY for the acts and omissions of its SUB-CONTRACTORS and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it

USE OF PREMISES:

13. The CONTRACTOR shall confine its apparatus, the storage of materials and operations of its workers to limits indicated by law, ordinance and permits and shall not otherwise unreasonably encumber the premises with its materials. If any part of the project is completed and ready for use, the CITY may, by written and mutual consent, without prejudice to any of its rights or the rights of the CONTRACTOR, enter in and make use of such completed parts of the project. Such use or occupancy shall in no case be construed as an acceptance of any work or materials.

CLEANING UP:

14. The CONTRACTOR shall at all times keep the premises free from accumulation of waste materials or rubbish caused by its employees or work, and at the completion of the work it shall remove all its rubbish from and about the project, and all its tools, scaffolding and surplus materials and shall leave its work "broom-clean" or its equivalent, unless more exactly specified. In case of dispute, the CITY may remove the rubbish and charge the cost to the CONTRACTOR.

PAYMENTS:

15. Unless otherwise agreed to, the CITY shall make payments on account of the Agreement as follows:

Within 30 days, as invoices are submitted for work completed to the satisfaction of the CITY.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

BY:		BY:		
	Witness		Finance Director	
BY:		BY:		
	Witness		Contractor	

CITY OF AUBURN, MAINE

ENGINE #5 FIRE STATION LIGHTING SYSTEM UPGRADES PROJECT

651 Center Street, Auburn, Maine

Bid No. 2016-037

Bid Documents

JUNE 13, 2016

APPENDIX A TECHNICAL SPECIFICATIONS

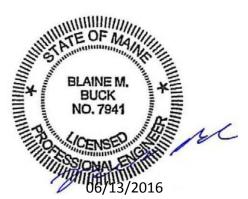
City of Auburn, Maine

60 Court Street, Auburn, Maine 04210

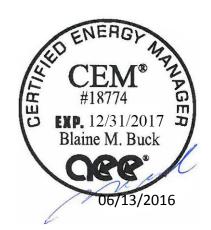
Engine #5 Fire Station Lighting System Upgrades Project

651 Center Street, Auburn, Maine 04210

Bid #2016-037









TECHNICAL SPECIFICATIONS

JUNE 13, 2016



SECTION 26 00 00

GENERAL REQUIREMENTS FOR ELECTRICAL WORK

PART ONE: GENERAL

1.1 General Requirements

1.1.1 Definition of Work

Conditions of the Contract, Specifications, Change Orders, Addenda and Drawings apply to work of this section.

1.1.2 Provisions

As used in this section, "provide" means "furnish and install", "furnish" means "to purchase and deliver to the project site complete with every necessary appurtenance and support and to store in a secure area in accordance with manufacturers instructions", and "install" means "to unload at the delivery point at the site or retrieve from storage, move to point of installation and perform every operation necessary to establish secure mounting and correct operation at the proper location in the project".

1.1.3 Existing Site Conditions – Responsibilities Prior to Bid

Before submitting a bid, Electrical Contractor is required to make a pre-bid site visit and carefully examine site to identify existing conditions and difficulties that may affect the work of this Section. No extra payment will be allowed for additional work caused by unfamiliarity with site conditions.

1.1.4 Existing Site Conditions – Responsibilities Prior to Starting Work

Before starting work in a particular area of the project, the Electrical Contractor shall examine the conditions under which work must be performed including preparatory work performed under other Sections of the Contract, or by the Owner and report conditions which might adversely affect the work in writing to the Engineer. Do not proceed with work until defects have been corrected and conditions are satisfactory. Commencement of work shall be construed as complete acceptance of existing conditions and preparatory work.

1.1.5 Coordination of Work

The Electrical Contractor shall coordinate the work of all trades and, with all other subcontractors to determine whether there will be any interference with the electrical work. If the electrical work is later found to interfere with the work of other subcontractors, then he shall make necessary changes, without additional cost to the Owner, to eliminate such interference.

1.1.6 Project Conditions

Full Owner Occupancy: The Owner intends to occupy the project site during construction. The Electrical Contractor shall cooperate with the Owner to minimize conflicts with the Owner's operations.

1.1.7 Discrepancies in Documents

Each bidder shall be responsible for examining the specifications carefully before submitting his bid, with particular attention to errors, omissions, conflicts with provisions of laws and codes imposed by authorities having jurisdiction, conflicts between portions of specifications, and ambiguous definition of the extent of coverage in the contract. Any such discrepancy discovered shall be brought to the immediate attention of the Engineer for correction. Should any of the aforementioned errors, omissions, conflicts or ambiguities exist in the specification, the Electrical Contractor shall have the same explained and adjusted in writing before signing the contract or proceeding with work. Failure to notify the Engineer in writing of such irregularities prior to signing the Contract will cause the Engineer's interpretation of the Contract Documents to be final. No additional compensation will be approved because of discrepancies thus resolved.

1.2 Applicable Codes and Standards

1.2.1 Work

All work shall be in accordance with the laws, rules, codes, and regulations set forth by Local, State, and Federal authorities having jurisdiction. All products and materials shall be manufactured, installed and tested as specified, but not limited to the latest accepted edition of the following codes, standards and regulations:

NFPA	National Fire Protection Association		
OSHA	Occupational Safety and Health Act		
NEC	National Electrical Code (NFPA 70)		
UL	Underwriters Laboratory		
NESC	National Electrical Safety Code		
FM	Factory Mutual Association		
MBC	Maine Building Code		
Local AHJ	Local and State building, electrical, fire and health department and public safety codes agencies.		

1.2.2 Code Conflicts

When requirements cited in this Paragraph conflict with each other or with Contract Documents, the most stringent requirements shall govern conduct of work. The Engineer may relax this requirement when such relaxation does not violate the ruling of authorities that have

jurisdiction. Approval for such relaxation shall be obtained in writing. Should the Electrical Contractor perform any work that does not comply with the requirements of the applicable building codes, state laws, and industry standards, he shall bear all costs arising in correcting these deficiencies.

1.3 Contract Documents

1.3.1 Work to be Provided

Work to be provided under this division is shown on the Electrical Drawings, General Requirements, and in these Contract Specifications.

1.3.2 Coordination of Work

The listing of electrical drawings does not limit the responsibility of determining the full extent of work that is required by these contract documents. The Electrical Contractor shall refer to the drawings and other specification sections included in the complete Contract Package, that indicate types of construction with which work of this section must be coordinated. The Electrical Contractor shall coordinate the work of all trades, with all other subcontractors to determine whether there will be any interference with the electrical work. If the electrical work is later found to interfere with the work of other subcontractors, then the Electrical Contractor shall make necessary changes, without additional cost to the Owner, to eliminate such interference.

1.3.3 Intent of Design

Drawings are diagrammatic and indicate the general arrangement of systems and work to be included in the Contract. Information and components shown on riser diagrams or called for in the specifications but not shown on plans, and vice versa, shall apply and shall be provided as though required expressly by both. The contract documents are not intended to indicate and specify each component required, but do require that the components and materials be provided for a complete and operational installation.

1.3.4 Discrepancies in Documents

Each bidder shall be responsible for examining the drawings and specifications carefully before submitting his bid, with particular attention to errors, omissions, conflicts with provisions of laws and codes imposed by authorities having jurisdiction, conflicts between portions of drawings, or between drawings and specifications, and ambiguous definition of the extent of coverage in the contract. Any such discrepancy discovered shall be brought to the immediate attention of the Engineer for correction. Should any of the aforementioned errors, omissions, conflicts or ambiguities exist in either or both the drawings and specifications, the Electrical Contractor shall have the same explained and adjusted in writing before signing the contract or proceeding with work. Failure to notify the Engineer in writing of such irregularities prior to signing the Contract will cause the Engineer's interpretation of the Contract Documents to be final. No additional compensation will be approved because of discrepancies thus resolved.

1.3.5 Conflicts with Codes and Regulations

The drawings and these specifications are intended to comply with all the above mentioned Codes, Rules and Regulations. If discrepancies occur, the Electrical Contractor shall immediately notify the Engineer in writing of said discrepancies and apply for an interpretation and, unless and interpretation is offered in writing by the Engineer prior to the execution of the contract, the applicable rules and regulations shall be complied with as a part of the contract.

1.4 Efficiency Maine

This project intends to pursue Efficiency Maine (EM) prescriptive and/or custom incentives where applicable. The Electrical Contractor shall coordinate the activities associated with Efficiency Maine incentive approval process including but not limited to; preparation and submission of all applicable incentive applications, receiving pre-approval when applicable, the tracking and submission of measure specific invoices to Efficiency Maine within 60 days of the completion of the work, and follow-up as necessary until the City of Auburn receives the incentives.

1.4.1 The Electrical Contractor shall also:

- A. Become familiar with the Efficiency Maine Business Program including available incentives and the application and review process.
- B. Review the specifications and field conditions for compliance with Efficiency Maine standards for applicable systems and technologies.
- C. Review the specifications for any and all incentive opportunities, prescriptive and custom.
- 1.4.2 The project schedule shall reflect and accommodate the time required to achieve application preapproval from EM. No equipment shall be purchased until preapproval is received from EM.
- 1.4.3 All invoices shall be forwarded to EM and the Owner within 60 days of the completion of work. This deliverable shall be shown on the project schedule as a milestone date and coordinated with all contractors to assure compliance with this requirement.
- 1.4.4 Efficiency Maine is available to assist in the application process and can be reached at 866-376-2463. Electrical Contractor must contact EM prior to submittals to review the project equipment and scope.

PART TWO: SCOPE OF WORK

2.1 General Requirements

2.1.1 General Scope

The work to be accomplished under these specifications includes providing all labor, materials, equipment, consumable items, supervision, administrative tasks, tests and documentation required to install complete and fully operational electrical lighting systems as described herein and shown on the Drawings.

2.1.2 Administrative Responsibilities

The Electrical Contractor shall file plans, obtain permits and licenses, pay fees and obtain necessary inspections and approvals from authorities that have jurisdiction, as required to perform work in accordance with all legal requirements.

2.2 Work to be Provided Under this Division

2.2.1 General Scope

The Work shall be complete from point of service to each outlet or device with all accessory construction and materials required to make each item of equipment or system complete and ready for operation. The work shall include but not be limited to the following. The Electrical Contractor shall provide:

- A. **Grounding System:** Furnish an equipment grounding conductor for each feeder and branch circuit.
- B. **Power Distribution Systems:** Provide power and lighting distribution systems for the areas, including breakers in existing panelboards (if required), receptacles, raceway, cable and wire.
- C. **Feeder and Branch Circuit Wiring:** Provide feeder and branch circuits and devices for power to equipment and convenience receptacles. This includes branch wiring to system control panels furnished under other sections.
- D. **Interior Lighting Systems:** Provide interior lighting system and devices including normal and emergency fixtures, exit signs, lamps, controls, trim and accessories.
- E. **Supports and Fittings:** Provide all support material and hardware for raceway, cable tray and electrical equipment.
- F. **Terminations:** Provide terminations of all cable and wire unless otherwise noted.
- G. **Penetrations:** Provide all building wall, floor and roof penetrations for raceway and cable tray.

2.4 General Equipment and Materials Requirements

2.4.1 General Requirements

All equipment and materials shall be new (with the exception of those lighting fixtures designated to be reused) and of the quality specified. All materials shall be free from defects at the time of installation. Materials or equipment damaged in shipment or otherwise damaged during construction shall not be repaired at the jobsite, but shall be replaced with new materials. Remove from job site and properly dispose of all materials that are not being reused. NOTE: OWNER HAS THE OPTION TO KEEP ANY OF THE REMOVED MATERIAL AND EQUIPMENT.

2.4.2 Representation of Equipment

All equipment installed on this project shall have local representation, local factory authorized service and a local stock of repair parts.

2.4.3 Warranties

No equipment or material shall be installed in such a manner as to void a manufacturer's warranty. The Electrical Contractor shall notify the Engineer of any discrepancies between the Contract Documents and manufacturer's recommendations prior to execution of the work. Provide Owner with a one year warranty on all parts and labor. Provide the Owner with any and all standard warranties from the manufacturer.

2.5 Shop Drawings

2.5.1 General Requirements

After the Contract is awarded, but prior to proceeding with the Work, the Electrical Contractor shall obtain complete shop drawings, product data and samples from manufacturers, suppliers, vendors, and Subcontractors for all materials and equipment specified herein, and submit data and details of such materials and equipment for review by the Engineer. Submission of such items shall follow the guidelines set in the General Section of the Specification Document. Prior to submission of the shop drawings and product data and samples to the Engineer, the Electrical Contractor shall review and certify that the shop drawings, product data and samples are in compliance with the Contract Documents. Further, the Electrical Contractor shall check all materials and equipment after their arrival on the jobsite and verify their compliance with the Contract Documents. A minimum period of ten working days, exclusive of transmittal time will be required in the Engineer's office each time shop drawings, product data and/or samples are submitted or resubmitted for review.

2.5.2 Information to be included in Submittal

The shop drawing submittal shall include all data necessary for interpretation as well as manufacturer's name and catalog number. Sizes, capacities, colors, etc., specified on the drawings shall be specifically noted or marked on the shop drawings.

2.5.3 Information Not to be included in Submittal

Submittals shall contain only information specific to systems, equipment and materials required by Contract Documents for this Project. Do not submit catalogs that describe products, models, options or accessories, other than those required, unless irrelevant information is marked out or unless relevant information is highlighted clearly. Marks on submittals, whether by Contractor, Subcontractor, manufacturer, etc., shall not be made in red ink. Red is reserved for review process.

2.5.4 Responsibility of Submitted Equipment

The Engineer's review of such drawings shall not relieve the Subcontractor of responsibility for deviations from the Contract, Drawings or Specifications, unless he has in writing called the attention of the Engineer to such deviations at the time of the submission. The Engineer's review shall not relieve the Contractor from responsibility for errors or omissions in such drawings.

2.5.5 Proposal of Other Equipment

If the Contractor proposes an item of equipment other than that specified or detailed on the drawings which requires any redesign of the wiring or any other part of the mechanical, electrical or architectural layout, the required changes shall be made at the expense of the trade furnishing the changed equipment at no cost to the Owner.

2.5.6 Substitution of Equipment of Equal Quality

Manufacturer's names are listed herein and on the drawings to establish a standard for quality and design. Where one manufacturer's name is mentioned, products of other manufacturers will be acceptable if, in the opinion of the Engineer the substitute material is of quality equal to or better than that of the material specified. Where two or more manufacturer's names are specified, material shall be by one of the named manufacturers only.

2.6 Record Drawings

2.6.1 General Requirements

As work progresses, and for duration of the Contract, the Contractor shall maintain a complete and separate set of prints of Contract Drawings at job site at all times and record work completed and all changes from original Contract. Drawings shall clearly and accurately include work installed as a modification or added to the original design. At completion of work and prior to final request for payment, the Contractor shall submit a complete set of reproducible record drawings showing all systems as actually installed.

2.6.2 Operation and Maintenance Data

Provide manufacturer's printed operating procedures to include start-up, break-in, routine and normal operation instructions; regulation control, stopping, shut-down, and emergency instructions. Provide copies of all warranties.

2.7 Equipment Specifications

- 2.7.1 Panelboards: The intent is to reuse existing panelboards and provide additional breakers as necessary.
 - A. Circuit Breakers: Overcurrent devices shall be trip-free molded case, bolt-on, thermal magnetic circuit breakers. Main circuit breakers shall be individually mounted and bolted to bus assembly. Back-fed branch mounted circuit breakers are prohibited. Front faces of all circuit breakers shall be flush. Trip indication shall be clearly shown by the handle position between the ON and OFF positions. All connections shall be rated for 75°C copper conductors.

2.7.2 Grounding System

A. A green equipment grounding conductor shall be run with each branch circuit. Grounding conductors shall be soft drawn bare copper.

2.7.3 Feeder and Branch Circuit Wiring:

- A. Provide feeder and branch circuits and devices for power to equipment and convenience receptacles. This includes branch wiring to system control panels furnished under other sections.
- B. All wiring shall be copper, minimum size #12 AWG. Conductors shall be 600V rated with THHN, THWN or XHHW insulation. A green equipment grounding conductor shall be run with each branch circuit.
- D. All exposed wiring shall be in EMT conduit. Wiring above acoustic ceiling tiles and in walls shall be part of an MC cable assembly.
- F. All conduits or penetrations in fire rated walls shall be furnished with fire stopping material to maintain the integrity of the rating.
- G. All conduits penetrating the roof or exterior walls shall be furnished with watertight seals.

2.7.4 Lighting Systems:

A. Light fixtures shall be provided with housings, trims, ballasts, lamps, lamp holders, sockets, reflectors, wiring and other components required, as a factory-assembled unit for a complete installation. Provide electrical wiring within light fixtures suitable for connecting to branch circuit wiring in accordance with N.E.C. Article 410, Paragraph 25. Provide lighting fixtures of sizes, types and ratings indicated and specified in the Basis of Design Lighting Fixture Schedule on the Contract Drawings.

- B. Contractor shall communicate with and provide all rebate worksheets and corresponding equipment cut sheets to Efficiency Maine for approval prior to ordering the fixtures to ensure that the Owner can receive the full value of the rebate for providing high efficiency fixtures.
- C. Occupancy Sensors: Occupancy sensors of the type and model specified on the drawings shall be provided, installed and wired into the local lighting circuit in the area that the sensors are installed. The engineer will consider equipment of another equal manufacturer, where suitable coverage can be documented.
 - 1. Passive Infrared Wall-Mount Sensors: Wall mounted occupancy sensors shall be suitable for dual circuit operation as specified on the contract drawings.
 - 2. Passive Infrared Fixture-Mount Sensors: Fixture mounted digital passive infrared (PIR) occupancy sensor shall be specifically designed for On/Off control of high bay fixtures in warehouse, distribution centers and vehicle garage facilities.
 - 3. Ultrasonic/Infrared Ceiling-Mounted Sensors: Ceiling mounted occupancy sensors shall be self-calibrating type as specified on the contract drawings.
 - 4. Power Packs: Power packs shall be provided as required for each room provided with occupancy sensors as needed.
 - 5. Slave Relay Packs: Slave relay packs shall be provided in rooms with more than one lighting circuit controlled by the occupancy sensor.
 - 6. Installation Requirements: Provide all miscellaneous equipment and wiring for a complete installation.

PART THREE: EXECUTION

3.1 Wiring Methods

3.1.1 General

Perform work by qualified journeymen if their respective trades who are employed by a firm that can demonstrate successful experience with work similar in type, quality and extent to the work required by this project.

3.1.2 Requirements

Unless otherwise noted all wiring shall be installed in raceway as follows:

A. **Power Distribution Indoors:** Unless otherwise noted, all other power distribution wiring including feeders and branch circuits shall be installed in electrical metallic tubing (EMT) when exposed and MC Cable when concealed.

3.2 Equipment Arrangement and Access

3.2.1 Location of Equipment

Locate all equipment which must be serviced, operated or maintained in fully accessible positions. Minor deviations from the drawings may be made to allow for better accessibility at no additional cost to the Owner, but changes shall not be made without review by the Engineer. Minimum clearances in front of or around equipment shall conform to the latest applicable code requirements.

3.3.2 Empty Conduits

All empty conduits shall have labels tied to the pull string at each end of each empty conduit, marked as to identification of each end. Junction boxes with circuits provided for future use shall be labeled with appropriate circuit designation.

3.3.3 Panelboard Directories

Cardholders for panelboards shall be filled out with typewritten identification of each circuit, except that the word "spare" shall be written in soft pencil to identify all circuit breakers installed that are not used.

END OF SECTION 26 00 00

CITY OF AUBURN, MAINE

ENGINE #5 FIRE STATION LIGHTING SYSTEM UPGRADES PROJECT

651 Center Street, Auburn, Maine

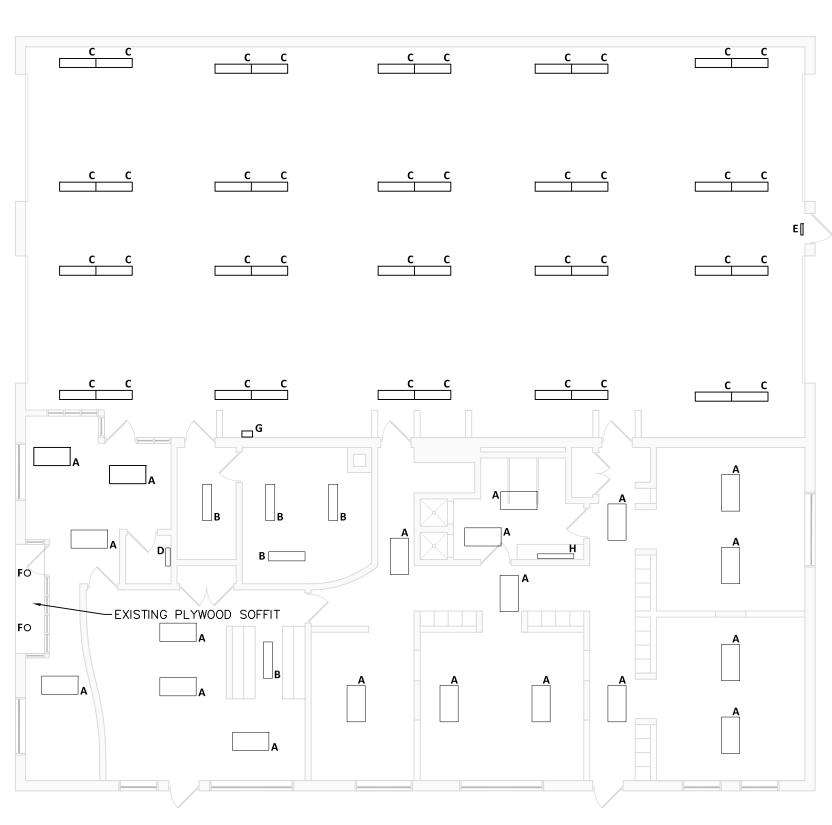
Bid No. 2016-037

Bid Documents

JUNE 13, 2016

APPENDIX B

DRAWINGS





Camden, ME | Portland, ME | York, ME

207.236.9970 www.cordjiacapitalprojects.com

CITY OF AUBURN, MAINE **ENGINE NO. 5 FIRE STATION LIGHTING PLAN**

SCALE: 3/32" = 1'-0" JUNE 13, 2016 BID #2016-037

DASIS OF DESIGN EIGHT HATORE SCHEDOLE					
TYPE	DESCRIPTION	MANUF.	LAMPS	MOUNTING	NOTES
Α	2' X 4' LED LENSED TROFFER	COLUMBIA LIGHTING	39W LED 4000K 4000 LUMENS	CEILING GRID	LJT24-40LWG-FSA12F- ED1U
В	4' LED LENSED WRAPAROUND FIXTURE	COLUMBIA LIGHTING	48W LED 4000K 4700 LUMENS	CEILING OR SUSPENDED MOUNT	LAW4-40ML-ED1U
С	4' LED LENSED WRAPAROUND FIXTURE	COLUMBIA LIGHTING	55W LED 4000K 5600 LUMENS	CEILING ON CHANNEL SUPPORT	LAW4-40HL-ED1U
D	2' LED WALL BRACKET FIXTURE	METALUX EATON	23W LED 4000K 2000 LUMENS	WALL MOUNT	2BCLED-LD4-20SL-F- UNV-L840-CD1-U
E	LED EXIT SIGN EMERGENCY LIGHT BATTERY UNIT COMBO RED LETTERING	DUAL-LITE	(2) 1W LED	UNIVERSAL	EVCURW
F	9.5" ROUND LED ENTRANCE BRONZE, WET LOCATION	HUBBELL	15W LED 5000K 830 LUMENS	SOFFIT MOUNT	BRLU-01 WITH GUARD
G	EXTERIOR LED WALL PACK FIXTURE WITH PHOTOCELL	HUBBELL	53W LED 4000K 4800 LUMENS	WALL MOUNT	WGH-110L-4K-U-M
Н	4' LED WALL BRACKET FIXTURE	METALUX EATON	22W LED 4000K 2000 LUMENS	WALL MOUNT	4BCLED-LD4-20SL-F- UNV-L840-CD1-U
GENERAL NOTES					

BASIS OF DESIGN LIGHT FIXTURE SCHEDULE

GENERAL NOTES

- 1. ALL WORK SHALL BE IN COMPLIANCE WITH NFPA-70, NATIONAL ELECTRIC CODE, 2014 EDITION AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- 2. THIS DRAWING IS DIAGRAMMATIC IN NATURE AND IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS AND PROVIDE ALL COMPONENTS AND MATERIALS FOR A COMPLETE AND OPERATIONAL INSTALLATION AT NO ADDITIONAL COST TO THE OWNER. CATALOG NO. PROVIDED IS TO BE FIELD VERIFIED BY THE CONTRACTOR FOR CORRECT INSTALLATION, MOUNTING, CONTROLS, VOLTAGE, ETC. AS NECESSARY.
- 3. THE INTENT OF THE WORK IS TO REPLACE THE INDICATED EXISTING LIGHT FIXTURES AND EMERGENCY LIGHTS WITH LED EQUIVALENTS IN A ONE-FOR-ONE MANNER.
- 4. REUSE EXISTING CIRCUIT WIRING AND SWITCHING. DOCUMENT EXISTING AND NEW CIRCUITS AND PANEL SCHEDULES IN THE FIELD FOR INCLUSION IN THE RECORD DRAWINGS.
- 5. EXISTING LIGHT SWITCH LOCATIONS ARE TO BE FIELD VERIFIED AND DOCUMENTED FOR INCLUSION IN THE RECORD DRAWINGS.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL WIRING AND CONDUITS REQUIRED FOR RECONNECTION OF NEW AND EXISTING EQUIPMENT AND FIXTURES TO REMAIN.
- 7. ALL EXPOSED CONDUIT SHALL BE EMT, 3/4" MINIMUM. PROPERLY SUPPORTED MC CABLE ASSEMBLIES MAY BE USED ABOVE CEILINGS AND IN WALLS WHERE REQUIRED. FLEXIBLE LIQUIDTIGHT WHIPS MAY BE USED FOR CONNECTIONS TO EXPOSED SUSPENDED FIXTURES.
- 8. ALL NEW EXPOSED CONDUIT SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE COLOR BEING ATTACHED TO.
- 9. UNLESS OTHERWISE NOTED ALL HOMERUNS FOR 15A OR 20A CIRCUITS SHALL BE 2#12AWG & #12 GROUND. HOMERUNS FED FROM 20A, 1P CIRCUITS IN EXCESS OF 100 FEET (FOR 120V CIRCUITS) SHALL BE #10AWG. ALL WIRING SHALL BE COPPER.
- 10. THE OWNER RESERVES THE RIGHT TO RETAIN ANY EQUIPMENT OR FIXTURES BEING REMOVED. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROPERLY DISPOSE OF ALL CONSTRUCTION WASTE.
- 11. THE CONTRACTOR IS RESPONSIBLE REPLACE ANY DAMAGED SUSPENDED CEILING GRID OR TILES AS A RESULT OF PERFORMING THE WORK.
- 12. THERE IS EXISTING FIBERGLASS INSULATION ABOVE THE SUSPENDED CEILINGS AND PLYWOOD SOFFIT. THE CONTRACTOR SHALL BE RESPONSIBLE TO REARRANGE ANY DISTURBED INSULATION AFTER CONDUCTING THE WORK TO PREVENT ANY GAPS IN THE INSULATION.
- 13. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AND PAINT THE EXISTING PLYWOOD SOFFIT AS NECESSARY FOR THE INSTALLATION OF THE TYPE F LIGHT FIXTURES.
- 14. THIS PROJECT INTENDS TO PURSUE EFFICIENCY MAINE PRESCRIPTIVE AND/OR CUSTOM INCENTIVES WHERE APPLICABLE. THE CONTRACTOR SHALL COORDINATE THE ACTIVITIES ASSOCIATED WITH ÉFFICIENCY MAINE INCENTIVE APPROVAL PROCESS INCLUDING BUT NOT LIMITED TO: PREPARATION AND SUBMISSION OF ALL APPLICABLE INCENTIVE APPLICATIONS. RECEIVING PRE-APPROVAL WHEN APPLICABLE, THE TRACKING AND SUBMISSION OF MEASURE SPECIFIC INVOICES TO EFFICIENCY MAINE WITHIN THE PRESCRIBED TIMEFRAME AFTER THE COMPLETION OF THE WORK, AND PROVIDE FOLLOW-UP AS NECESSARY UNTIL THE CITY OF AUBURN RECEIVES THE INCENTIVES.