

**INVITATION FOR BID  
City of Craig**

**CRAIG NORTH COVE HARBOR LIGHTING REPLACEMENT**

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**BIDS ARE DUE NO LATER THAN 11:00 AM Friday, April 12, 2019**

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**SCOPE OF WORK.** Bids are requested to install and make operational piling-mounted light fixtures at North Cove Harbor in Craig, Alaska. Work includes removal of all existing luminaires, installation of new luminaires, conductor, messenger wire, mounting arms, brackets, electrical service equipment, and connection to new/existing panels. All work must comply with drawings, notes, and specifications, attached to this invitation to bid. Existing conductor, panels, and lighting fixtures removed under this scope of work shall be removed with care and delivered to City.

Bid price shall include mobilization and all labor, materials, and equipment necessary to perform the specified work, except as specified below in section titled "OWNER PROVIDED MATERIALS".

**OWNER PROVIDED MATERIALS.** Owner will provide all luminaires. Luminaire fixture brand is Cree, model RSWMAHT2LG9L40K7ULGYNSS. Specification sheet is attached. Contractor shall provide all other labor, materials, and equipment necessary to perform the specified work.

**COMPLETION TIME FOR THE WORK.** Scope of work to be completed by October 31, 2019.

**CONTRACTOR'S PROPOSAL.**

Proposals shall include the following:

1. Completed Official Bid Form.
2. Licenses issued by the State of Alaska required for the performance of the scope of work.
3. Bid bond in the amount of at least five percent of bid amount written on Official Bid Form.

**REVIEW OF JOB SITE.**

Prospective bidders are strongly encouraged to view the job site before bidding.

**AWARD.**

The City of Craig may award a contract for the solicited work to the qualified bidder that submits the lowest bid amount, subject to other criteria listed in the "INFORMATION FOR BIDDERS" section below. The City of Craig reserves the right to withdraw this request at any time, and may reject any and proposals. The City of Craig shall not compensate any firm for preparation of proposals made in response to this request.

Upon award of the successful low bid, the lowest responsive Bidder shall provide the city:

1. Proof of insurance, with the City of Craig named as an additional insured;
2. A calendar showing start and finish dates of work.

**QUALIFICATIONS.** By submitting a bid, the Contractor warrants that it is qualified to perform the work described in accordance with all applicable codes, standards, and regulations.

**FIRM OFFER.** For the purpose of award, offers made in accordance with this Invitation for Bids (IFB) must be held firm for a period of 30 calendar days from the date of the bid opening. Bids shall consist of a single, lump sum amount to complete the scope of work.

**REJECTION OF BID.** The City of Craig reserves the right to reject any and all bids and to waive any informality in the bids received whenever such rejection or waiver is in the best interest of City of Craig. City of Craig also reserves the right to reject the bid of any bidder who has previously failed to perform properly, or to complete on time, contracts of a similar nature; who is not in a position to perform the contract, or who has habitually and without just cause neglected the payment of bills or otherwise.

Contractors must be in good standing with City of Craig, and not debarred from Federal and/or State projects.

**OWNER'S RESPONSIBILITIES.** City of Craig is the owner and responsible for administering the contract.

**QUESTIONS.** All questions on this bid should be directed in writing at [info@craigak.com](mailto:info@craigak.com). Questions are due no later than seven days prior to bid opening.

**QUALITY OF WORK.** The Contractor shall be responsible for the supervision and control of all work; the safety of the workers; and assurance that the quality of work and character of workers, conform to all applicable laws and regulations.

**ACCEPTANCE OF WORK.** Should the Contractor fail to meet the required specifications, the Contractor shall immediately complete the Project as specified, at no additional cost to the City of Craig.

**AWARD OF CONTRACT.** City of Craig reserves the sole right to cancel the Contract, in whole or in part, immediately, in the event of the contractor's failure to perform the work in conformance with the Contract Documents.

**PAYMENT SCHEDULE.** Payment will be made within 30 days upon receipt of invoice after completion of work and acceptance of work by the City of Craig. Material receipts (if any) shall accompany invoices for materials received.

**MINIMUM WAGE.** If the contract amount is greater than or equal to \$25,000, the Contractor shall at all times pay not less than the minimum wage per hour for each classification of laborers, workers, or mechanics as set forth in the general prevailing wage rate schedule applicable at the time the work is performed published by the State of Alaska, as amended from time to time, and shall comply with all other provisions of Alaska Statutes, Title 36, Chapter 5 (Wages and Hours of Labor). Each Bidder, by submitting a bid proposal, acknowledges and represents they have familiarized themselves with the prevailing wage rates and agree to pay and comply with said requirements relating to minimum wages, including administrative and filing fees due to the State of Alaska.

**LIABILITY.** The Contractor shall hold and save the City of Craig, its officers, agents, and employees harmless from liability of any nature. This includes any costs, expenses, suits or damages of any kind sustained by any person(s) or property by any virtue of performance resulting from the Project, unless arising from carelessness or negligence by the City of Craig, which will be apportioned on a comparative fault basis.

**DISPUTES and LIEN RELEASE:** Any disputes shall be handled in accordance with City of Craig's procurement policy. The contractor warrants that they waive any right to lien against the subject property, and that they shall save harmless the property owner from any liens or claims arising out of this construction contract.

**SUBMISSION OF BIDS.** Bids may be mailed or hand-delivered to Craig City Hall, 500 Third Street, P.O. Box 725, Craig, AK 99921. Fax No. (907) 826-3278. Only bids received by the time and date set forth in this Invitation for Bid, or revised by addendum will be accepted. Submitted bids must be clearly marked with the words "**North Cove Harbor LED Lighting Replacement**" or equivalent. Bidders must use the Official Bid Form attached to this invitation to bid.

**DUE DATE AND TIME.** Bids must be received by 11:00 A.M. Friday, April 12, 2019. Only bids received by the due date and time will be accepted.

**FAX DISCLAIMER.** It is the responsibility of the bidder to respond in a timely manner. The City of Craig is not responsible for bids that are late due to mechanical failure, a busy fax machine, or any other cause arising from bidders' use of a fax machine. Bidders are strongly encouraged to confirm receipt of their bid with the City of Craig prior to submittal deadline.

**REGISTER.** While bid documents are available for download at no cost, Bidders must register with the City of Craig in order to ensure receipt of RFP addendums. Bidders may register by sending an e-mail with the bidder's name, e-mail address, and telephone number to the City of Craig at [info@craigak.com](mailto:info@craigak.com).

**END OF INVITATION FOR BID**

**Craig North Cove Harbor Lighting Replacement – 2019**  
***Official Bid Form***

The City of Craig is accepting bids to install LED lighting at North Cove Harbor. Interested bidders must complete this bid form and return it in a sealed envelope to Craig City Hall by 10:00 a.m. Friday, April 12, 2019. Please complete the areas below.

**Base Bid:** Complete work specified in the Project Bid Documents.

I submit the following base bid: \$ \_\_\_\_\_

Bid amount in words \_\_\_\_\_.

Bid Terms: Bid terms are defined in the attached Invitation for Informal Bid document.

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**Signature**

By signing below, Bidder agrees to bind itself to the bid amount and bid terms in the Invitation for Bid document.

\_\_\_\_\_  
Bidder's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of person signing this bid

\_\_\_\_\_  
Telephone number

\_\_\_\_\_  
Printed name of business

\_\_\_\_\_  
Mailing Address of Bidder

\_\_\_\_\_  
Email Address

Bidder's check list:

1. Completed Official Bid Form.
2. General Contractor's License issued by the State of Alaska.
3. Bid security in the amount of at least 5% of Contractor's bid.

## **INFORMATION FOR BIDDERS**

**1. BACKGROUND INFORMATION.** The City of Craig owns and operates North Cove Harbor. This project provides for certain repairs and upgrades to the facility.

While bid documents are available for download at no cost, Bidders must register with the City of Craig in order to ensure receipt of RFP addendums. Bidders may register by sending an e-mail with the Bidder's name, e-mail address, and telephone number to the City of Craig at [info@craigak.com](mailto:info@craigak.com).

**2. PREPARATION OF BID FORMS.** The City of Craig, hereinafter referred to as the OWNER, invites plan/build proposals to install LED lighting at North Cove Harbor. Bid documents to be submitted at such time and place as is stated in the public notice inviting bids.

All bids must be submitted in sealed envelopes bearing on the outside the name of the project for which the bid is submitted. It is the sole responsibility of the Bidder to see that his bid is received in proper time. Any bids received after the scheduled closing time for receipt of bids will be returned to the Bidder unopened.

**3. SIGNATURES.** All proposals shall give the total lump sum price proposed both in writing and in figures, shall give all other information requested herein, and shall be signed by the Bidder or his authorized representative with his address. If the proposal is made by an individual, his name, signature and post office address must be shown; if made by firm or partnership, the name and post office address of the firm or partnership and the signature of at least one of the general partners must be shown; if made by a corporation, the proposal shall show the name of state under the laws of which the corporation is incorporated, and the title of the person who signs on behalf of the corporation. If the proposal is made by a corporation, a certified copy of the bylaws or resolution of the board of directors of the corporation shall be furnished showing the authority of the officer signing the proposal to execute contracts on behalf of the corporation.

**4. MODIFICATIONS.** Changes in or additions to the bid forms, recapitulations of the work bid upon, alternative proposals or any other modifications of the bid documents that are not specifically called for in the Contract Documents may result in the OWNER's rejection of the bid as not being responsive to the Notice to Contractors Inviting Bids. No oral or telephone modification of any bid submitted will be considered. Any Bidder may modify his bid by submitting a written modification signed by the Bidder, or by signed facsimile communication at Fax No. (907) 826-3278 at any time prior to the scheduled bid closing time for receipt of bids, provided such communication is received by the OWNER prior to the bid closing time, and, provided further, the OWNER is satisfied that a written confirmation of the telegraphic or facsimile modification over the signature of the Bidder was mailed by Federal Express, DHL, or USPS Express Mail prior to the bid closing time. The telegraphic or facsimile communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid

is opened. If written confirmation is not received within three (3) days from the closing time no consideration will be given to the telegraphic or facsimile modification.

**5. ERASURES** The bid submitted must not contain any erasures interlineations or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the corrections the surname of the person or persons signing the bid.

**6. EXAMINATION OF THE SITE, DRAWINGS, ETC.** Each Bidder shall visit the site of the proposed work and fully investigate and acquaint himself with the conditions relating to the work and labor, including taking of soils or other tests, so that he may fully understand the facilities, difficulties, soils and other conditions and restrictions attending the execution of the work under this Contract. Bidders shall thoroughly examine and be familiar with the Contract Documents. The failure or omission of any Bidder to receive or examine any forms, instrument or addendum or other document or to visit the site, take and make soils or other tests, and fully acquaint himself with conditions there existing shall in no way relieve the Bidder from obligations with respect to his bid or to full performance of the Contract and for the price bid. The submission of a bid shall be taken as conclusive evidence of compliance with this section.

**7. ADDENDA.** Each proposal shall include specific acknowledgment in the space provided of receipt of all addenda issued during the bidding period. Failure to so acknowledge may result in the proposal being rejected as not responsive.

**8. BID PRICE.** The bid price shall include everything necessary for the fulfillment of the Contract including, but not limited to, all planning work and construction, mobilization, and furnishing all labor, materials and equipment, except as may be provided otherwise in the Contract Documents. In the event of a difference between a price quoted in words and a price quoted in figures for the same quotation, the price quoted in words shall be the amount bid.

**9. CONTRACTOR'S LICENSING LAWS.** All Bidders and Contractors shall be licensed at the time of submitting a bid in accordance with the laws of the State of Alaska and any Bidder or Contractor not so licensed is subject to the penalties imposed by such laws and the Bid Proposal of such Bidders may be rejected.

**10. QUALIFICATION OF BIDDERS.** Each Bidder shall be duly licensed, qualified, skilled and regularly engaged in the general class or type of work called for under the Contract. A statement setting forth his licensing, qualification, experience and the experience, knowledge and ability of the personnel available for employment in responsible charge of the work shall be submitted by the Bidder when requested by the OWNER.

It is the intention of the OWNER to award a contract to the responsive responsible Bidder submitting the lowest bid within the city's project budget and who furnishes satisfactory evidence that he has the requisite licenses, qualifications, experience and ability and that he has sufficient capital, facilities and plans to enable him to prosecute the work successfully and properly, and to complete the work within the time specified in the Contract.

To determine the degree of responsibility to be credited to the Bidder, the OWNER will weigh any evidence that the Bidder, or personnel available for employment in responsible charge of the work, have satisfactorily performed other contracts of like nature, magnitude and comparable difficulty and comparable rates of progress and other factors, including:

- a) The ability, capacity and skill of the Bidder to perform the Contract.
- b) Whether the Bidder can perform the Contract within the time specified, and without delay
- c) The character, integrity, reputation, judgment, experience and efficiency of the Bidder.
- d) The quality of the Bidder's performance on previous contracts.
- e) The previous and existing compliance by the Bidder with laws and ordinances relating to this and other contracts.
- f) The sufficiency of the financial resources and the ability of the Bidder to perform the Contract.

**11. POSTPONEMENT OF OPENING.** The OWNER reserves the right to postpone the date and time for opening of proposals at any time prior to the time announced for opening of proposals in the advertisement.

**12. DISQUALIFICATION OF BIDDER.** If there is reason to believe that collusion exists among the Bidders, none of the bids of the participants in such collusion will be considered.

**13. REJECTION OF BIDS.** The OWNER reserves the right to reject any bid which is nonresponsive, incomplete, obscure or irregular; any bid which omits anyone or more items on which the bids are required; any bid in which unit prices are unbalanced in the opinion of the OWNER; any bid accompanied by insufficient or irregular bid security; and any bid from Bidders who have previously failed to perform properly or to complete on time contracts of any nature.

**14. RETURN OF BID BOND.** Within ten (10) days after the bids are opened the OWNER will return the bid security accompanying the proposals which are not to be considered in making the award. All other bid security will be held until the Agreement has been fully executed and the performance and payment bonds and insurance certificates, all on the forms provided and required, have been submitted in proper form to the OWNER, after which they will be returned to the respective Bidders whose proposals they accompany. The bonds or other bid security of the three (3) apparent lowest responsive Bidders may be retained by the OWNER until execution of the Agreement and delivery of the required bonds and insurance certificates by the Bidder whose Bid Proposal is accepted.

**15. INTERPRETATION OF DOCUMENTS PRIOR TO BID OPENING.**

Bidders are notified to examine thoroughly the RFP, information for Bidders, the form of agreement, bonds, and the other contract documents. If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the contract documents, or finds discrepancies or omissions therein, he may submit to the Craig City Administrator, at [info@craigak.com](mailto:info@craigak.com) or at fax no. (907) 826-3278, no later than seven (7) days prior to the time announced for opening the proposals, a request for an interpretation or correction thereof. The person submitting the request shall be responsible for its prompt



delivery. Any interpretation or correction of the contract documents will be made only by addendum issued by the City Administrator, which shall thereupon become part of the contract documents and a copy of such Addendum will be sent by facsimile or electronic mail to each person receiving a set of contract documents; however, responsibility shall rest solely with each of the intending Bidders to determine that he has, by time of bidding, received all Addenda. The OWNER will not be responsible for any other explanation or interpretation of the Contract Documents. No oral interpretation of provisions in the Contract Documents will be made to the Bidder. After bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work, site or other conditions, or of the nature of the work to be done.

**16. BIDDERS INTERESTED IN MORE THAN ONE BID.** No person, firm, or corporation shall be allowed to make, or file, or be interested in more than one bid for the same work unless alternate bids are specifically called for. A person, firm, or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices or materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or making a prime proposal.

**17. AWARD OF CONTRACT.** The OWNER reserves the right to reject any or all bids, waive any informalities or irregularity in the bidding and/or not make an award. The award of the Contract, if made by the OWNER, will be made to the qualified and responsible Bidder submitting the lowest responsive bid, but the OWNER shall determine in its own discretion whether a Bidder is responsible and qualified to perform the Contract, and what bid is the lowest or in the best interest of the OWNER, including the OWNER's right to consider the proposed form of manufacturer's warranty to be given by the manufacturer to be used by a Bidder, if such warranty is called for in the Contract Documents, or any other matters to be submitted pursuant to the Contract Documents, in making its determinations, and determine whether it is to the best interest of the OWNER to accept the bid.

Alternate bids are intended to provide the Owner a range of comparative costs which will allow identification of the combination most responsive to the Owner's needs and available funds. The Bidder must submit bid prices for all alternate bids. Except as otherwise herein stated an apparent low Bidder will be identified and award of the contract will be made on the basis of the base bid plus those alternate bids that the Owner in its sole discretion elects to accept. The order of the alternates listed shall not be construed as binding and/or an indication of the order in which the Owner may select alternatives if any.

**18. NON-COLLUSION AFFIDAVITS.** Upon a specific request of the OWNER, the Bidder, before the award of a Contract, shall submit non-collusion affidavits to the OWNER covering the Bidder and all subcontractors.

**19. DEFAULTING BIDDER.** If any Bidder whose Bid proposal is accepted fails, neglects or refuses to furnish the required performance and payment bonds, or the required worker's compensation and other insurance certificates or policies, or to execute the Agreement, such Bidder shall not be the lowest responsive Bidder. The OWNER may then select the lowest



responsive Bidder and deliver a notice of acceptance of Bid proposal to such lowest responsive Bidder.

**20. INSURANCE REQUIREMENTS.** (a) Contractor shall not commence work under this Contract until all of the insurance required under this section has been obtained and Contractor has filed the certificates of insurance and copies of insurance policies with the Owner as required by the Contract Documents, and the Owner has approved the same, nor shall Contractor allow any subcontractor to commence work on his subcontract until the insurance required has been so obtained.

(b) General Liability Insurance.

- (1) Coverage. The Contractor shall purchase and maintain General Liability Insurance covering pollution events, bodily injuries, including death at any time resulting therefrom, sustained by any person or persons, and covering damages to property, including loss of use thereof, arising out of or in consequence of the performance of the Contract or the work or construction, whether such injuries to persons or damages to property are due or are claimed to be due to operations of the Contractor, its subcontractors, or any of their officers, employees, servants, partners, agents or representatives. The Owner shall be named as an additional insured on all such policies.
- (2) Insurance Amounts. Such General Liability Insurance shall be in the amounts set forth on the form of Certificate of Insurance included in the Contract Documents and required herein to be filed with the Owner.
- (3) Insurance Period. Such General Liability Insurance shall be maintained in effect at all times until final acceptance by the Owner of all of the completed construction, and products liability and completed operations liability for at least two (2) years thereafter.
- (4) Insurance Form. Such General Liability Insurance shall indemnify and defend the Contractor, its subcontractors and the Owner, as an additional named insured, and all of their officers, employees, servants, partners, agents and representatives from and against any and all claims, judgments, liens, loss, damage, cost, charge or expense, including defense costs, court costs and attorneys' fees, whether direct or indirect, by reason of liability imposed by law or by contract upon said parties, including Operations/Premises Liability, Independent Contractor's Protective Liability/Owner's Protective Liability, Completed Operations and Products Liability, Broad Form Blanket Contractual Liability, Owner, Non-owned, and Hired Vehicles and Equipment, and Broad Form Property Damage, including explosion, collapse and underground damage and loss of use. Such General Liability Insurance shall be provided on a comprehensive bodily injury and property damage liability form satisfactory to the Owner and shall name the Owner as an additional insured and shall cover and include Contractor's contractual indemnity of Owner. The coverage shall not include an unfunded self-insured retention. A Certificate of Insurance certifying such insurance policies have been issued to the Contractor shall be filed with the Owner in the amount and form and as required herein.

(c) Worker's Compensation.

- (1) Insurance Requirements. The Contractor and its subcontractors shall purchase and maintain industrial accident or worker's compensation insurance issued by an insurance company authorized to write such insurance in the State of Alaska covering bodily

injuries, including death at any time resulting therefrom, suffered or alleged to have been suffered by any employee of the Contractor or its subcontractors by reason of or in the course of operations under the Contract.

- (2) Insurance Amount. The amount and type of such industrial accident or worker's compensation insurance shall be that required by law for all employees employed under the Contract who may come within the protection of such laws, and as required by the Certificate of Insurance required under (e) below.
- (3) Insurance Period. Such industrial accident and worker's compensation insurance shall be maintained in effect until final acceptance of the completed work and construction.
- (4) Failure to Maintain Worker's Compensation Insurance. The Contractor acknowledges and agrees that in the event it fails to maintain proper worker's compensation insurance coverage, the State and the Owner may pursue any remedies provided by AS 23.30.045, terminate the Contract without liability, and/or take or pursue any other remedies otherwise provided by law.

(d) Builder's All Risk. Not Required

(e) Certificates of Insurance. Contractor shall deposit with the Owner not later than submittal of the signed Agreement and required bonds, Certificates of Insurance from its insurance companies certifying to the coverage of all of the insurance required in this section in the form, and in the amounts set forth on the form of Certificate of Insurance set forth in the Contract Documents, and as required herein, and shall furnish copies of all insurance policies at any time upon request of the Owner.

(f) Cancellation of Insurance.

- (1) The Contractor shall not cause any insurance policy to be canceled or permit any policy to lapse or reduce the amount of such insurance during the period of the Contract. All insurance policies shall include a provision to the effect that the insurance policy shall not be subject to cancellation, lapse, or to a reduction in the amount of insurance until written notice has been first delivered to the Owner by the insuring company stating the date that such cancellation, lapse, or reduction shall be effective, which date shall not be less than thirty (30) days after the delivery of such notice to the Owner.
- (2) When a renewal of the policy is approaching, Contractor shall deposit evidence of renewal not less than twenty (20) days before expiration of the term of the policy.
- (3) The Owner shall have the right to require Contractor provide verification, including the right to inspect Contractor's records at reasonable times, to confirm the insurance called for herein is in force. If the Contractor fails to provide verification of full coverage of all the insurance required by the Contract Documents, at all times, Owner may, without liability, direct the Contractor cease any further operations, and remove all personnel and equipment from the project site until all such insurance is verified as being in full force and effect, or may, without liability, deem such failure to verify full coverage as a material breach and default and terminate the Contract without liability.

(g) Waiver of Subrogation. Each of the policies of insurance required herein shall contain a clause or endorsement pursuant to which the insurance companies waive subrogation or consent to a waiver of right to recovery against the Owner.

(h) Insurance Companies. Unless such requirement is waived by the Owner in writing, all insurance companies issuing any insurance required in this section shall be member insurers included and covered under the Alaska Insurance Guarantee Association Act (Alaska Statutes, Section 21.80.010, et seq.).

**21. MINIMUM WAGE.** If the contract amount is greater than or equal to \$25,000, the Contractor shall at all times pay not less than the minimum wage per hour for each classification of laborers, workers, or mechanics as set forth in the general prevailing wage rate schedule applicable at the time the work is performed published by the State of Alaska, as amended from time to time, and shall comply with all other provisions of Alaska Statutes, Title 36, Chapter 5 (Wages and Hours of Labor). Each Bidder, by submitting a bid proposal, acknowledges and represents they have familiarized themselves with the prevailing wage rates and agree to pay and comply with said requirements relating to minimum wages, including administrative and filing fees due to the State of Alaska. Contract will provide copies of certified payroll to OWNER at OWNER's request, and before release of final payment from OWNER.

**22. ERRORS AND OMISSIONS.** No consideration will be given by the OWNER to claim of error in a bid unless such claim is made to the OWNER within twenty-four (24) hours after the time stated for receiving bids in the Notice to Contractors Inviting Bids, and unless supporting evidence of such claim, including cost breakdown sheets, is delivered to the OWNER within forty-eight (48) hours after the time stated for receiving bids in the Notice to Contractors Inviting Bids. Relief may be granted only at the OWNER's discretion and in such event only for clerical errors.

**23. SIGNING.** Each document signed by an attorney-in-fact shall be accompanied with a copy of the power of attorney authorizing the attorney-in-fact. No agreement shall be binding upon the OWNER until the same has been completely signed by the Contractor and also signed on behalf of the OWNER. Failure to sign and return the required Contract of Work and acceptable bonds and/or insurance certificates or policies as provided herein and the Contract Documents within the time limit above specified may be just and sufficient cause for the cancellation of the award and the forfeiture of the bid security.

**24. CANCELLATION OF AWARD.** The OWNER reserves the right to cancel the award without liability to the Bidder, except return of the bid security, at any time before the Agreement has been fully signed by all parties, including the OWNER.

**25. WITHDRAWAL OF BIDS.** No Bidder may withdraw his bid after the time announced for the opening, or before both the "award and execution of the agreement, unless the award is delayed for a period in excess of sixty (60) days.

**26. BID PROTESTS.** An aggrieved bidder may file a bid protest within five (5) calendar days after Notice of Intent to Award the contract is mailed.

**27. SUBMITTALS.** The Contractor shall assemble and submit to the OWNER project component data and samples as specified by OWNER. The project data and samples shall be submitted to the OWNER for review and checking to determine conformance with the intent of the plans and specifications. The review and checking by the Engineer will be specifically limited to the project data and samples specified in these specifications.

**City of Craig**  
**DRAFT Agreement for Work**  
**Installation of LED Lighting at North Cove Harbor – 2019**

THIS AGREEMENT made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, by and between the CITY OF CRAIG, a municipal corporation, P.O. Box 725, Craig, Alaska 99921, hereinafter called "OWNER," and \_\_\_\_\_, licensed and qualified to do business within the State of Alaska, hereinafter called "CONTRACTOR."

NOW, THEREFORE, for and in consideration of the terms, covenants, conditions, and provisions contained herein, and attached and incorporated herein and made a part hereof, the parties hereto agree as follows:

**Section 1: Scope of Work**

The CONTRACTOR shall perform and provide, within the time stipulated, the Contract as herein defined, of which this Agreement is a component part, and everything required to be performed including the providing of all work, labor, services, materials, utility, transportation and other acts necessary to perform the Contract in a workmanlike manner (hereinafter referred to as "Construction"), and in strict conformity with the requirements identified in the request for proposals and the contractor's proposal and concept drawings, and with all of the other Contract Documents enumerated in Section 4 hereof, hereinafter collectively referred to as the "Contract".

**Section 2: Construction Time.**

The CONTRACTOR agrees to complete all work and construction called for and as defined in the CONTRACTOR'S proposal, to the satisfaction of the OWNER in accordance with the attached construction schedule. It is further agreed that the CONTRACTOR shall start all work and construction within ten (10) days after delivery of the OWNER'S Notice to Proceed, unless otherwise specified in such Notice to Proceed, and shall complete all work and construction in accordance with the construction schedule and time for completion as provided in the Contract Documents.

**Section 3: Contract Amount.**

As and for full payment, and in consideration of the timely and proper performance of all construction and work called for by the Contract, as defined herein, and performance of all the terms and conditions thereof, the OWNER shall pay the CONTRACTOR in currency of the United States a total contract amount of \_\_\_\_\_. Payments to CONTRACTOR shall be based on the schedule of values agreed to by OWNER and CONTRACTOR attached to and made a part of this agreement. OWNER shall retain 10% of all progress payments pending final acceptance of the building.

Contract payments shall be made on the following schedule:

1. 20% of total contract amount upon mobilization and delivery of materials to site.
2. 20% of total contract amount upon completed installation of new “ELECTRICAL SERVICE EQUIPMENT, CONTACTORS, ETC” identified on Sheet E2 of design drawings.
3. Balance of bid price upon completion of work.

The owner shall withhold final payment pending final acceptance of the work by the owner. Contractor shall submit all pay requests to the owner on company letterhead or invoice. Owner will issue payment to contractor within 30 days of approval of pay requests.

**Section 4: Contract Documents.**

The Contract, and the component parts of this Contract, entered into by the acceptance of the CONTRACTOR'S Bid Proposal and the signing of this Agreement, consist of the following documents, all of which are component parts of said Contract and are as fully a part thereof as if herein set forth in full, and if not attached, as if attached hereto:

1. This Agreement;
2. Notice to Contractors Inviting Bids;
3. Notice of Award;
4. Bid Proposal as accepted by the Craig City Council;
5. Notice to Proceed;
6. Written amendments, including Change Orders, if any, to this Agreement signed by both parties entered into after execution of this Agreement.
7. Certificate of Insurance;

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

CITY OF CRAIG

CONTRACTOR

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Contract payments shall be made on the following schedule:

1. 20% of total contract amount upon mobilization and delivery of materials to site.
2. 20% of total contract amount upon completed installation of new "ELECTRICAL SERVICE EQUIPMENT, CONTACTORS, ETC" identified on Sheet E2 of design drawings.
3. Balance of bid price upon completion of work.

The owner shall withhold final payment pending final acceptance of the work by the owner. Contractor shall submit all pay requests to the owner on company letterhead or invoice. Owner will issue payment to contractor within 30 days of approval of pay requests.

**Section 4: Contract Documents.**

The Contract, and the component parts of this Contract, entered into by the acceptance of the CONTRACTOR'S Bid Proposal and the signing of this Agreement, consist of the following documents, all of which are component parts of said Contract and are as fully a part thereof as if herein set forth in full, and if not attached, as if attached hereto:

1. This Agreement;
2. Notice to Contractors Inviting Bids;
3. Notice of Award;
4. Bid Proposal as accepted by the Craig City Council;
5. Notice to Proceed;
6. Written amendments, including Change Orders, if any, to this Agreement signed by both parties entered into after execution of this Agreement.
7. Certificate of Insurance;

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

CITY OF CRAIG

CONTRACTOR

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature
















\_\_\_\_\_  
Date



# CRAIG, ALASKA

## CRAIG NORTH HARBOR LIGHTING REPLACEMENT

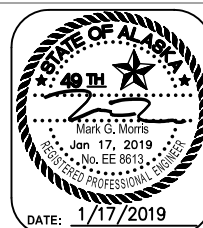
### LEGEND

<p> CAMERA</p> <p> CIRCUIT BREAKER (AMPS/POLES)</p> <p>C/B CIRCUIT BREAKER</p> <p>CKT CIRCUIT</p> <p>CIVIL CIVIL PROJECT DRAWINGS</p> <p>COMM. COMMUNICATION</p> <p>C CONDUIT</p> <p> CONTACTOR</p> <p>CU COPPER</p> <p> DISCONNECT</p> <p><math>\phi</math> ELECTRICAL PHASE</p> <p> MOTER CONNECTION</p> <p>GALV. GALVANIZED</p> <p>GRS GALVANIZED RIGID STELL</p> <p>GND GROUND</p> <p> GROUND BUSS</p>	<p>GFI GROUND FAULT INTERRUPTER</p> <p>HOA HAND-OFF-AUTO</p> <p>HT HEAT TRACE</p> <p> HEAVY DUTY DISCONNECT (AMPS/POLES AS SHOWN)</p> <p> HOME RUN</p> <p> HUMIDISTAT</p> <p>AP&amp;T ALASKA POWER &amp; TELEPHONE</p> <p>LFMC LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (WITH STAINLESS STEEL INTERNAL SPIRAL)</p> <p>LTG LIGHTING</p> <p> LIGHTING CONTACTOR</p> <p>MTG HT MOUNTING HEIGHT</p> <p>MDP MAIN DISTRIBUTION PANEL</p> <p>NEC NATIONAL ELECTRICAL CODE</p> <p>NFPA NATIONAL FIRE PROTECTION ASSOCIATION</p> <p>N.I.C. NOT IN CONTRACT</p>	<p>NM NON METALLIC</p> <p> OVERLOAD RELAY</p> <p> PHOTO ELECTRIC CELL</p> <p> POLE MOUNTED LUMINAIRE. LABEL DESIGNATES POLE NUMBER</p> <p>POE POWER OF ETHERNET</p> <p> RECEPTACLE, 120V, 20A INDUSTRIAL SPEC GRADE, WHITE WITH STAINLESS COVER PLATE</p> <p>REC RECETPTACLE</p> <p>RMC RIGID METAL CONDUIT (HOT DIPPED GALVANIZED RIGID STEEL)</p> <p>SS 316 STAINLESS STEEL</p> <p>STA STATION LINE</p> <p>STRUCTURAL STRUCTURAL PROJECT DRAWINGS &amp; SPECIFICATIONS</p> <p>S SWITCH, 120V, 20A INDUSTRIAL SPEC GRADE, WHITE WITH STAINLESS COVER PLATE</p> <p>(TYP) TYPICAL</p> <p>UHMW ULTRA HIGH DENSITY MOLECULAR WEIGHT</p> <p> UTILITY METER</p>
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Sheet List Table	
Sheet Number	Sheet Title
E1	GENERAL NOTES & LEGEND
E2	NEW SITE PLAN LIGHTING LAYOUT
E3	SINGLE LINE DIAGRAM – EXISTING
E4	SINGLE LINE DIAGRAM

**GENERAL NOTES (APPLICABLE ALL SHEETS):**

1. ALL WORK ON ALL SHEETS IS NEW UNLESS OTHERWISE NOTED.
2. PERFORM ALL WORK PER THE 2017 NATIONAL ELECTRIC CODE (NEC) AND OTHER APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND STANDARDS. PROVIDE EQUIPMENT AND AN INSTALLATION THAT COMPLIES WITH ARTICLE 555 OF THE NEC.
3. MOUNT ALL OF THE ELECTRICAL EQUIPMENT IN THE LOCATIONS SHOWN AND AS COORDINATED WITH OWNER. LOCATIONS SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE.
4. MOUNT ELECTRICAL EQUIPMENT AS DESCRIBED ON ELECTRICAL. SIZE MOUNTING BOLTS, BRACKETS, HARDWARE, ETC. FOR A SAFETY FACTOR OF 5 MINIMUM. ALL EQUIPMENT AND MATERIALS SHALL NOT MOVE WHEN PULLED OR PUSHED BY HAND (EXCEPT CABLES AND FLEXIBLE CONDUIT). SECURE ALL CONDUIT WITHIN 12 INCHES OF END OF CONDUIT AND AS REQUIRED PER NEC.
5. FIELD TREAT ALL HOT DIPPED GALVANIZED MATERIALS THAT ARE CUT, DRILLED, SCRATCHED OR DAMAGED.
6. ALL CONDUCTORS SHALL BE COPPER, ALL INSULATION SHALL BE 600V RATED. TYPE XHHW FOR CONDUCTORS NOT IN A CABLE. ALL CABLES SHALL BE THE TYPE SPECIFIED, NO SUBSTITUTIONS.
7. IF GALVANIZED THREADS ARE CHASED IN ORDER TO BE USABLE, TREAT CHASED THREADS WITH BRAKE CLEANER, THEN COAT WITH MARINE TRAILER WHEEL BEARING GREASE BEFORE APPLYING A STAINLESS STEEL WASHER AND NUT.
8. USE 316 STAINLESS STEEL BOLTS, WASHERS, ETC. TO MOUNT ELECTRICAL EQUIPMENT AND STRUT CHANNEL. ALL FASTENERS AND OTHER EXPOSED HARDWARE SHALL BE 316 STAINLESS STEEL. ALL STAINLESS STEEL SHALL BE 316 STAINLESS STEEL.
9. SEAL ALL PENETRATIONS IN ELECTRICAL EQUIPMENT WITH UL LISTED HARDWARE FOR SUCH USE. USE RUBBER OR SILICONE WASHERS IN ADDITION TO STAINLESS STEEL WASHERS.
10. USE 316 STAINLESS STEEL SUPPORT CHANNEL (UNISTRUT) TO SUPPORT CABLES, PANELS, CONTACTORS, AND ALL OTHER ELECTRICAL EQUIPMENT. TRIM SUPPORT CHANNEL 1/4" SHORT OF EDGE OF EQUIPMENT AND POSTS. SAND END OF SUPPORT CHANNEL SMOOTH. USE CABLE SUPPORTS THAT COMPLY WITH 555.13(4). USE CUSHION STRAPS WHEN SUPPORTING CABLE TO SUPPORT CHANNEL.
11. ALL CABLE TERMINATIONS AND ALL ELECTRICAL CONNECTIONS SHALL BE A MINIMUM OF 12 INCHES ABOVE THE FLOAT DECKING INCLUDING WIRING TERMINATIONS, RECEPTACLES, ETC.
12. PROVIDE OXIDE INHIBITING COMPOUND ON ALL ELECTRICAL CONNECTIONS. BURNDY PENTROX TYPE A OR E AS REQUIRED.
13. ALL LUGS AND ELECTRICAL TERMINALS SHALL BE COPPER OR TIN PLATED HIGH CONDUCTIVE ALUMINUM.
14. THE PART NUMBERS SHOWN ON THE DRAWINGS ARE NOT TO BE USED AS A BILL OF MATERIALS. VERIFY ALL PART NUMBERS ARE CORRECT PRIOR TO ORDERING, VERIFY ALL REQUIRED OR NECESSARY ACCESSORIES, FEATURES, MATERIAL TYPE, ETC. ARE INCLUDED.
15. CABLE AND CONDUCTOR ROUTING AT ALL TRANSITIONS BETWEEN UPLANDS, BRIDGE, AND FLOAT SHALL BE INSTALLED SO THAT IT WILL NOT BE DAMAGED AT THE MINIMUM AND MAXIMUM TIDAL LEVELS.
16. BUILD THE PROJECT AS DESIGNED. DO NOT ASSUME THE DESIGN WILL BE CHANGED AT THE CONTRACTOR'S REQUEST.
17. DO NOT EXCEED 8 TIMES DIAMETER FOR BENDING RADIUS OF CABLES OR CONDUCTORS. PROTECT CABLE AND CONDUCTORS FROM CHAFING. USE CABLE GRIPS AT TOP AND BOTTOM OF GANGWAY.



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

DESIGN: **MGM** CHECKED: **MGM** DRAWN: **JRW** APPROVED: **MGM** SCALE:

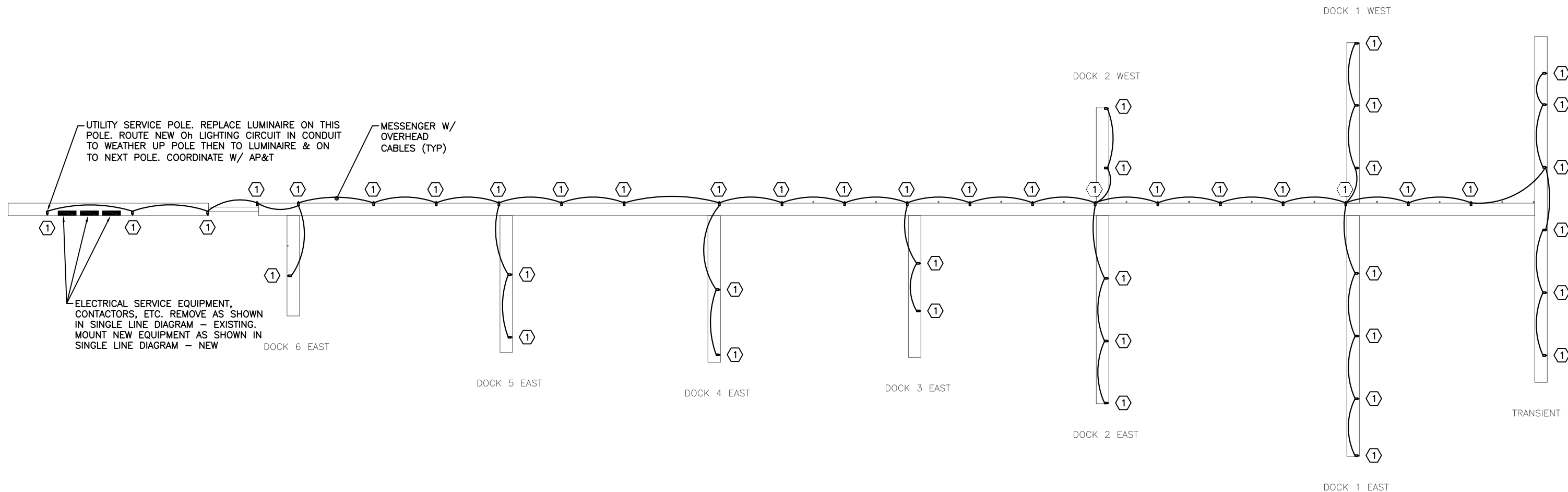
### CRAIG NORTH COVE HARBOR LIGHTING REPLACEMENT

SHEET TITLE:  
**GENERAL NOTES & LEGEND**  
MEG PROJECT NO.: 100-60

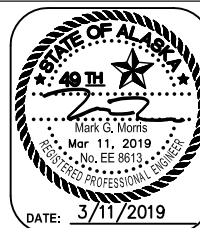
E1

NOTES:

1. LED LUMINAIRE FIXTURE, TYPE 2 DISTRIBUTION 80W, 9,000 LUMENS, 70 CRI, 240V, 4000K, HOUSING CONSTRUCTED OF HIGH STRENGTH, LIGHT WEIGHT BULK MOLDING COMPOUND FOR LONG WEATHERING. TOOLLESS ENTRY. SLIPFITTER MOUNT FOR 2-3/8" OD PIPE TENON. STAINLESS STEEL HARDWARE. SEALED LED ENGINE IP66. CREE RSWMAHT2LG9L40K7ULGYNSS OR EQUAL WITH EQUIPMENT PHOTOMETRIC PERFORMANCE. LOCATE ON PILES WHERE SHOWN. MOUNT TO TOP OF PILES.
2. POWER ALL LUMINAIRES AS SHOWN ON SINGLE LINE DIAGRAM.
3. PROVIDE TRIPLEX OVERHEAD CABLES WITH CONCENTRIC STRAND CONDUCTOR, 600V RATED CROSS LINKED POLYETHYLENE INSULATION AND CONCENTRIC STRAND ASCR MESSENGER. NO. 2 AWG PHASE CONDUCTORS, NO. 2 NEUTRAL. CODE WORD CONCH. KING WIRE CO.
4. PERFORM ALL WORK PER 2017 NFPA 70.
5. SECURE MESSENGER CABLE TO PILES WITH BRACKETS AND INSULATORS USING STRAIN RELIEF. SPLICE TO 3 NO. 10 XHHW-2 COPPER CONDUCTORS, ROUTED TO LUMINAIRE. USE CRIMP SPLICES WITH ELECTRICAL INSULATING TAPE AND HEAT SHRINK.
6. MOUNT LUMINAIRES TO PILES WITH 2" GALVANIZED X-STRONG PIPE WITH MIN 5/16" FILLET WELD. REPAIR DAMAGE TO GALVANIZED COATINGS WITH ZINC HOT STICK. USE PURPOSE MADE BRACKET FOR WOOD POLES. EXISTING BRACKETS MAY BE REUSED WHERE PRACTICAL AND IN GOOD CONDITION.
7. PROTECT EXPOSED CABLES FROM CHAFING.



1 NEW SITE PLAN LIGHTING LAYOUT  
NOT TO SCALE



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

DESIGN: **MGM** CHECKED: **MGM** DRAWN: **JRW** APPROVED: **MGM** SCALE:

**CRAIG NORTH COVE HARBOR  
LIGHTING REPLACEMENT**

SHEET TITLE:  
**NEW SITE PLAN LIGHTING LAYOUT**

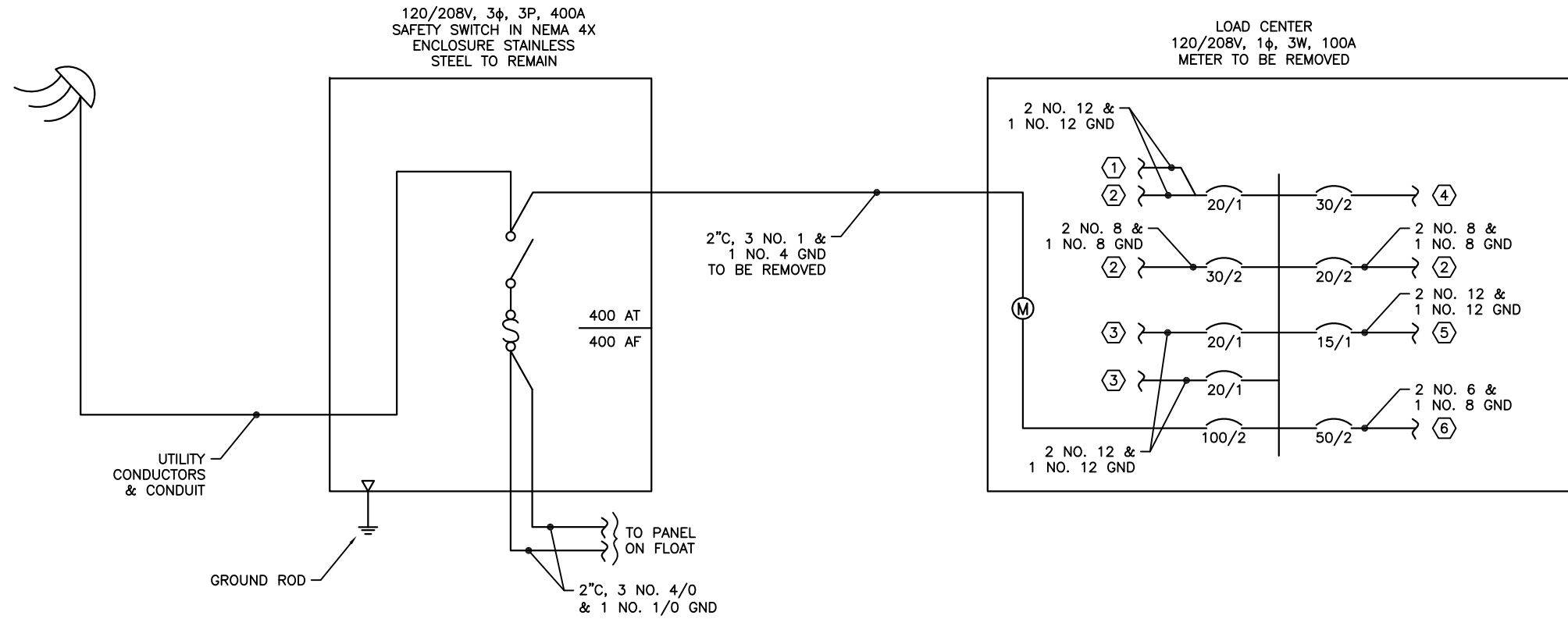
MEG PROJECT NO.: 100-60

**E2**

NOTES:

- ① TO PE CELL TO BE REPLACED.
- ② TO HEAT TRACE CONTACTOR TO BE REMOVED.
- ③ TO RECEPTACLE ON GRID TO BE REPLACED.
- ④ TO LIGHTING CONTACTOR TO BE REPLACED.
- ⑤ TO WEATHER STATION TO REMAIN.
- ⑥ TO RECEPTACLE ON GRID TO BE REPLACED.

- 7. REMOVE METAL LOAD CENTER, HEAT TRACE CONTACTOR, LIGHTING CONTACTOR, AND ALL ASSOCIATED WIRING TO DEVICES THEY FEED. INSPECT SITE SO A CLEAR UNDERSTANDING OF ALL DEMO WORK IS GAINED.
- 8. COORDINATE W/ AP&T TO REMOVE SERVICE TO METER/LOAD CENTER.
- 9. REMOVE ALL LIGHTING OFF PILES, ALL CABLES FEEDING THEM. REMOVE ALL HEAT TRACE FROM DOCK AND ALL CABLES AND ENCLOSURES FEEDING HEAT TRACE.
- 10. REMOVE ALL WIRING TO GRID. REPLACE WITH NEW WIRING PER SINGLE LINE DIAGRAM. MOUNT RECEPTACLES TO APPROACH DOCK RAILING IN WEATHER PROOF COVERS. COORDINATE LOCATION WITH OWNER.



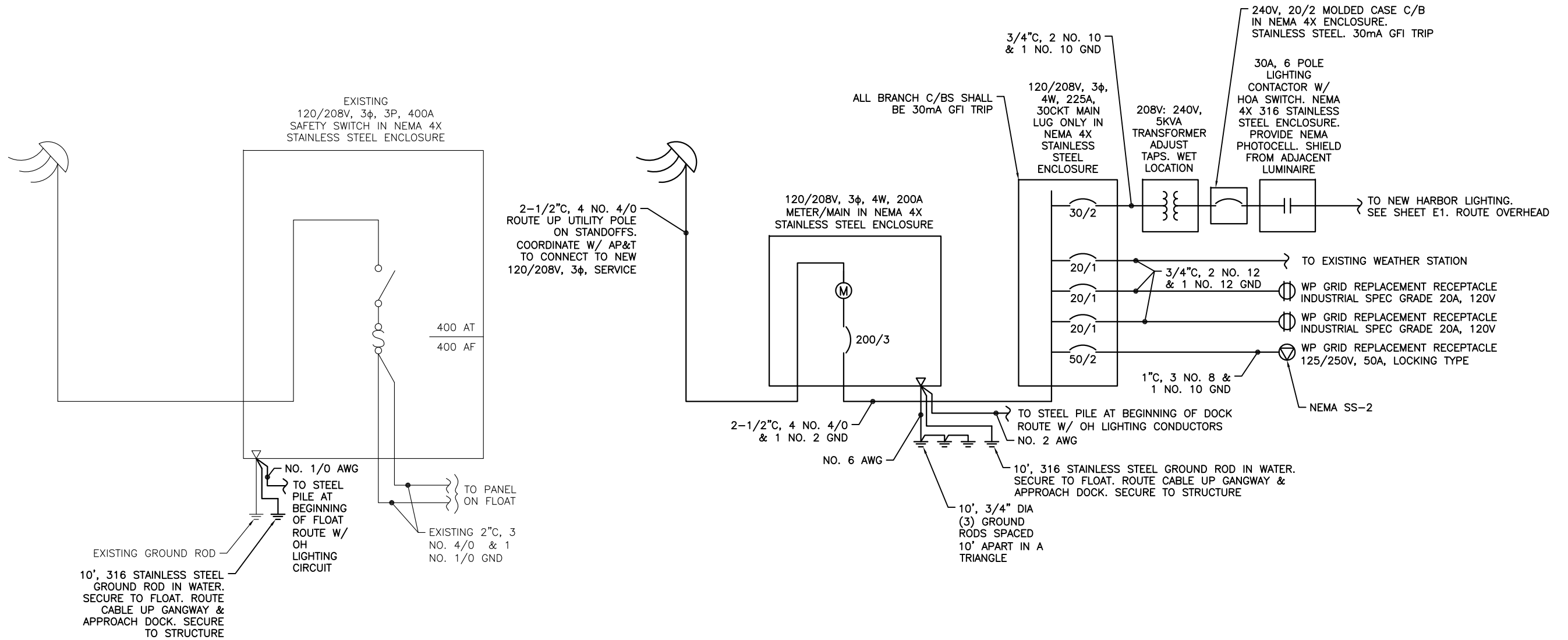
① CRAIG NORTH HARBOR SINGLE LINE DIAGRAM - EXISTING  
NO SCALE

REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

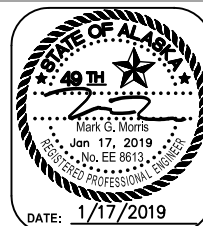
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NOTES:

1. REPLACE THE HARBOR ELECTRICAL SYSTEM FOR LIGHTING AND GRID POWER. RE-POWER WEATHER STATION. PROVIDE ADDITIONAL GROUNDING FOR HARBOR POWER SYSTEM AS SHOWN. PROVIDE A NEW SERVICE THROUGH AP&T FOR LIGHTING. MOUNT NEW EQUIPMENT ON WOOD STRUCTURE AT APPROACH DOCK. REPLACE WOOD STRUCTURE WITH PRESSURE TREATED WOOD AS REQUIRED. ADD WOOD STRUCTURE AS REQUIRED TO MOUNT ALL EQUIPMENT AND DEVICES. ALL BRANCH C/BS SHALL HAVE 30mA GFI TRIP. PAY AP&T FOR THEIR WORK.
2. ALL CONDUIT SHALL BE SCHEDULE 80 PVC. ALL WIRING SHALL BE COPPER, XHHW INSULATION EXCEPT AS NOTED ON SHEET E1. ALL SUPPORT HARDWARE, FASTENERS AND SUPPORT CHANNEL, ETC.
3. PERFORM ALL WORK TO PROVIDE FULLY OPERATIONAL SYSTEMS.



① SINGLE LINE DIAGRAM - NEW  
NO SCALE



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

DESIGN: **MGM** CHECKED: **MGM** DRAWN: **JRW** APPROVED: **MGM** SCALE:

**CRAIG NORTH COVE HARBOR LIGHTING REPLACEMENT**

SHEET TITLE:  
**SINGLE LINE DIAGRAM**

**E4**

MEG PROJECT NO.: 100-60

# RSW Series

RSW™ LED Street Luminaire – Medium

## RSW - 7200Lm, X3 Stainless Steel Latches

### Product Description

The Cree® RSW Series, utilizing WaveMax® Technology, will transform the way utilities and municipalities light their residential streets, interchanges, and expressways. With the first viable LED streetlight at warm CCT, the RSW Series delivers up to 121 LPW, enhanced visual comfort with reduced glare and high color contrast leading to improved overall illumination using less energy. The RSW Series provides warm, inviting dark sky friendly lighting that makes good economic sense.

**Applications:** Residential roads, collector roads, parking lots, and general area spaces

### Performance Summary

Utilizes Cree WaveMax® Technology

Assembled in the U.S.A. of U.S. and imported parts

**Initial Delivered Lumens:** Up to 9,325

**Efficacy:** Up to 121 LPW

**CRI:** Minimum 70 CRI (3000K, 4000K & 5000K); 80 CRI (2700K, 3000K, 4000K & 5000K)

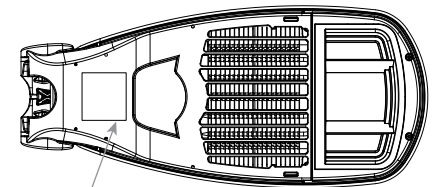
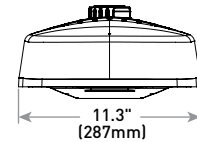
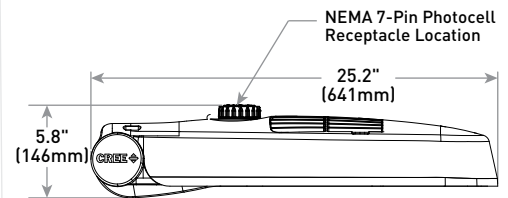
**CCT:** 2700K, 3000K, 4000K, 5000K

**Limited Warranty\*:** 10 years

\* See <http://lighting.cree.com/warranty> for warranty terms

### Accessories

Field-Installed	
<b>Backlight Control Shield</b> RSW-BLSM - Provides 1 mounting height cutoff - 0.5" (13mm) 301 stainless steel construction - Refer to initial delivered lumen tables for lumen output	<b>Cul-De-Sac Shield</b> RSW-CLSM - Provides backlight and sidelight control - 0.5" (13mm) 301 stainless steel construction - Lumen multiplier: 0.77
<b>Bird Guard</b> RSW-BRDGRDM - 5052-H32 aluminum construction	<b>Front Light Shield</b> RSW-FLSM - Provides front light control - 0.5" (13mm) 301 stainless steel construction - Lumen multiplier: 0.87



Utility Label Location

Weight*
15.6 lbs. (7.1kg)

\* RSW-BLSM Accessory: add 0.4 lbs. (0.2kg); RSW-CLSM or RSW-FLSM Accessories: add 0.6 lbs. (0.3kg)

### Ordering Information

Example: RSWM-A-HT-2ME-9L-27K8-UL-GY-N

RSWM	A	HT		9L		UL	GY	N	
Product	Version	Mounting	Optic	Lumen Package**	CCT/CRI	Voltage	Color Options	Utility Label/Receptacle	Options
RSWM Medium	A	HT Horizontal Tenon	2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium	9L 9,000 Lumens	27K8 2700K, 80 CRI 30K7 3000K, 70 CRI 30K8 3000K, 80 CRI 40K7 4000K, 70CRI 40K8 4000K, 80 CRI 50K7 5000K, 70CRI 50K8 5000K, 80CRI	UL Universal 120-277V	GY Grey	N Utility Label and NEMA® 7-Pin Photocell Receptacle - External wattage label per ANSI C136.15 - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell or shorting cap by others	<b>Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Lumen Output</b> - Must select Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Offers full range lumen adjustability - Includes wattage label for setting selected - Refer to pages 7 & 8 for power and lumen values - Luminaire may also be dimmed through 7-Pin receptacle with use of dimming control by others - Refer to <a href="#">dimming spec sheet</a> for dimming multipliers  <b>SS Stainless Steel Bolts</b> <b>X7/X6/X5/X4/X3/X2/X1 Locked Lumen Output</b> - Must select X7, X6, X5, X4, X3, X2, or X1 - Lumen output is permanently locked to the setting selected - Includes wattage label for setting selected - Refer to pages 7 & 8 for power and lumen values - Dimming is only available through 7-Pin receptacle with use of dimming control by others - Refer to <a href="#">dimming spec sheet</a> for dimming multipliers

\* Available with Backlight Shield when ordered with field-installed accessory (see table above)

\*\* Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values



Rev. Date: V5 01/24/2019



US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Canada: [www.cree.com/canada](http://www.cree.com/canada)

T (800) 473-1234 F (800) 890-7507

## Product Specifications

### CREE WAVEMAX® TECHNOLOGY

Featuring up to 90% optical efficiency and precise control, Cree WaveMax® Technology provides unmatched comfort and decreased LED source luminance by smoothly spreading brightness over a broader area. When integrated with luminous surfaces made of a polymer medium engineered with DiamondFacet™ optical elements, extremely high efficacy luminaires are the result – ultimately creating more visually comfortable and appealing environments while exceeding illumination performance.

### CONSTRUCTION & MATERIALS

- Housing constructed of high strength, lightweight bulk molding compound for long weathering and durability
- UV stabilized polymeric door with handle pocket for tool-less entry
- Straight in wiring to terminal block for power input [#6-#14 AWG]
- IP66 rated optic box and driver enclosure inside optic box
- Mounts on 1.25" [32mm] IP, 1.66" [42mm] O.D. or 2" [51mm] IP, 2.375" [60mm] O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° in 2.5° increments to allow for fixture leveling (two axis T-level included)
- Luminaire secures with two grade 5 steel mounting bolts w/clear zinc clad finish standard; optional 316 stainless steel mounting bolts available with SS option
- Comes standard with Utility Label per ANSI C136.15 and 7-pin NEMA® Photocell Receptacle per ANSI C136.41
- **Weight:** 15.6 lbs. (7.1kg); add 0.4 lbs. (0.2kg) for RSW-BLSM accessory; add 0.6 lbs. (0.3kg) for RSW-CLSM or RSW-FLSM accessories

### ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **10V Source Current:** 0.15mA
- **Operating Temperature Range:** -40°C - +50°C [-40°F - + 122°F]

### REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Meets CALTrans 611 Vibration testing
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Meets Buy American requirements within ARRA
- RoHS compliance. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 27K or 30K CCT
- DLC and DLC Premium qualified versions available. Please refer to <https://www.designlights.org/search/> for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

Electrical Data*								
Lumen Package	CCT/CRI	System Watts 120-277V	Utility Label Wattage	Efficacy	Total Current (A)			
					120V	208V	240V	277V
9L	27K8	83	80	98	0.74	0.42	0.36	0.32
	30K7	83	80	112	0.74	0.42	0.36	0.32
	30K8	83	80	105	0.74	0.42	0.36	0.32
	40K7	78	80	120	0.70	0.40	0.34	0.30
	40K8	83	80	111	0.74	0.42	0.36	0.32
	50K7	77	80	121	0.69	0.39	0.34	0.29
	50K8	80	80	117	0.72	0.41	0.35	0.31

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%

RSWM Series Ambient Adjusted Lumen Maintenance <sup>1</sup>					
Ambient	Initial LMF	25K hr Projected <sup>2</sup> LMF	50K hr Projected <sup>2</sup> LMF	75K hr Calculated <sup>3</sup> LMF	100K hr Calculated <sup>3</sup> LMF
5°C (41°F)	1.04	1.04	1.04	1.04	1.04
10°C (50°F)	1.03	1.03	1.03	1.03	1.03
15°C (59°F)	1.02	1.02	1.02	1.02	1.02
20°C (68°F)	1.01	1.01	1.01	1.01	1.01
25°C (77°F)	1.00	1.00	1.00	1.00	1.00

<sup>1</sup> Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

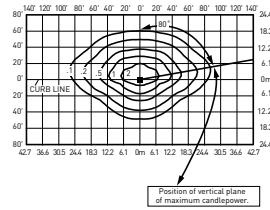
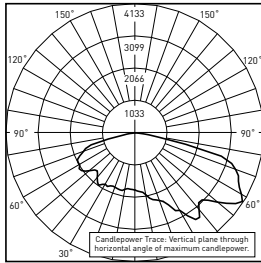
<sup>2</sup> In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

<sup>3</sup> In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

**Photometry**

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/rsw-series>

**2LG**



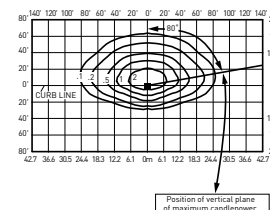
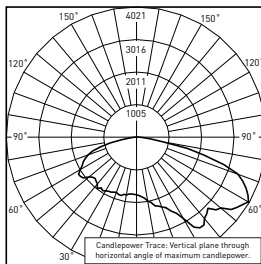
**UL Verification Services Test Report #:**  
12311460.01  
RSWM-A-\*\*-2LG-9L-30K7-UL-\*\*-N  
**Initial Delivered Lumens:** 9,178

RSWM-A-\*\*-2LG-9L-30K7-UL-\*\*-N  
**Mounting Height:** 25' [7.6m] A.F.G.  
**Initial Delivered Lumens:** 9,325  
Initial FC at grade

Type II Long Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	9,325	B2 U0 G2	9,325	B2 U0 G2	9,325	B2 U0 G2
	80	8,175	B2 U0 G2	8,700	B2 U0 G2	9,200	B2 U0 G2	9,325	B2 U0 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



**UL Verification Services Test Report #:**  
11705478-02  
RSWM-A-\*\*-2LG-9L-30K7-UL-\*\*-N  
w/RSW-BLSM  
**Initial Delivered Lumens:** 8,466

RSWM-A-\*\*-2LG-9L-30K7-UL-\*\*-N  
w/RSW-BLSM  
**Mounting Height:** 25' [7.6m] A.F.G.  
**Initial Delivered Lumens:** 8,550  
Initial FC at grade

Type II Long w/BLS Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	8,550	B2 U0 G2	8,550	B2 U0 G2	8,550	B2 U0 G2
	80	7,500	B2 U0 G2	7,975	B2 U0 G2	8,450	B2 U0 G2	8,550	B2 U0 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt

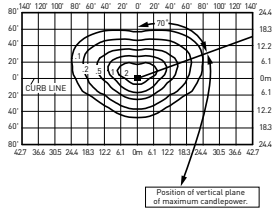
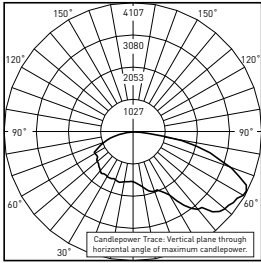




**Photometry**

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/rsw-series>

**2ME**

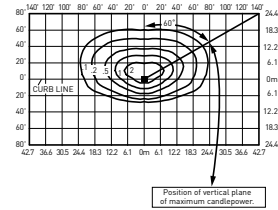
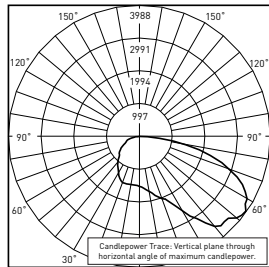


**UL Verification Services Test Report #:**  
12311460.05  
RSWM-A-\*\*-2ME-9L-30K7-UL-\*\*-N  
**Initial Delivered Lumens:** 9,487

RSWM-A-\*\*-2ME-9L-30K7-UL-\*\*-N  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 9,325  
Initial FC at grade

Type II Medium Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	9,325	B2 U0 G3	9,325	B2 U0 G3	9,325	B2 U0 G3
	80	8,175	B2 U0 G2	8,700	B2 U0 G2	9,200	B2 U0 G3	9,325	B2 U0 G3

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



**UL Verification Services Test Report #:**  
11705478.01  
RSWM-A-\*\*-2ME-9L-30K7-UL-\*\*-N  
w/RSW-BLSM  
**Initial Delivered Lumens:** 8,383

RSWM-A-\*\*-2ME-9L-30K7-UL-\*\*-N  
w/RSW-BLSM  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 8,550  
Initial FC at grade

Type II Medium w/BLS Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	8,550	B2 U0 G3	8,550	B2 U0 G3	8,550	B2 U0 G3
	80	7,500	B1 U0 G2	7,975	B2 U0 G2	8,450	B2 U0 G3	8,550	B2 U0 G3

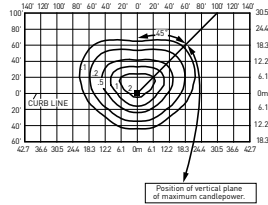
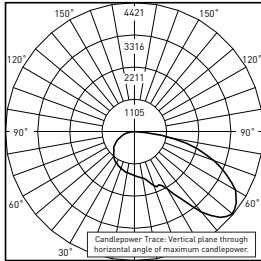
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



**Photometry**

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/rsw-series>

**3ME**



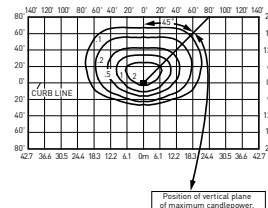
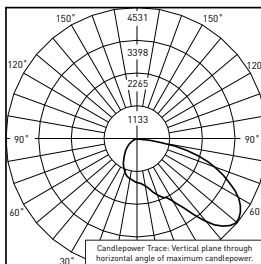
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12311460.02  
RSWM-A\*\*-3ME-9L-30K7-UL\*\*-N  
**Initial Delivered Lumens:** 9,302

RSWM-A\*\*-3ME-9L-30K7-UL\*\*-N  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 9,325  
Initial FC at grade

Type III Medium Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	9,325	B2 U0 G2	9,325	B2 U0 G2	9,325	B2 U0 G2
	80	8,175	B2 U0 G2	8,700	B2 U0 G2	9,200	B2 U0 G2	9,325	B2 U0 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



**UL Verification Services Test Report #**  
11705478.03  
RSWM-A\*\*-3ME-9L-30K7-UL\*\*-N  
w/RSW-BLSM  
**Initial Delivered Lumens:** 8,532

RSWM-A\*\*-3ME-9L-30K7-UL\*\*-N  
w/RSW-BLSM  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 8,550  
Initial FC at grade






Type III Medium w/BLS Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	8,550	B2 U1 G2	8,550	B2 U1 G2	8,550	B2 U1 G2
	80	7,500	B1 U1 G2	7,975	B1 U1 G2	8,450	B2 U1 G2	8,550	B2 U1 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



**Luminaire EPA**

<b>Horizontal Tenon Mount – Weight: 15.6 lbs. (7.1kg); RSW-BLSM Accessory: add 0.4 lbs. (0.2kg); RSW-CLSM or RSW-FLSM Accessories: add 0.6 lbs. (0.3kg)</b>					
Luminaire	Single	2 @ 90°	2 @ 180°	3 @ 90°	4 @ 90°
<b>Tenon Configuration</b> If used with Cree tenons, please add tenon EPA with luminaire EPA					
					
	PD-1H4; PT-1H	PD-2H4(90); PT-2H(90)	PD-2H4(180); PT-2H(180)	PD-3H4(90); PT-3H(90)	PD-4H4(90); PT-4H(90)
Standard Luminaire	0.86	1.24	1.71	2.10	2.49
Luminaire w/RSW-BLSM, RSW-CLSM or RSW-FLSM Accessory	0.86	1.59	1.71	2.45	3.19

**Tenon EPA**

Part Number	EPA
PD Series Tenons	0.09
PT Series Tenons	0.10
WM-2L	0.13
XA-TMDA8	0.19

<b>Tenons and Brackets* (must specify color)</b>	
<p><b>Square Internal Mount Horizontal Tenons (Aluminum)</b>                      - Mounts to 4" (102mm) square aluminum or steel poles                      PD-1H4 – Single      PD-3H4(90) – 90° Triple                      PD-2H4(90) – 90° Twin      PD-4H4(90) – 90° Quad                      PD-2H4(180) – 180° Twin</p>	<p><b>Round External Mount Horizontal Tenons (Aluminum)</b>                      - Mounts to 2.375"-3" (60-76mm) O.D. round aluminum or steel poles or tenons                      PT-1H – Single      PT-3H(90) – 90° Triple                      PT-2H(90) – 90° Twin      PT-4H(90) – 90° Quad                      PT-2H(180) – 180° Twin</p>
<p><b>Wall Mount Brackets</b>                      - Mounts to wall or roof                      WM-2L – Extended Horizontal</p>	<p><b>Direct Arm Pole Adaptor Bracket</b>                      - Mounts to 3-6" (76-152mm) round or square aluminum or steel poles                      XA-TMDA8</p>

\* Refer to the [Bracket and Tenons spec sheet](#) for more details



**Field Adjustable Output (Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:**

The Field Adjustable Output option enables the street and area luminaire within the RSW Series on this page to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected lumen output, will be fully adjustable between the outputs, and will include a wattage label that indicates the wattage of the luminaire at the selected lumen output (Rounded to nearest 10 watts per ANSI C136.15-2015.). Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

**Locked Lumen Output (X7/X6/X5/X4/X3/X2/X1) Option Description:**

The Locked Lumen Output option on this page permanently locks the lumen output on the RSW Series street and area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected, and will include a wattage label that indicates the wattage of the setting selected. When this option is selected, the luminaire output is not able to be adjusted in the field except if a dimming control (by others) is used in the 7-Pin receptacle.

**Q & X Option Power & Lumen Data – 9L**

Q Option Setting	X Option Setting	CCT/CRI	System Watts <sup>†</sup>		Lumen Values <sup>†</sup>		Optics Qualified on DLC QPL	
			120-277V	Label Wattage	2LG, 2ME & 3ME	w/BLS	Standard	Premium
Q8 (Full Power)	N/A (Full Power)	27K8	83	80	8,175	7,500	2LG, 2ME, 3ME	
		30K7	83	80	9,325	8,550		2LG, 2ME, 3ME
		30K8	83	80	8,700	7,975	2LG, 2ME, 3ME	
		40K7	78	80	9,325	8,550		2LG, 2ME, 3ME
		40K8	83	80	9,200	8,450	2LG, 2ME, 3ME	
		50K7	77	80	9,325	8,550		2LG, 2ME, 3ME
		50K8	80	80	9,325	8,550		2LG, 2ME, 3ME
Q7	X7	27K8	81	80	7,975	7,325	2LG, 2ME, 3ME	
		30K7	81	80	9,100	8,350		2LG, 2ME, 3ME
		30K8	81	80	8,500	7,800	2LG, 2ME, 3ME	
		40K7	76	80	9,100	8,350		2LG, 2ME, 3ME
		40K8	81	80	8,975	8,250	2LG, 2ME, 3ME	
		50K7	75	80	9,100	8,350		2LG, 2ME, 3ME
		50K8	78	80	9,100	8,350		2LG, 2ME, 3ME
Q6	X6	27K8	75	80	7,850	7,200	2LG, 2ME, 3ME	
		30K7	75	80	8,975	8,250		2LG, 2ME, 3ME
		30K8	75	80	8,375	7,675	2LG, 2ME, 3ME	
		40K7	71	70	8,975	8,250		2LG, 2ME, 3ME
		40K8	75	80	8,850	8,125	2LG, 2ME, 3ME	
		50K7	70	70	8,975	8,250		2LG, 2ME, 3ME
		50K8	73	70	8,975	8,250		2LG, 2ME, 3ME
Q5	X5	27K8	69	70	7,300	6,700	2LG, 2ME, 3ME	
		30K7	69	70	8,325	7,650		2LG, 2ME, 3ME
		30K8	69	70	7,775	7,125	2LG, 2ME, 3ME	
		40K7	65	70	8,325	7,650		2LG, 2ME, 3ME
		40K8	69	70	8,225	7,550	2LG, 2ME, 3ME	
		50K7	64	60	8,325	7,650		2LG, 2ME, 3ME
		50K8	67	70	8,325	7,650		2LG, 2ME, 3ME

<sup>†</sup> Electrical and lumen data at 25°C (77°F). Actual wattage and lumen output may differ by +/-10% when operating between 120-277V +/-10%



**Field Adjustable Output (Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:**

The Field Adjustable Output option enables the street and area luminaire within the RSW Series on this page to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected lumen output, will be fully adjustable between the outputs, and will include a wattage label that indicates the wattage of the luminaire at the selected lumen output (Rounded to nearest 10 watts per ANSI C136.15-2015.). Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

**Locked Lumen Output (X7/X6/X5/X4/X3/X2/X1) Option Description:**

The Locked Lumen Output option on this page permanently locks the lumen output on the RSW Series street and area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected, and will include a wattage label that indicates the wattage of the setting selected. When this option is selected, the luminaire output is not able to be adjusted in the field except if a dimming control (by others) is used in the 7-Pin receptacle.

**Q & X Option Power & Lumen Data – 9L**

Q Option Setting	X Option Setting	CCT/CRI	System Watts <sup>†</sup>		Lumen Values <sup>†</sup>		Optics Qualified on DLC QPL	
			120-277V	Label Wattage	2LG, 2ME & 3ME	w/BLS	Standard	Premium
Q4	X4	27K8	65	70	6,800	6,250	2LG, 2ME, 3ME	
		30K7	65	70	7,750	7,125		2LG, 2ME, 3ME
		30K8	65	70	7,225	6,625	2LG, 2ME, 3ME	
		40K7	62	60	7,750	7,125		2LG, 2ME, 3ME
		40K8	65	70	7,650	7,025	2LG, 2ME, 3ME	
		50K7	61	60	7,750	7,125		2LG, 2ME, 3ME
		50K8	63	60	7,750	7,125		2LG, 2ME, 3ME
Q3	X3	27K8	61	60	6,400	5,875	2LG, 2ME, 3ME	
		30K7	61	60	7,300	6,700		2LG, 2ME, 3ME
		30K8	61	60	6,825	6,275	2LG, 2ME, 3ME	
		40K7	59	60	7,300	6,700		2LG, 2ME, 3ME
		40K8	61	60	7,200	6,600	2LG, 2ME, 3ME	
		50K7	58	60	7,300	6,700		2LG, 2ME, 3ME
		50K8	60	60	7,300	6,700		2LG, 2ME, 3ME
Q2	X2	27K8	60	60	6,125	5,625	2LG, 2ME, 3ME	
		30K7	60	60	7,000	6,425		2LG, 2ME, 3ME
		30K8	60	60	6,525	6,000	2LG, 2ME, 3ME	
		40K7	56	60	7,000	6,425		2LG, 2ME, 3ME
		40K8	60	60	6,900	6,325	2LG, 2ME, 3ME	
		50K7	56	60	7,000	6,425		2LG, 2ME, 3ME
		50K8	58	60	7,000	6,425		2LG, 2ME, 3ME
Q1	X1	27K8	50	50	5,700	5,225	2LG, 2ME, 3ME	
		30K7	50	50	6,500	5,975		2LG, 2ME, 3ME
		30K8	50	50	6,050	5,550	2LG, 2ME, 3ME	
		40K7	48	50	6,500	5,975		2LG, 2ME, 3ME
		40K8	50	50	6,400	5,875	2LG, 2ME, 3ME	
		50K7	47	50	6,500	5,975		2LG, 2ME, 3ME
		50K8	49	50	6,500	5,975		2LG, 2ME, 3ME

<sup>†</sup> Electrical and lumen data at 25°C (77°F). Actual wattage and lumen output may differ by +/-10% when operating between 120-277V +/-10%



## IMPORTANT SAFEGUARDS

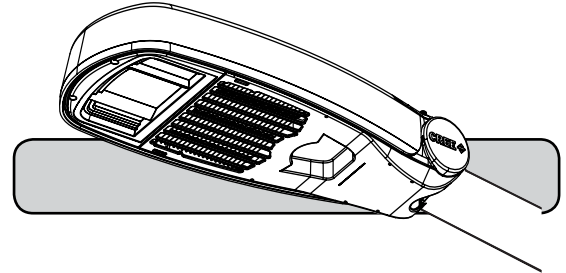
When using electrical equipment, basic safety precautions should always be followed including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

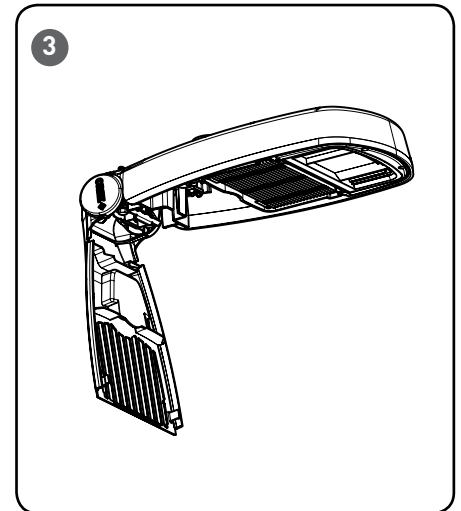
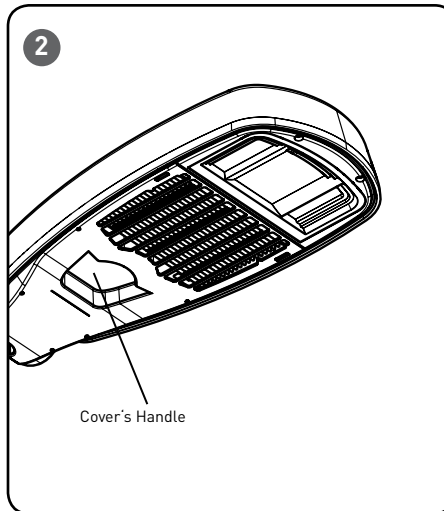
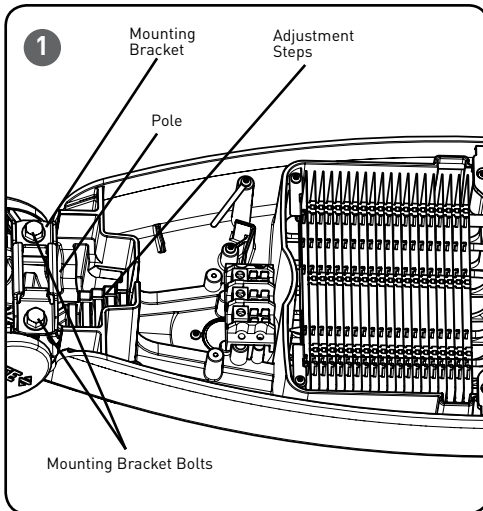
- 1. DANGER-** Risk of shock- Disconnect power before installation.  
**DANGER – Risque de choc – Couper l'alimentation avant l'installation.**
- This luminaire must be installed in accordance with the NEC or your local electrical code. If you are not familiar with these codes and requirements, consult a qualified electrician.  
*Ce produit doit être installé conformément à NEC ou votre code électrique local. Si vous n'êtes pas familier avec ces codes et ces exigences, veuillez contacter un électricien qualifié.*
- If NEMA® photo control is installed refer to NEMA® Receptacle section for instructions.
- If mounting bolts are completely removed in the field they should be hand threaded (prior to use of power tools) to ensure proper engagement of the thread when re-installing. Failure to pre-start threads may result in cross-threading or stripping of the bolts during reinstallation.

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

#### INSTALLATION INSTRUCTIONS



#### TO INSTALL:



#### LUMINAIRE INSTALLATION

##### STEP 1:

Slide fixture on to a minimum 8" tenon, through opening on the rear of housing. See **Figure 1**.

##### STEP 2:

Once desired position is achieved, open cover by holding fixture and pulling the handle and allow the cover to swing open. See **Figure 2 and 3**.

##### STEP 3:

To level fixture, use bubble level located inside housing. Adjust leveling of fixture from side to side by rotating fixture on pole. To level from front to back, slide pole in or out to different step in upper housing. Each step changes the angle in 2.5 increments

##### STEP 4:

**NOTE:** When tightening bolts make sure to alternate between bolts to keep bracket straight.

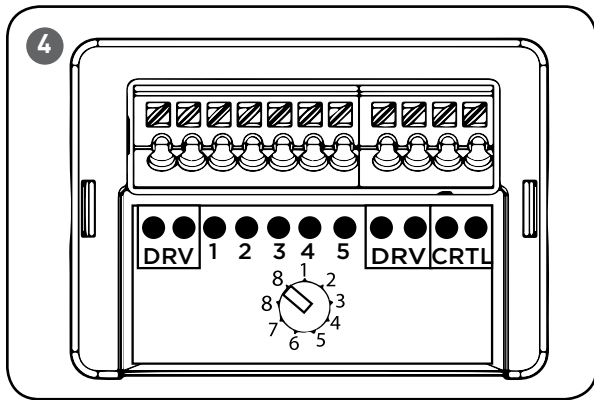
Tighten mounting bolts to the appropriate torque values specified in TORQUE VALUES table on page 2. See **Figure 1** (use 9/16" socket wrench).

##### STEP 5:

Reference **Electrical Connections** section for completing electrical connections.



TORQUE VALUES			
Pipe Size	Pipe Position	Bolt Torque Required (in-lbs)	Bolt Torque Required (N-m)
1.66 in O.D.	+5.0 degrees tilt	200 +/-30	23 +/-3
	+2.5 degrees tilt	200 +/-30	23 +/-3
	0 degrees (no tilt)	200 +/-30	23 +/-3
	-2.5 degrees tilt	200 +/-30	23 +/-3
	-5.0 degrees tilt	200 +/-30	23 +/-3
2.38 in O.D.	+5.0 degrees tilt	200 +/-30	23 +/-3
	+2.5 degrees tilt	200 +/-30	23 +/-3
	0 degrees (no tilt)	200 +/-30	23 +/-3
	-2.5 degrees tilt	200 +/-30	23 +/-3
	-5.0 degrees tilt	200 +/-30	23 +/-3



## NEMA® RECEPTACLE

**NOTE:** Dimming capabilities are accessible through the NEMA® receptacle when used with a photo control with dimming capabilities.

### STEP 1:

Rotational adjustment of the photo control is tool-less.

### STEP 2:

Engage/install photo control into NEMA receptacle on top of the fixture. If no photo control will be used with luminaire install customer supplied shorting plug into receptacle.

### STEP 3:

Firmly rotate photo-control with its photo-eye approximately in the 'N' north direction. Some photo-controls operate best somewhere between NW and NE.

## FIELD ADJUSTABLE OUTPUT (OPTIONAL)

**NOTE:** When ordered with the Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output Option, this luminaire includes an internal field adjustable output module, and ships from the factory at the field adjustable output setting selected. Refer to the spec sheet for power and lumen values for each of the settings.

### STEP 1:

The Field Adjustable Output module is located inside the luminaire. Open the cover by holding luminaire and pulling the handle. Allow the cover to swing open.

### STEP 2:

Establish the desired input power or lumen output by referring to the product spec sheet and turn the switch to the correlating position. See **Figure 4**.

### STEP 3:

Close the cover ensuring no wires are pinched.

## FCC NOTICE

**CAUTION:** Changes or modifications not expressly approved could void your authority to use this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.  
CAN ICES-003 (A)/NMB-003 (A)



## ELECTRICAL CONNECTIONS

### STEP 1:

Make the following Electrical Connections to the terminal block:

- For 120/277V connect the black fixture lead to the voltage supply position of the terminal block (Hot 1 for 208/240V wiring).
- For 120/277V connect the white fixture lead to the neutral supply position of the terminal block or (Hot 2 for 208/240V wiring).
- Connect the green or green/yellow ground lead to the green wire position of the terminal block.

Dimming capabilities are accessible through the NEMA® receptacle when used with a photo control with dimming capabilities.

### STEP 2:

Push excess supply wires into pole.

### STEP 3:

Close cover, making sure that no wires are pinched and latches are fully engaged.

