

TOWN OF GLASTONBURY

INVITATION TO BID

<u>BID #</u>	<u>ITEM</u>	<u>DATE & TIME REQUIRED</u>
GL-2009-11	Furnish & Install Softball Sportslighting (Retrofit)	October 23, 2008 @ 11:00 a.m.

The Town of Glastonbury is seeking bids for installation new softball sportslighting luminaires on existing poles at the Academy Field, 2155 Main Street, Glastonbury, Connecticut.

Bid forms may be obtained at the Office of the Purchasing Agent, Town Hall, 2155 Main Street, Glastonbury, Connecticut 06033 (second level) or on the Town's website at www.glastonbury-ct.gov

A mandatory pre-bid meeting and site walk through will be held at the project site, 2155 Main Street, Glastonbury, Connecticut on Friday, October 17, 2008 at 1:00 p.m.

The Town reserves the right to waive informalities or reject any part of, or the entire bid, when said action is deemed to be in the best interest of the Town. All Sealed Bids must be submitted to the Office of the Purchasing Agent no later than the time and date indicated. All bids will be publicly opened and read.

Mary F. Visone
Purchasing Agent

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
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BID #GL-2009-11

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*Please Note – Detailed Specification DS-12 is a separate document

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
INFORMATION FOR BIDDERS**

BID #GL-2009-11

1. Sealed bids (**one original and one copy**) on the attached Bid Forms will be received at the Office of the Purchasing Agent, Town Hall, 2155 Main Street, Glastonbury, Connecticut, 06033 (second level). At the designated time of opening, they will be publicly opened, read, recorded and placed on file.
2. Whenever it is deemed to be in the best interest of the Town, the Town Manager, Purchasing Agent or designated representative shall waive informalities in any and all bids. The right is reserved to reject any bid, or any part of any bid, when such action is deemed to be in the best interest of the Town of Glastonbury.
3. Bidders shall submit a Bid on a lump sum basis for the Base Bid and include a separate price of each alternate described in the Bidding Documents as provided for in the Bid Proposal. The price for each alternate will be the amount added to or deleted from the Base Bid if the Owner selects the alternate. The basis of award will be based upon the sum of the Base Bid plus the sum of any alternates accepted by the Owner.
4. Bids will be carefully evaluated as to conformance with stated specifications.
5. The envelope enclosing your bid should be clearly marked by bid number, time of bid opening, and date.
6. Specifications must be submitted complete in every detail and, when requested, samples shall be provided. If a bid involves any exception from stated specifications, they must be clearly noted as exceptions, underlined, and attached to the bid.
7. The Bid Documents contain the provisions required for the requested item. Information obtained from an officer, agent, or employee of the Town or any other person shall not affect the risks or obligations assumed by the Bidder or relieve him/her from fulfilling any of the conditions of the bid.
8. Each Bidder is held responsible for the examination and/or to have acquainted themselves with any conditions at the job site which would affect their work before submitting a bid. Failure to meet this criteria shall not relieve the Bidder of the responsibility of completing the bid without extra cost to the Town of Glastonbury.
9. Any bid may be withdrawn prior to the above-scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and the date specified shall not be considered. No Bidder may withdraw a bid within sixty (60) days after the actual date of the opening thereof. Should there be reasons why a bid cannot be awarded within the specified period, the time may be extended by mutual agreement between the Town and the Bidder.
10. Each bid must be accompanied by a bid bond payable to the Town for ten percent (10%) of the total amount of the bid. The bid bond of the successful Bidder will be retained until the payment bond and performance bond have been executed and approved, after which it will be returned. A certified check may be used in lieu of a bid bond. The Town of Glastonbury will not be liable for the accrual of any interest on any certified check submitted. Cashier's checks will not be accepted.
11. A 100% Performance and Payment bond is required of the successful bidder. This bond shall cover all aspects of the specification and shall be delivered to the Purchasing Agent prior to the issuance of a purchase order. The Performance and Payment Bond will be returned upon the delivery and acceptance of the bid items.
12. The Bidder agrees and warrants that in the submission of this sealed Bid, they will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religion, national origin, sex, or physical disability including, but not limited to blindness, unless it is shown by such Bidder that such disability prevents performance of that which must be done to successfully

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fulfill the terms of this sealed Bid or in any manner which is prohibited by the laws of the United States or the State of Connecticut: and further agrees to provide the Human Relations Commission with such information requested by the Commission concerning the employment practices and procedures of the Bidder. An Affirmative Action Statement will be required by the successful Bidder.

13. Bidder agrees to comply with all of the latest Federal and State Safety Standards and Regulations and certifies that all work required in this bid will conform to and comply with said standards and regulations. Bidder further agrees to indemnify and hold harmless the Town for all damages assessed against the Town as a result of Bidder's failure to comply with said standards and/or regulations.
14. All correspondence regarding any purchase made by the Town of Glastonbury shall reference the Town's purchase order number. Each shipping container shall clearly indicate both Town purchase order number and item number.
15. Bidder is required to review the Town of Glastonbury Code of Ethics adopted July 8, 2003 and effective August 1, 2003. Bidder shall acknowledge that they have reviewed the document in the area provided on the bid/proposal response page (BP). The selected Bidder will also be required to complete and sign an Acknowledgement Form prior to award. The Code of Ethics and the Consultant Acknowledgement Form can be accessed at the Town of Glastonbury website at www.glasct.org. Upon entering the website click on **General Information**, then **Bids and Quotes** which will bring you to the links for the **Code of Ethics** and the **Consultant Acknowledgement Form**. If the Bidder does not have access to the internet, a copy of these documents can be obtained through the Purchasing Department at the address listed within this bid/proposal.
16. Any bidder, in order to be considered, shall be engaged primarily in the business of electrical work with a minimum of five (5) years experience and have a valid electrical contractor's license in the State of Connecticut.
17. **Non-Resident Contractors:**

The Town is required to report names of non-resident (out-of-State) contractors to the State of Connecticut, Department of Revenue Services (DRS) to ensure that Employment Taxes and other applicable taxes are being paid by Contractors. **Upon award, all non-resident contractors must furnish a five percent (5%) sales tax guarantee bond (State Form AU-766) or a cash bond for five percent (5%) of the total contract price (State Form AU-72) to DRS even though this project is exempt from most sales and use taxes.**

See State Notice to Non-Resident Contractors SN 2005 (12). If the above bond is not provided, the Town is required to withhold five percent (5%) from the contractor's payments and forward it to the State DRS.

The Contractor must promptly furnish to the Town a copy of the Certificate of Compliance issued by the State DRS.

18. Bidder shall include on a sheet(s) attached to its proposal a complete disclosure of all past and pending mediation, arbitration and litigation cases that the bidder or its principals (regardless of their place of employment) have been involved in for the most recent five years. Please include a statement of the issues in dispute and their resolution. Acceptability of Bidder based upon this disclosure shall lie solely with the Town.
19. Bidder or its principals, regardless of their place of employment, shall not have been convicted of, nor entered any plea of guilty, or nolo contendere, or otherwise have been found civilly liable or criminally responsible for any criminal offense or civil action. Bidder shall not be in violation of any State or

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local ethics standards or other offenses arising out of the submission of bids or proposals, or performance of work on public works projects or contracts.

20. Municipal construction projects are exempt from Federal Excise Taxes, as well as, State of Connecticut Sales, Use and Service Taxes and should not be include in the Bidder's proposal.
21. After award of Contract, Owner will require the Contractor's schedule of Values, which shall be submitted at the preconstruction meeting. The Schedule of Values must accurately reflect job costs and include a complete breakdown of material and labor costs.
22. Electric power and sanitary facilities are available on site.

IMPORTANT:

Failure to comply with general rules may result in disqualification of the Bidder.

For technical questions regarding this Bid, please contact Raymond E. Purtell, Director of Parks and Recreation, at (860) 652-7687.

For administrative questions regarding this Bid, please contact Mary F. Visone, Purchasing Agent at (860) 652-7588.

01.00 WORKMANSHIP, MATERIALS AND EMPLOYEES

- 01.01 Wherever in this contract the word "Engineer" is used, it shall be understood as referring to the Director of Parks and Recreation of the Town of Glastonbury acting personally or through any assistants duly authorized.
- 01.02 The entire work described herein shall be completed in accordance with the plans and specifications to the full intent and meaning of the same. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and material shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.
- 01.03 The wording "furnish", "install", "construct", "furnish and install", or any similar terms, unless specifically noted to the contrary, shall include all labor, materials, water, tools, equipment, light, power, transportation, and any other services required for the completion of the work.
- 01.04 The Contractor shall at all times enforce strict discipline and good order among his employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned to him.

02.00 SUPERINTENDENT

- 02.01 The Contractor shall keep on the work during its progress, in the absence of the Contractor, a competent Superintendent. The Superintendent shall be acceptable to the Engineer and shall fully represent the Contractor. All directions given to the Superintendent shall be binding as if given to the Contractor.

03.00 PRECONSTRUCTION MEETING

- 03.01 A Preconstruction Meeting will be held with the Engineer, Contractor, and any private utility company prior to commencing any work. The Engineer shall arrange the meeting based on a mutually convenient time.

04.00 PERMITS

- 04.01 All permits, licenses, and fees required for the performance of the Contract work shall be secured and paid for by the Contractor. The local building permit fees will be waived.

05.00 PROPERTY ACCESS

- 05.01 The Contractor shall take all proper precautions to protect from injury or unnecessary interference, and provide proper means of access to abutting property where the existing access is cut off by the Contractor.
- 05.02 The Contractor shall take all proper precautions to protect persons from injury or unnecessary inconvenience and leave an unobstructed way along the public and private places for travelers, vehicles, and access to hydrants.
- 05.03 The Contractor shall make arrangements with the adjacent property owners for such trespass as he may reasonably anticipate in the performance of the work. All such arrangements shall be reported, in writing, to the Engineer.

06.00 PROTECTION OF THE PUBLIC AND OF WORK AND PROPERTY

- 06.01 The Contractor shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the Town from injury or loss arising in connection with the Contract.
- 06.02 The Contractor shall adequately protect adjacent private and public property as provided by law and the Contract Documents.
- 06.03 The Contractor shall make good any damage, injury, or loss of work and to the property of the Town resulting from lack of reasonable protective precautions.

07.00 EXISTING IMPROVEMENTS

- 07.01 The Contractor shall conduct his work so as to minimize damage to existing improvements designated to remain. Except where specifically stated otherwise in the specifications, drawings, or as directed by the Engineer, it will be the responsibility of the Contractor to restore to their original condition, as near as practical, all improvements on public or private property. This shall include:
- a. Property within and adjacent to the work area such as shrubs, walks, driveways, fences, etc.
 - b. Utility mains, ducts, poles, and services. The Contractor is hereby notified that utilities, if/where shown on the plans, are at approximate locations. These locations are subject to possible errors in the source of information and errors in transcription. The Contractor shall make certain of the exact location of all mains, ducts, poles, and services prior to excavation.

08.00 SEPARATE CONTRACTS

- 08.01 The Engineer reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. Wherever work being done by the Town of Glastonbury forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer to secure the completion of the various portions of the work.

09.00 INSPECTION OF WORK

- 09.01 The Town shall provide sufficient personnel for the inspection of the work.
- 09.02 The Engineer shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and for inspection.
- 09.03 If the specifications or the Engineer's instructions require any work to be specially tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection and, if the inspection is by another authority other than the Engineer, of the date fixed for such inspection. Inspections by the Engineer shall be made promptly. If any work should be covered up without approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination and properly restored at the Contractor's expense.
- 09.04 Re-inspection of any work may be ordered by the Engineer. If such work is found to be in accordance with the Contract Documents, the Town shall pay the cost of re-inspection and

replacement. If such work is not in accordance with the Contract Documents, the Contractor shall pay such cost.

10.00 RIGHT TO INCREASE OR DECREASE WORK

10.01 The Town shall have the right to increase or decrease the amount of work herein specified as may be required.

11.00 RIGHT OF ENGINEER TO STOP WORK FOR WEATHER CONDITIONS

11.01 Should the work, in the opinion of the Engineer, be in danger by reason of inclemency of weather, or could not be finished in time to prevent such danger, the Contractor shall cease operations upon order of the Engineer, and shall not resume them until ordered to do so by the Engineer when the weather conditions are favorable. The Contractor shall, upon such orders, discontinue work, remove all materials or appliances for or in use upon the work, and place the streets in proper condition for use by the public during the time the work is suspended as herein provided, without cost to the Town.

12.00 CONTRACTOR TO BE RESPONSIBLE FOR IMPERFECT WORK OR MATERIALS

12.01 Any faithful work or imperfect material that may be discovered before the acceptance and the payment of the work shall be corrected upon the order of the Engineer. The acceptance and payment of the work does not in any manner relieve the Contractor of his obligation to construct work in the proper manner and the use of materials herein specified.

13.00 TOWN MAY NOTIFY CONTRACTOR IF WORK IS NOT CARRIED ON SATISFACTORILY

13.01 If, in the opinion of the Engineer, the Contractor is not proceeding with the work at a sufficient rate of progress so as to finish in the time specified, or has abandoned said work, or is not complying with the terms and stipulations or the Contract and specifications, the Engineer may serve notice on the Contractor to adopt such methods as will ensure the completion of the work in the time specified.

13.02 If, within five days after the Engineer has notified the Contractor that his work is not being carried on satisfactorily as before mentioned, the Engineer shall have the right to annul the Contract and manage the work under the direction of the Engineer, or re-let, for the very best interest of the Town as a new contract, the work under said new Contract shall be considered the responsibility of the defaulting Contractor.

13.03 Additional costs incurred over and above the original Contract shall be borne by the Performance Bond.

14.00 DEDUCTIONS FOR UNCORRECTED WORK

14.01 If the Engineer deems it inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made there for.

14.02 The Contractor shall promptly remove from the premises all materials condemned by the Engineer as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the Town, and shall bear the expense of making good all work by other contractors destroyed or damaged by such removal or replacement.

14.03 If the Contractor does not remove such condemned work and materials as promptly as possible after written notice, the Engineer may remove them and store the materials at the expense of the Contractor.

15.00 CLEANING UP

15.01 The Contractor must remove all debris of every description as the work progresses and leave the surroundings in a neat and orderly condition to the satisfaction of the Engineer.

15.02 Upon completion, and before acceptance and final payment, the Contractor shall remove from the site all equipment, forms, surplus material, rubbish and miscellaneous debris and leave the site in a neat and presentable condition.

16.00 ROYALTIES AND PATENTS

16.01 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Town of Glastonbury harmless from loss on account hereof, except that the Town of Glastonbury shall be responsible for all such loss when a particular manufacturer, product, or process is specified by the Town of Glastonbury.

17.00 ERRORS OR CONFLICT IN DRAWINGS AND SPECIFICATIONS

17.01 The Contractor shall immediately notify the Owner/Engineer should he find any errors or conflicts in the contract documents. The Owner/Engineer shall render his interpretation or instruction in writing on the items as soon as possible.

17.02 Any work undertaken by the Contractor containing possible errors or conflicts will be done at his own risk unless he has received prior written approval from the Owner/Engineer.

17.03 The Contractor shall be responsible for estimating and supplying all quantities: and where clarification or additional information is required, a request in writing to the Owner/Engineer shall be made. No extra charge or compensation will be allowed the Contractor unless there is a change in scope or dimension of the project resulting in need for extra material, equipment and/or labor. Said differences are to be handled under Article 18.

18.00 EXTRA WORK AND EXTRA COST

18.01 The Owner, without invalidating the contract documents, may order extra work or make changes by altering, adding to or deducting from the work, the contract price being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim of extension of time caused thereby shall be adjusted at the time of ordering the change.

18.02 No extra work or change shall be performed unless in pursuance of a written order from the Owner/Engineer, with the agreed price prior to the commencement of the work, and no claim for an addition to the contract price shall be valid unless so ordered.

18.03 The value of any such work or change shall be determined, in one or more of the following ways:

- a) By estimate and acceptance on a lump sum.
- b) By unit prices named in the contract or subsequently agreed upon.
- c) By cost and percentage or by cost and a final fee.

19.00 SUBSTITUTIONS

19.01 The Contractor shall use materials as specified unless material list is of an open nature. Material other than specified will be permitted only after written application, including four (4) copies of specifications, is made by the Contractor and written approval received from the Engineer or Owner.

The material installed in the job site shall be new and of the quality specified.

The manufacturer's recommendation shall be followed for the installation of all equipment.

20.00 PRODUCT SUBMITTALS

20.01 Prior to ordering materials, the Contractor shall submit manufacturer's product data and installation instructions for each of the system components including complete wiring diagrams. Three (3) copies of the submittals shall be forwarded to the Engineer for review and approval.

20.02 Submittals shall indicate specification Section for each product. Submittals not containing all the required information shall be returned to the contractor for re-submittal.

21.00 OWNER'S ACCEPTANCE

21.01 Within seven (7) days of the Contractor's notification that the installation is substantially complete, the Owner's authorized representative shall inspect the installation. The Owner, with the Contractor, shall take necessary steps to check out all equipment for operation. Upon completion of the inspection, the Owner or the Owner's authorized representative may either accept the system outright or prepare a "Punch List" that upon completion by the Contractor and acceptance by the Owner will signify final acceptance provided that all other applicable terms and provisions of the Contract have been completed to the Owner's satisfaction.

22.00 RESPONSIBILITY FOR MAINTENANCE

22.01 It will be the Contractor's responsibility to maintain the system in working order during the warranty period.

23.00 SERVICE BY THE CONTRACTOR

23.01 The Contractor shall service the system at the Owner's request during the warranty period and shall be paid for work performed that is not covered by the warranty. If requested by the Owner, the Contractor will furnish the Owner with a schedule of service fees.

23.02 The Contractor shall start up and test the sportslighting system prior to the start of the warranty period.

24.00 WARRANTY

24.01 The warranty shall be as specified in Section 16500 Lighting 2.8 Sportslighting System warranty.

24.02 The Contractor shall extend to the Owner any and all warranties that apply to equipment found to be defective in either materials or workmanship, as extended by the manufacturer and/or distributor to the Contractor. The limits of this equipment warranty shall be as expressly stated by the appropriate manufacturer/distributor in writing. No further warranty, expressed or implied in fact or in law, shall be given by the Contractor.

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
GENERAL CONSTRUCTION SPECIFICATIONS**

BID #GL-2009-11

- 24.03 The Contractor shall be responsible for the repair and/or replacement of all defective work and materials. He shall not rely on the equipment manufacturers and/or suppliers to perform this work, unless agreed to by the Owner and Engineer. All repair work shall be completed in a timely fashion.
- 24.04 Should the Contractor not respond promptly, the Owner may take any action he deems necessary to repair the defect and prevent further damage to his property, including the hiring of another contractor, or the repairing of such a defect with material supplied by the Contractor. In this event, the Contractor shall be liable for expenses incurred and property damages suffered by the Owner.

01.00 NOTICE TO CONTRACTOR

01.01 Intent of Contract: The intent of the Contract is to prescribe a complete work or improvement which the Contractor undertakes to do, in full compliance with the specifications, plans, special provisions, proposal and Contract. The Contractor shall perform all work in close conformity with the plans or as modified by written orders, including the furnishing of all materials, supplies, transportation, labor, and all other things necessary to the satisfactory prosecution and completion of the project.

The scope of the work shall include all labor, materials and equipment needed to: (1) demolish and remove the existing sportslighting; and (2) install and aim the new fixtures in accordance with manufacturer's recommendations and local codes. The new luminaires shall be mounted to the existing support structure and connected to the existing electric service. Project Location: Academy Field, 2155 Main Street, Glastonbury, Connecticut 06033.

02.00 COMMUNICATIONS

02.01 All notices, demands, requests, instructions, approvals, proposals, and claims must be in writing.

02.02 Any notice to, or demand upon, the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may, from time to time, designate) in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.

02.03 All papers required to be delivered to the Town shall, unless otherwise specified in writing to the Contractor, be delivered to the Director of Parks and Recreation, 2155 Main Street, Glastonbury, CT 06033, and any notice to, or demand upon, the Town shall be delivered at the above address in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office or to such other representatives of the Town, or to such other address as the Town may subsequently specify in writing to the Contractor for such purpose.

02.04 Any such notice shall be deemed to have been given as of the time of actual delivery or, in case of mailing, when the same should have been received in due course of post or, in the case of telegrams, at the time of actual receipt, as the case may be.

03.00 INSURANCE

03.01 The Contractor shall, at its own expense and cost, obtain and keep in force during the entire duration of the project or work, the following insurance covering the Contractor and all of its agents, employees and subcontractors, and other providers of services, and shall name the Town of Glastonbury, its employees and agents as an Additional Insured on a primary and non-contributory basis to the Contractor's Commercial General Liability and Automobile Liability policies. Insurance shall be written with Carriers approved in the State of Connecticut and with a minimum Best's Rating of A-. In addition, all Carriers are subject to approval by the Town of Glastonbury.

1) Worker's Compensation Insurance:

- Statutory Coverage
- Employer's Liability
- \$100,000 each accident/\$500,000 disease-policy limit/\$100,000 disease each employee

2) Commercial General Liability:

- Including Premises & Operations, Products and Completed Operations, Personal and Advertising Injury, Contractual Liability and Independent Contractors.
- Limits of Liability for Bodily Injury and Property Damage
Each Occurrence \$1,000,000
Aggregate: \$2,000,000 (The Aggregate Limit shall apply separately to each job.)
- A Waiver of Subrogation shall be provided

3) Automobile Insurance:

- Including all owned, hired, borrowed and non-owned vehicles
- Limit of Liability for Bodily Injury and Property Damage:
Per Accident: \$1,000,000

4) Umbrella Liability Coverage, including Asbestos/Pollution Liability

- Limit of Liability of \$1,000,000.

03.02 The bidder shall direct its Insurer to provide a Certificate of Insurance to the Town of Glastonbury before any work is performed. The Certificate shall specify that the Town of Glastonbury shall receive 30 days advance written notice of cancellation or non-renewal. The Certificate shall evidence all required coverage, including the Additional Insured and Waiver of Subrogation.

03.03 To the fullest extent permitted by law, the Bidder shall indemnify and hold harmless the Town and its consultants, agents, and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including, but not limited to, fees and charges of engineers, attorneys and other professionals, and court and arbitration costs) arising out of or resulting from the performance of the Bidder's work, provided that such claim, damage, loss, or expense is caused in whole or in part by any negligent act or omission by the Bidder, any person or organization directly or indirectly employed or engaged by the Bidder to perform or furnish either of the services, or anyone for whose acts the Bidder may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

04.00 WORK BY OTHERS

04.01 Private utilities, contractors, developers or other parties may be expected to be working within the Contract area during this Contract. It shall be the responsibility of the contractor to coordinate his work with the work being done by others in order that the construction shall proceed in an efficient and logical manner. The Contractor shall have no claim or claims whatever against the Town, the Engineer, or other parties due to delays or other reasons caused by the work by others or his failure to coordinate such work.

05.00 CONTRACTOR'S WORK AND STORAGE AREA

05.01 The Contractor shall contact the Town to determine if any specific locations will be designated, or gain its approval prior to using any area for storage of equipment, materials and trailers during the period of this Contract. The Contractor shall confine his work/storage area to the limits as designated or approved and shall be responsible for the security of the work/storage area. Upon completion of the Contract, the Contractor shall remove all equipment and materials, except as

otherwise specified, and restore the site to its original condition as approved by the Engineer and at no cost to the Town.

06.00 DISPOSAL AREA

06.01 The Tryon Street Bulky Waste Facility will be available to the Contractor, at no charge, for disposal of materials that are accepted at that facility. No materials containing lead-based paint of any level shall be dumped at the Tryon Street facility. The Contractor is required to obtain a disposal area for all other unsuitable or surplus materials at no cost to the Town.

07.00 DUST CONTROL

07.01 During the progress of the work, the Contractor shall conduct his operations and maintain the area of his activities so as to minimize the creation and dispersion of dust. If the Engineer decides that it is necessary to use water or calcium chloride for more effective dust control, the Contractor shall furnish and spread the material, as directed, without additional compensation.

08.00 PROTECTION OF EXISTING UTILITIES

08.01 Before starting any excavation, the Contractor shall submit to the Engineer plans or details showing the proposed method the Contractor will use to support and protect all existing utilities during construction. The furnishing of such plans and details shall not serve to relieve the Contractor of any responsibility for the proper conduct of the work.

08.02 There will be no extra payment for submitting plans or details for supporting and protecting all existing utilities during construction.

09.00 TIME FOR COMPLETION/NOTICE TO PROCEED

09.01 Within ten (10) calendar days after the date of the Notice of Award, the Contractor must provide the appropriate insurance certificates to the Town Purchasing Agent and shall be issued a Notice to Proceed and a Purchase Order prior to initiating any work on the project.

09.02 Work shall commence within thirty (30) days of the date of the Notice to Proceed/Purchase Order.

09.03 After the work has begun, it will continue in an orderly fashion and shall be fully completed within thirty (30) consecutive calendar days from the date of commencement. The Engineer reserves the right to extend the contract an additional thirty (30) days by mutual written agreement.

09.04 Weather permitting, it is the intention of the Town to have all work required under this Contract completed no later than December 31, 2008. Should, however, there be an extended lead time for delivery of materials from the manufacturer, the Owner may grant an extension of time for completion. In no case, however, shall the work be completed and the system fully operational and turned over for use by the Owner any later than Friday, April 17, 2009.

09.05 Because the park shall remain open during the installation period, the Contractor shall make every reasonable effort to complete the installation as expeditiously as possible.

10.00 MEASUREMENT AND PAYMENT

10.01 All direct, indirect, or incidental costs of work and/or services required by these specifications shall be included in the Lump Sum price.

- 10.02 Progress payments will be made, based on the approved Schedule of Values, for work that has progressed in accordance with the contract documents, subject to a deduction of five percent (5%) of the amount of the application for payment to be retained by the Owner until completion of the entire contract in an acceptable manner and two and one half percent (2.5%) until the applicable two year warranty period has expired and all required testing has been submitted and approved by the Engineer.

Substantial completion is the stage in the progress of the work when the work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the work for its intended use. Substantial completion shall include the following items: (1) all equipment has been installed, tested and calibrated as detailed in the specifications; (2) any deficiencies noted during testing and calibration have been corrected to the satisfaction of the Owner; (3) Owner's manuals (operation and maintenance manuals) have been provided to the Owner and are deemed to be complete; and (4) training of the Owner's representative with respect to the operation and maintenance of the system. The retainage amount can be reduced from five percent (5%) to two and one-half percent (2.5%) at Substantial Completion.

11.00 COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS

- 11.01 This award of bid is subject to the conformance of the Contractor to all Federal, State, and Local laws, statutes, regulations, ordinances or other requirements that are applicable to the type of work contained in these specifications.

SECTION 16000 – GENERAL ELECTRICAL

PART 1 – GENERAL

1. RELATED DOCUMENTS:

- A. The General Provisions of the Contract, General Construction Specifications and Special Conditions, apply to the work specified in this Section.

2. DESCRIPTION:

- A. Work Included: The electrical work shall consist of all labor, equipment and services required to complete, ready for correct operation, all of the work called for by accompanying drawings and these specifications.
- B. The work shall include, but is not limited to:
 - 1. Lighting fixtures, ballasts and lamps.
 - 2. Ballfield lighting.

3. QUALITY ASSURANCE:

A. Codes and Standards:

- 1. All work under this section shall comply with the applicable requirements of the National Electrical Code, local electrical and other codes, laws, regulations and standards including those of all state authorities. Where references are made in laws codes regulation and standards, these documents, including the latest revisions and amendments in effect as of the date of bid opening, shall form part of these specifications. Upon completion of the work, the Contractor shall furnish Certificates of Approval from the local inspection authorities having jurisdiction for approving materials, equipment, installation pertaining to the electrical work as may be required by the local and/or state authority for the issuance of a permanent Certificate of Occupancy. Fees for any permits required by the Town of Glastonbury will be waived.
- 2. Codes enforced at time of bidding include: 2005 Connecticut State Building Code Supplement, 2003 IBC, 2005 Connecticut Fire Code Supplement, 2005 National Electrical Code, ICC/ANSI A117.1-2003, Accessible and Usable Buildings and Facilities, ADA, and 2003 International Energy Conservation Code (IECC).

B. Submittals

- 1. The Contractor shall submit for approval a complete list of materials, fixtures and equipment to be incorporated in the work. The list shall include manufacturer's names and catalog numbers, descriptive data, manufacturer's ratings and application recommendations, cuts, diagrams, performance curves and such other information as may be required by the Owner to judge compliance with the requirements of the contract and suitability to the application. Items on the list shall be clearly identified as to proposed application. Approval of materials and equipment will be based on manufacturer's published ratings.
- 2. When directed by the Owner, the Contractor shall submit in approved form for record, a Certificate of Compliance with a cited code or standard for the designated materials and equipment: such certificates may be accepted in lieu of samples. Any materials or equipment

submitted for approval which are not in accordance with the specifications requirements may be rejected.

3. As part of the coordination work required of the Contractor, installation drawings shall be prepared by the Contractor as necessary. It is intended that these drawings be used to coordinate the work of the various trades and to clarify details of proposed assembly, erection and installation. Installation drawings shall be prepared when indicated in these specifications or on the electrical drawings, or when directed by the Owner for comment or approval when an installation condition or problem arises which the Contractor wishes the Owner to review. All installation drawings submitted for review will be considered and treated as shop drawings and the requirements pertaining to shop drawings shall govern.

C. Record Drawings

1. The Contractor shall maintain an accurate record of all deviations in the work as actually installed from work as indicated. This record shall be kept current and shall be kept available at the site for inspection. Upon completion of the work, and before final payment is authorized, marked prints with signed certifications of accuracy shall be delivered to the Engineer.

D. Manuals

1. The Contractor shall furnish to the Owner operating and maintenance instructions for each piece of equipment and each device.
2. The instructions shall provide detailed descriptions of the operation and maintenance of the equipment or device and shall include manufacturer's literature, detailed wiring diagrams, device internal wiring diagrams, characteristics curves and graphs, data sheets and descriptive literature. The instructions shall be furnished to the Owner 30 days prior to the completion of the work.

E. Product Handling

1. All work, materials, and equipment, whether incorporated into the project or not, shall be protected from damage due to moisture, dirt, plaster, concrete, or from carelessness.
2. All material and equipment which is damaged, including installed work, shall be repaired or replaced to the satisfaction of the Owner.
3. After work is complete, all equipment, including lighting fixtures and lamps, shall be cleaned of all construction dirt.

4. INTENT OF SPECIFICATIONS:

- A. Equipment identified as equal to that called for in the base specification and/or on the base drawings is judged by the Engineer to be equal only in quality and performance. It shall be this Contractor's responsibility to check dimensions of equipment and be responsible for dimensionally fitting and installing the new equipment to the existing poles and crossarms.
- B. Ease of maintenance and access shall be of prime importance in determining the above. The Engineer reserves the right to reject any equipment not meeting the above requirements and demand the base equipment as specified and/or shown on the drawings.

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

5. GUARANTEE FOR EQUIPMENT:

- A. All electrical components included under this Section of the Specifications shall be guaranteed by this Contractor against original defects of equipment and workmanship for a period of 12 months from date of acceptance, unless otherwise specified.

6. CUTTING AND PATCHING:

- A. Cutting and patching for all electrical work shall be done in accordance with best practices in the industry.

7. RUBBISH AND CLEANING:

- A. This Contractor shall be responsible for removal of all rubbish and trash created by the installation of the electrical systems and equipment from the job site. Contractor shall sweep clean all areas.

8. INSTRUCTIONS:

- A. The Superintendent of the electrical work for this particular project shall spend all necessary time required to instruct the Owner's staff in the installation including all special controls and devices installed or connected under this contract.

END OF SECTION 16000

SECTION 16500 – LIGHTING

PART 1 – GENERAL

1. RELATED DOCUMENTS:

- A. The General Provisions of the Contract, including General Construction Specifications and Special Conditions, apply to the work specified in this Section.
- B. The General Requirements in Section 16000 shall also govern the work under this Section.

2. SCOPE

- A. Scope of Work: Includes but is not limited to:
 - 1. Lighting Fixtures.
 - 2. Ballasts.
 - 3. Lamps.
 - 4. Mounting brackets and accessories.
 - 5. Wiring and materials incidental to the installation.

3. QUALITY ASSURANCE:

- A. Refer to Section 16000.
- B. Submit lighting distribution curve for each fixture.

4. SUBMITTALS:

- A. Shop Drawing: Submit for all items listed in Paragraph 2.A.
- B. All lighting fixtures shall be U.L. labeled.
- C. Softball Field Lighting System: The following items shall be submitted for review. Failure to provide any of the following information with the submittal will be grounds for rejection. Each item listed below shall be provided in the form of clear and concise statements and/or plans and drawings, which can be easily read and clearly interpreted. All items shall be assembled in the order indicated and secured or bound in a neat and orderly fashion for easy use and reference. Also provide additional submittal information that may be required as detailed in other sections of the specifications.

1. Lighting System Description:

- a) Lighting layout design showing luminaire mounting heights, reflector types, number of luminaires per pole, and kilowatt consumption.
- b) Computer generated point by point analysis of field light values.
- c) Computer generated spill/glare analysis.

2. Product Information:

- a) Written equipment list with model numbers and manufacturer for all equipment.
- b) A drawing of the sports lighting fixture/pole assembly.
- c) Product data sheets for fixtures, crossarms, and ballast boxes.

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

- d) Luminaire photometric reports.
- e) Ballast data sheet.
- f) Lamp data sheet.

3. Warranty:

- a) Written product warranty by the manufacturer covering the installed components as outlined in the specifications.
- b) Manufacturer shall provide a letter guaranteeing that the footcandle and uniformity levels will be met as specified.

5. PERFORMANCE VERIFICATION:

A. Upon completion of work the Contractor shall submit a test report to demonstrate that the system is performing in accordance with design criteria. The following methods shall be used.

1. Field Verification

- a) All testing and computer analysis shall generate values based upon the following grid size and number of target points per LM-5, the IESNA guide for photometric testing of area and sports lighting installations.
 - Grid Size: 20' x 20'
 - Test Points: The minimum number of test points shall be 72 on each playing field.
 - Field Measurements, Horizontal fc: The flight meter shall be in a horizontal position 36" above the playing surface.
 - To evaluate the actual performance of the installation, illumination measurements should be made in the field on the grids and number of tests points. These readings should be taken with the owner or their representative present.
- b) For final approval, the manufacturer's representative shall provide a final report from the test results that shall provide the following items:
 - Identification of number and location of the test grid.
 - Actual horizontal footcandle readings taken at each test grid.
 - Number of hours of operation.
 - Maximum to minimum ratios.
 - Coefficient of Variation.

PART 2 – PRODUCTS

1. ACCEPTABLE LIST OF LIGHTING FIXTURE MANUFACTURERS

- A. The light fixture schedule on the drawings is intended to indicate style, quality and performance for each fixture type listed. In all cases the base specified fixture shall serve as the standard by which any proposed substitute fixture will be judged.
- B. Lighting fixture submittals shall include dimensioned diagrams, photometric data, photographs or illustration of fixture, and written specifications for each fixture type. Submittals shall include fixture samples and point-by-point calculations as specified under paragraphs 4.C. Incomplete submittals will not be reviewed by the Engineer.

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

2. LIGHT FIXTURE SCHEDULE

- A. Refer to Drawings.

3. SPORTS LIGHTING SYSTEM:

- A. General Description: The system shall consist of Hubbell Lighting, Inc., Sportsliter® Solutions luminaries, as specified, complete with 1500 watt metal halide lamps, a 6' long prewired cord, and slipfitters for a 2" (2-3/8 OD) tenon. Lamps shall meet ANSI designation 48 and be manufactured to industry standards. Approved lamp manufacturers are General Electric, Osrom/Sylvania, Philips or Venture. Double ended or off axis tube lamps are not acceptable. Each individual component of the system shall be UL listed or recognized, as well as, CSA NRTL/C certified or recognized. To ensure structural strength, all mounting hardware shall be provided by the luminaire manufacturer.
- B. Integral Ballasted: The ballast shall be integrally mounted into a heavy-duty one-piece die-cast aluminum housing, with adjustable die-cast lamp socket housing. When the fixture is installed the ballast center of gravity shall be located over the crossarm or tennon so downward torque will not be present as in yoke mounted units. Unit shall have a gray Lektrocote® polyester powder paint finish. Units shall have a built in strain relief bushing. All external hardware shall be captive and is Hubbell Gard® treated to prevent galvanic corrosion. To ensure added durability, the Luminaires must pass a 1G, 100,000-cycle vibration test in each of two planes.
- C. Optics: Floodlight optics shall be computer designed and consist of a one-piece 22" spun aluminum finished reflector providing maximum controlled light output. The lamp shall be mounted horizontally to the parabolic contour of the reflector. Lens shall be thermal shock, impact-resistant, clear tempered glass sealed to reflector by high temperature silicone gasketing and filtered to inhibit entrance of contaminants. Lens ring shall be stainless steel held on with four Hubbell Gard® treated steel latches and one stainless steel hinge. Optics shall operate using standard BT-56 metal halide lamps. Proprietary or off axis lamps will not be acceptable.
- D. Electrical: The floodlight shall be UL 1598 listed for wet location and CSA certified and shall be suitable for 40°C ambient operation. Ballasts shall be 180°C insulated, regulating, high power factor, -20°F starting, copper wound and 100% factory tested. The socket shall be spring loaded, mogul base, nickel plated with lamp grip screw shell. Internal lamp support shall be standard. All electrical components shall be serviced from the top without moving the luminaries aiming position. Cover and screws shall be captive. Unit shall have an isolated ballast and capacitor system along with an isolated supply wire/wiring compartment.
- E. Lamps: The lamp shall be 1500 watt Metal Halide and shall meet ANSI designation M48 and be manufactured to current industry standards. The lamps used must be commercially available through local electrical distribution. Approved lamp manufacturer's are General Electric, Osram/Sylvania, Philips or Venture. The fixture manufacturer shall submit the names, addresses and telephone numbers of three local lamp suppliers with the submittal package. Double ended or off axis arc tube lamps are not acceptable.
- F. Installation: Integral ballasted units shall be installed utilizing a single 25,000-lb. strength captive bolt mounting to crossarms without the need of additional hardware to simplify installation. Unit shall be able to withstand 125-mph winds. Unit shall include a rifle sight type-aiming indicator. Unit shall incorporate both horizontal and vertical degree aiming systems, which will allow pre-aiming on the ground before poles are installed. The vertical protractor shall be ALMAC treated steel and work as a re-positioning stop when re-lamping. The wiring chamber shall be isolated

and require no more than 90°C rated supply wire for 40°C ambient operation. Fusing shall be externally assessable if option is required.

4. SPORTS LIGHTING SYSTEM WARRANTY

- A. Manufacturer shall warrant in writing all fixtures (excluding fuses and lamps) to be free from defects in material and workmanship for a period of seven years starting from the date of shipment.
- B. Manufacturer agrees in writing to provide labor and materials for a period of two years to replace defective parts or repair defects in workmanship, or, at its election, to pay reasonable costs of labor for such repairs. For the remainder of the warranty period, replacement materials will be provided at no charge.
- C. Lamps shall be warranted by the manufacturer in writing not to fail for two years from the date of shipment. Lamps, which fail during the first year of the warranty period, will be replaced and installed at no cost to the owner. Lamps, which fail during the second year, will be replaced by the manufacturer but installation will be the owner's responsibility.
- D. Contractor warrants in writing accurate alignment of the luminaries on the existing crossarm assembly for a period of seven years from the date of acceptance by the Owner.

PART 3 – EXECUTION

1. INSTALLATION:

- A. Each fixture shall be furnished with all necessary trims, brackets, fittings, and any other required accessories to properly install fixture.

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

SPORTSLITER® SOLUTIONS

**Integral Ballasted Luminaire
Horizontal Optics**

SLS

Job Bid GL-2009-11 Furnish & Install Softball Sportslighting(retrofit)	Type
--	------

Dimensions

EPA
2.8 ft.²
.03 m²

Integral Ballasted System Horizontal Optics

A	B	C	D	E
22.87"	35.75"	20.13"	8.75"	5.5"
579 mm	907 mm	511 mm	223 mm	140 mm

Note: Aimed 40° below horizontal

Optional V2 Visor

Specifications

Housing
Die cast aluminum housing. Isolated die cast aluminum socket housing. Isolated ballast compartment. Isolated capacitor compartment. Isolated wiring chamber (maximum 90° input cord). Vertical aiming/repositioning memory. Horizontal aiming indicator. Lektrocote® polyester powder paint finish (gray).

Optics
Horizontal mounted lamp. Uses standard BT-56 lamps. Anodal® finished parabolic reflector. Four point latching. Stainless steel lens ring. Stainless steel door hinge. Silicone gasketing. Tempered clear glass lens. Filtered optics. Front lamp support standard 22 7/8" diameter maximum.

Installation
One captive mounting bolt (3/4" dia.) installed in fixture. Aiming sight included. FAST AIM system. Shipped assembled from factory. Single ballast cover plate for easy access.

Special Features
1g, 100,000 cycle vibration tested. Wind tunnel tested to 120 mph. Captive hardware. Hubbell Gard™ treated external hardware. UL 1598 listed and CSA NRTL certified for 40°C ambient operation. External fusing access. Mogul socket, 4kv pulse rated, 600v rated. 100% factory electrically tested.

UL
SP
NRTL

Ordering Information

series	watt	lamp type	ballast	beam dist.	voltage	sol. cord	lamp	options	options
SLS	1500	H	1	W	8	N/A	L		-6C(x)

Fixture Data

SERIES	BEAM DISTRIBUTION	LAMP
SLS Sportsliter System	N Narrow beam	L Lamp (shipped separately)
	M Medium beam	
	W Wide beam	
WATT	VOLTAGE	OPTIONS
1000 1000W	5 480V	F ¹ (X) Fusing
1500 1500W	8 Quad Tap® (120, 208, 240, 277V)	PH ² Protective Hull
	6 Tri-Tap (120, 277, 347)	V2 ³ 12" External Visor
	E 220/240V, 50 Hz	
LAMP TYPE	BALLAST TYPE	
H Metal Halide	1 HPF regulated PLA	

1. Replace "X" with 2-208V; 3-240V; 4-277V; 5-480V; 6-347V.
2. Hull adds 4lbs. to total weight, shipped separately.
3. Shipped separately.

Handwritten notes:
-6(c)277 6' Prewired SEOWA Cord
QUANTITY: 8

Comments

Submitted by: **Hubbell Lighting, Inc.**, 701 Millennium Blvd., Greenville, SC 29607 864-678-1000 Fax 866-581-0433

Hubbell Outdoor Floodlighting SLS 5A1 - 1/07

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

SPORTSLITER® SOLUTIONS

**Integral Ballasted Luminaire
Horizontal Optics**

SLS

Job	Bid GL-2009-11 Furnish & Install Softball Sportslighting(retrofit)	Type
-----	--	------

Dimensions

Integral Ballasted System Horizontal Optics

A	B	C	D	E
22.87"	35.75"	20.13"	8.75"	5.5"
579 mm	907 mm	511 mm	223 mm	140 mm

Note: Aimed 40° below horizontal

Optional V2 Visor

Specifications

Housing
Die cast aluminum housing. Isolated die cast aluminum socket housing. Isolated ballast compartment. Isolated capacitor compartment. Isolated wiring chamber (maximum 90° input cord). Vertical aiming/repositioning memory. Horizontal aiming indicator. Lektrocote® polyester powder paint finish (gray).

Optics
Horizontal mounted lamp. Uses standard BT-56 lamps. Anoda® finished parabolic reflector. Four point latching. Stainless steel lens ring. Stainless steel door hinge. Silicone gasketing. Tempered clear glass lens. Filtered optics. Front lamp support standard 22 7/8" diameter maximum.

Installation
One captive mounting bolt (3/4" dia.) installed in fixture. Aiming sight included. FAST AIM system. Shipped assembled from factory. Single ballast cover plate for easy access.

Special Features
1g, 100,000 cycle vibration tested. Wind tunnel tested to 120 mph. Captive hardware. Hubbell Gard™ treated external hardware. UL 1598 listed and CSA NRTL certified for 40°C ambient operation. External fusing access. Mogul socket, 4kv pulse rated, 600v rated. 100% factory electrically tested.

Ordering Information

Fixture Data	series	watt	lamp type	ballast	beam dist.	voltage	sol. cord	lamp	options	options
	SLS	1500	H	1	M	8	N/A	L		-6C(X)

SERIES	SLS Sportsliter System	BEAM DISTRIBUTION	N Narrow beam M Medium beam W Wide beam
WATT	1000 1000W 1500 1500W	LAMP	L Lamp (shipped separately)
LAMP TYPE	H Metal Halide	VOLTAGE	5 480V 8 Quad Tap® (120, 208, 240, 277V) 6 Tri-Tap (120, 277, 347) E 220/240V, 50 Hz
BALLAST TYPE	1 HPF regulated PLA	OPTIONS	F¹ (X) Fusing PH² Protective Hull V²³ 12" External Visor

1. Replace "X" with 2-208V; 3-240V; 4-277V; 5-480V; 6-347V.
2. Hull adds 4lbs. to total weight, shipped separately.
3. Shipped separately.

-6(C)277 6' Prewired
SEOWA CORD

QUANTITY: 26

Comments

Submitted by: Hubbell Lighting, Inc., 701 Millennium Blvd., Greenville, SC 29607 864-678-1000 Fax 866-581-0433

Outdoor Floodlighting
SLS 5A1 - 1/07

SPORTSLIGHTING

SLS SERIES ACCESSORIES

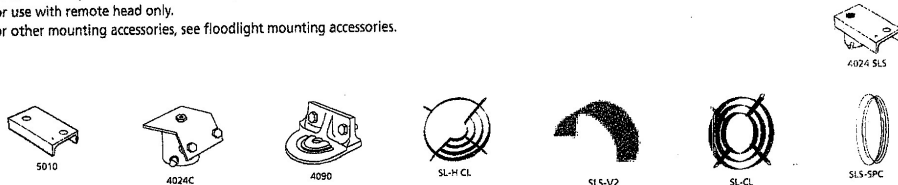
SPORTSLITER SOLUTIONS

Ordering Information: Integrated Sportsliter® Accessories

Catalog Number	Description	Weight lbs. (kg)
4024SLS	Slipfitter for 2" (2 3/8" OD) tenon	4 (1.8)
4024C ¹	Slipfitter for 2" (2 3/8" OD) tenon for remote head units only	4 (1.8)
4090 ⁴	Heavy duty cast iron crossarm fitting for horizontal trunnion for remote heads only	3 (1.4)
SLS-V2	Visor assembly 12"	3 (1.4)
SL-HCL ³	Half internal concentric louver	2 (0.9)
SLS-CL ³	Full internal concentric louver	3 (1.4)
SLS-SPC ¹	Polycarbonate Shield	5 (2.3)
SLS-AA-REM	Remote head aiming sight	-
FL-C3-14	3 ft. #14/3 SEOW-A cord	-
FL-C3-16	3 ft. #16/3 SEOW-A cord	-
FL-C6-14	6 ft. #14/3 SEOW-A cord	-
FL-C6-16	6 ft. #16/3 SEOW-A cord	-
SLSF	Field installed single fuse holder (120, 277 & 347V)	-
SLSFF	Field installed double fuse holder (208, 240 & 480V)	-
5010 ²	Heavy duty steel fitting	2 (0.9)
SLS-C	Safety cable	-

QUANTITY: 34

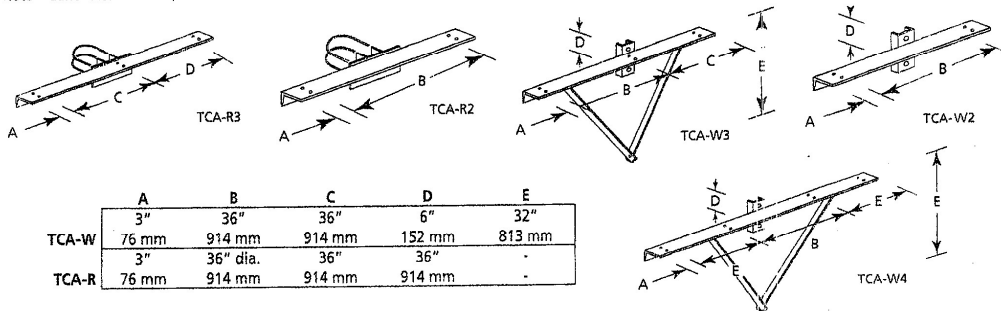
- Suitable for NEMA 5/6/W beam spreads, 400-1000W only.
 - Must use with SLS Series (integral ballasted) when mounting on center location of TCA-W3 & TCA-R3 style crossarm brackets.
 - NEMA 2 - 6 only. Not for use with beam type N/M/W.
 - For use with remote head only.
- Note For other mounting accessories, see floodlight mounting accessories.



Ordering Information: SLS Mounting Accessories

Catalog Number	Fixture Quantity	Maximum Loading Weight lbs. (kg)	Description	Weight lbs. (kg)	EPA ft ² (m ²)
Round Steel Pole - Crossarm Type					
TCA-R Series - Clamps 3" to 5 1/2" dia.					
TCA-R2	2	210 (95.3)	For two fixtures	28 (12.7)	.8 (0.1)
TCA-R3	3	315 (142.9)	For three fixtures ¹	70 (31.7)	1.6 (0.2)
TCA-R4	4	420 (190.5)	For four fixtures	106 (48)	2.5 (0.2)
Wood Pole - Crossarm Type					
TCA-W Series - Thru or Lag Bolt (Not Included)					
TCA-W2	2	210 (95.3)	For two fixtures	21 (9.5)	1 (0.1)
TCA-W3	3	315 (142.9)	For three fixtures ¹	80 (36.3)	1.8 (0.2)
TCA-W4	4	420 (190.5)	For four fixtures	106 (48)	2.4 (0.2)

- One 5010 mounting bracket included.
- Note Galvanized available, add suffix -M38.



SLS

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
DETAILED SPECIFICATIONS**

BID #GL-2009-11

ILLUMINANCE SUMMARY

TARGET PLANE X-Y (HORIZ.) AT Z = 3.00'
ILLUMINANCE: HORIZONTAL FC

GRID NAME	NO. POINTS	AVG	MIN	A/M	M/M	UG	CV	GRID SIZE X Y
Infield	25	41.1	50.8	1.31	1.62	1.46	0.12	20' 20'
Outfield	164	24.1	35.0	1.70	2.47	1.76	0.19	20' 20'

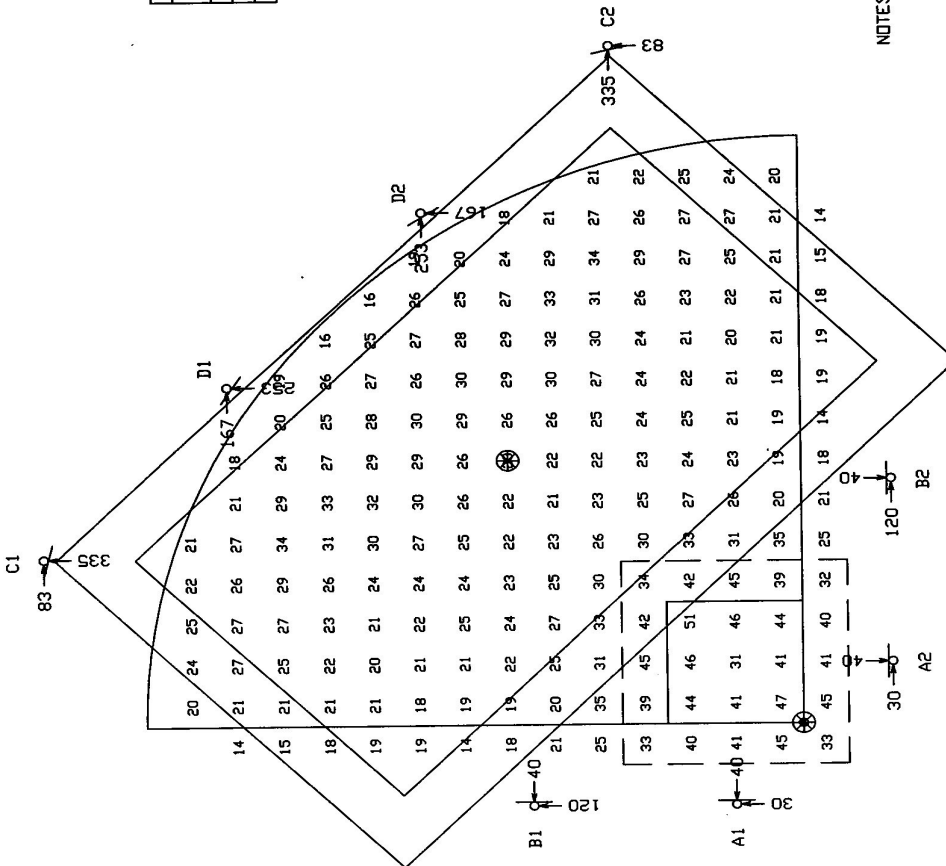
LUMINAIRE SUMMARY

GRID TYPE	CATALOG NUMBER	TEST NUMBER	INITIAL LUMENS	LLF	Q'TY	AVG. TILT
ALL A	SLS1500HXx	HP-09891	162000	0.74	26	1.00
B	SLS1500HXx	HP-09994	162000	0.74	8	1.00
Total Luminaires/Combined Avg. Tilt						
					34	1.00

MOUNTING LOCATION SUMMARY

MTG. LOC. LABEL (X, Y)	Q'TY PER LOC.	KV LOAD	TYPE
A1 (-40, 30)	3	4.83	1 2
A2 (30, -40)	3	4.83	1 2
B1 (-40, 120)	5	8.05	4 1
B2 (120, -40)	5	8.05	4 1
C1 (83, 335)	5	8.05	5 -
C2 (335, 83)	5	8.05	5 -
D1 (167, 253)	4	6.44	3 1
D2 (253, 167)	4	6.44	3 1
TOTAL	34	54.74	26 8

* MOUNTING HEIGHTS MEASURED FROM PLAYING SURFACE
MTG. LOCATIONS (X, Y) ARE RELATIVE TO 0,0 AT ⬤



- NOTES: 1. DIMENSIONS ARE IN FEET & ORIGINATE FROM EACH FIELD'S ⬤
2. MOUNTING HEIGHT (>) ABOVE PLAYING SURFACE



NOTES

- THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREIN ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
- LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
- CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

HUBBELL Lighting Lightscaping Application Services	
AP'VD	SCALE 1"=80'
DATE	DATE 05-11-07
DWN	QUOTE NO. 0735132
HGJ	0361977
ACADEMY FIELD GLASTONBURY, CT AIMING DIAGRAM USING EXIST. POLES BY OTHERS	
REVISED FROM DRAWING NUMBER(S)	TITLE
0318526	
REFERENCE ANGLE(S)	
270°	PLAN NORTH
90°	
180°	
HUBBELL LIGHTING 2000 ELECTRIC WAY CHRISTIANSBURG, VA. 24073	

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
BID PROPOSAL**

BID #GL-2009-11

Proposal of _____
(hereinafter called "Bidder"), organized and existing under the laws of the State of _____
_____, doing business as _____
_____.

To the Town of Glastonbury (hereinafter called "Town").

In compliance with your Invitation to Bid, the Bidder hereby proposes to furnish and/or services as per Bid Number GL-2009-11 in strict accordance with the Bid Documents, within the time set forth therein, and at the prices stated below.

By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto certifies as to their own organization that this bid has been arrived at independently without consultation, communication, or agreement as to any matter relating to this bid with any other Bidder or with any competitor.

The Bidder acknowledges receipt of the following Addendum:

Addendum #1 _____

Addendum #2 _____

Addendum #3 _____

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
BID PROPOSAL**

BID #GL-2009-11

TOTAL BID AMOUNT:

Furnish and install Softball Sportslighting (retrofit) as specified in the Plans and Specifications for Bid GL-2009-11. \$ _____

WRITTEN BID AMOUNT: \$ _____

Other Items Required with Submission of Bid Proposal

The following bid checklist describes items required for inclusion with the above-referenced bid proposal package. It is provided for the convenience of the bidders and, therefore, should not be assumed to be a complete list.

- _____ Acknowledgement of Addendums in Bid Proposal.
- _____ Acknowledgement of Code of Ethics in Bid Proposal.
- _____ Sealed bids, one original and one copy.
- _____ Disclosure of past and pending mediation, arbitration and litigation cases that the Bidder or its principals have been involved in for the most recent five years (if applicable).
- _____ Copy of Bidder's electric Contractor's License (State of Connecticut).

**TOWN OF GLASTONBURY
FURNISH & INSTALL SOFTBALL SPORTSLIGHTING (RETROFIT)
BID PROPOSAL**

BID #GL-2009-11

CODE OF ETHICS

I/We have reviewed a copy of the Town of Glastonbury's Code of Ethics and agree to submit a Consultant Acknowledgement Form if I/We are selected. Yes _____ No _____ *

*Bidder is advised that effective August 1, 2003, the Town of Glastonbury cannot consider any bid or proposal where the Bidder has not agreed to the above statement.

Respectfully submitted:

Type or Print Name of Individual

Doing Business as (Trade Name)

Signature of Individual

Street Address

Title

City, State, Zip Code

Date

Telephone Number/Fax Number

E-Mail Address

SS# or TIN#

(Seal – If bid is by a Corporation)

Attest