

REQUEST FOR PROPOSALS:

Sports & Facility Lighting with Installation and Related Services

RFP #:

COG-2166

ISSUED BY:

The Cooperative Council of Governments
On Behalf of Equalis Group

*6001 Cochran Road, Suite 333
Cleveland, Ohio 44139*

DATED:

March 7, 2025

SECTION TWO:

Proposal Submission Documents, Technical Proposal, Cost
Proposal and Other Required Forms

TABLE OF CONTENTS

PROPOSAL FORM CHECKLIST.....	3
PROPOSAL FORM 1: TECHNICAL PROPOSAL.....	4
PROPOSAL FORM 2: COST PROPOSAL.....	19
PROPOSAL FORM 3: DIVERSITY VENDOR CERTIFICATION PARTICIPATION	20
PROPOSAL FORM 4: CERTIFICATIONS AND LICENSES	20
PROPOSAL FORM 5: UNRESOLVED FINDINGS FOR RECOVERY	24
PROPOSAL FORM 6: MANDATORY DISCLOSURES.....	25
PROPOSAL FORM 7: DEALER, RESELLER, AND DISTRIBUTOR AUTHORIZATION.....	26
PROPOSAL FORM 8: MANDATORY SUPPLIER & PROPOSAL CERTIFICATIONS	27
PROPOSAL FORM 9: CLEAN AIR ACT & CLEAN WATER ACT	28
PROPOSAL FORM 10: DEBARMENT NOTICE.....	29
PROPOSAL FORM 11: LOBBYING CERTIFICATIONS	30
PROPOSAL FORM 12: CONTRACTOR CERTIFICATION REQUIREMENTS.....	31
PROPOSAL FORM 13: BOYCOTT CERTIFICATION.....	32
PROPOSAL FORM 14: FEDERAL FUNDS CERTIFICATION FORMS	33
PROPOSAL FORM 15: FEMA FUNDING REQUIREMENTS CERTIFICATION FORMS.....	39
PROPOSAL FORM 16: ARIZONA CONTRACTOR REQUIREMENTS	42
PROPOSAL FORM 17: NEW JERSEY REQUIREMENTS.....	44
PROPOSAL FORM 18: GENERAL TERMS AND CONDITIONS ACCEPTANCE FORM.....	56
PROPOSAL FORM 19: EQUALIS GROUP ADMINISTRATION AGREEMENT DECLARATION	57
PROPOSAL FORM 20: MASTER AGREEMENT SIGNATURE FORM.....	58

PROPOSAL FORM CHECKLIST

The following documents must be submitted with the Proposal

The below documents can be found in Section 2; Proposal Submission and Required Forms and must be submitted with the proposal. Please note Proposal Form 2 is a separate attachment (attachment B).

TECHNICAL PROPOSAL

- ☒ **Proposal Form 1: Technical Proposal**

PROPOSAL PRICING: Attachment B is provided separately in a Microsoft Excel file and is required to complete your cost proposal.

- ☒ **Proposal Form 2: Cost Proposal**

OTHER REQUIRED PROPOSAL FORMS:

- ☒ **Proposal Form 3: Diversity Vendor Certification Participation**
- ☒ **Proposal Form 4: Certifications and Licenses**
- ☒ **Proposal Form 5: Unresolved Findings for Recovery**
- ☒ **Proposal Form 6: Mandatory Disclosures**
- ☒ **Proposal Form 7: Dealer, Reseller, and Distributor Authorization**
- ☒ **Proposal Form 8: Mandatory Supplier & Proposal Certifications**
- ☒ **Proposal Form 9: Clean Air Act & Clean Water Act**
- ☒ **Proposal Form 10: Debarment Notice**
- ☒ **Proposal Form 11: Lobbying Certification**
- ☒ **Proposal Form 12: Contractor Certification Requirements**
- ☒ **Proposal Form 13: Boycott Certification**
- ☒ **Proposal Form 14 Federal Funds Certification Form**
- ☒ **Proposal Form 15 FEMA Funding Requirements Certification Form**
- ☒ **Proposal Form 16: Arizona Contractor Requirements**
- ☒ **Proposal Form 17: New Jersey Requirements**
- ☒ **Proposal Form 18: General Terms and Conditions Acceptance Form**
- ☒ **Proposal Form 19: Equalis Group Administration Agreement Declaration**
- ☒ **Proposal Form 20: Master Agreement Signature Form**

(The rest of this page is intentionally left blank)

PROPOSAL FORM 1: TECHNICAL PROPOSAL

1. OVERVIEW & QUALIFICATIONS		
1.1. Company Information		
1.1.1. Company Name:	Musco Sports Lighting, LLC	
1.1.2. Corporate Street Address:	100 1 st Ave West PO Box 808 Oskaloosa, IA 52577	
1.1.3. Website:	www.musco.com	
1.1.4. Formation. In what year was the company formed? For how long has your company been operating under its present business name? If your company has changed its business name, include the most recent prior business name and the year of the name change.	Musco Sports Lighting (Musco/Musco Lighting) was founded in 1976 (49 years), Musco has specialized in the design and manufacture of sports and transportation/infrastructure lighting solutions for nearly 50 years. We have been operating as Musco Sports Lighting, LLC for 24 years, and for 25 years prior we have been operating as Musco Sports Lighting, Inc.	
1.1.5. Primary Point of Contact. Provide information about the Respondent representative/contact person authorized to answer questions regarding the proposal submitted by your company:	Name:	Beth Sheeley
	Title:	Cooperative Contract Specialist
	Phone:	800-825-6030
	E-Mail Address:	Musco.contracts@musco.com
1.1.6. Authorized Representative. Print or type the name of the Respondent representative authorized to address contractual issues, including the authority to execute a contract on behalf of Respondent, and to whom legal notices regarding contract termination or breach, should be sent (if not the same individual as in 1.1.9., provide the following information on each such representative and specify their function).	Name:	James Hansen
	Title:	Secretary
	Phone:	641-673-0411
	E-Mail Address:	secretary@musco.com
1.2. Financial Strength & Legal Considerations		
1.2.1. Financial Strength. Demonstrate your financial strength and stability with meaningful data. This could include, but is not limited to, such items as financial statements, SEC filings, credit & bond ratings, letters of credit, and detailed reference letters. Note: If the information disclosed in your response is considered "Trade Secret" as defined in Ohio Revised Code, Respondents may mark the information as a "Trade Secret" and the response	Musco Sports Lighting LLC is a privately held company and does not release our financial information. Please find a letter from Wells Fargo Bank, N.A. dated February 11, 2025. (Technical Proposal- Musco Sports Lighting, LLC. - Section 1.2.1- Financial Strength – Trade Secret). Please redact from any future use of the RFP response.	

will be redacted from any future use of the RFP response.	
1.2.2. Bankruptcy & Insolvency. Describe any bankruptcy or insolvency for your organization (or its predecessors, if any) or any principal of the firm in the last three (3) years.	Musco Sports Lighting, LLC has not been subject to any bankruptcy or insolvency.
1.2.3. Litigation. Describe any litigation in which your company has been involved in the last three (3) years and the status of that litigation.	Musco Sports Lighting, LLC has not had any litigation that would have an impact on our ability to perform under this contract.
1.3. Industry Qualifications	
1.3.1. Company Identification. How is your organization best identified? Is it a manufacturer, distributor, dealer, reseller, or service provider?	Musco Sports Lighting, LLC is a manufacturer of sports lighting and large area lighting.
1.3.2. Manufacturer Authorization. If your company is best described as a distributor, dealer, reseller, or similar entity please certify that your organization is authorized to sell the products and services at the price points disclosed in this proposal.	Please see response to questions 1.3.1, N/A.
1.3.3. Authorized Distributors, Agents, Dealers, or Resellers. Describe the different channels in which this contract will be made available to Equalis Group Members. Your response should include, but is not limited to, whether your organization will serve as the single point of sale or if the contract will be made available through a network of distributors, agents, dealers, or resellers. NOTE: Respondents intending to authorize distributors, agents, dealers, or resellers must complete <u>Proposal Form 7 - Dealer, Distributor and Reseller Authorization Form.</u>	Musco Sports Lighting, LLC does not have any authorized Distributors, Agents, Dealers or Resellers. Musco's custom designed, engineered to order lighting systems must be purchased directly from the company.
1.3.4. Network Relationship. If your company is best described as a manufacturer or service provider, please describe how your dealer network operates to sell and deliver the Products & Services proposed in this RFP. If applicable, is your network independent or company owned?	Musco has a sale force of over 100 dedicated Sales Team Members throughout the United States. These Team Members are employed by Musco. At https://www.musco.com users can navigate the "Find your Representative" function to find the appropriate contact information for the sales team members in their area. All of

	<p>whom would be qualified in consulting, estimating, coordinating, and supervising the sales service during the entire process of the sale. Musco offices can also be contacted by phone at: 1800-825-6030. When you purchase a Musco Solution, it is delivered from our dedicated transportation company with Musco Lighting signage on the trucks.</p> <p>Musco has over 170 Team Members dedicated to operating and maintaining customer lighting around the USA. Regional-based service technicians are available for quick responses. These Team Members are factory-trained and specialize in routine maintenance, repairs, and analysis of sports lighting systems. Along with our Lighting Services and Control-Link Central™ Teams, we have a fully staffed group of internal experts including but not limited to Sales Representatives, Regional Sales Associates, Service Representatives, Part Representatives, Project Coordinators, Schedulers, and Engineers. We will ensure your project flows smoothly and you get the results you expect.</p> <p>These Team Members are employed by Musco Sports Lighting, LLC. Musco Sports Lighting has no agents or dealers authorized to represent the company. Musco's custom designed, engineered to order lighting systems must be purchased directly from the company.</p>
<p>1.3.5. Industry Experience. How long has your company provided the products and services outlined in your response to this RFP? What percentage of your company's revenue in each of the last three (3) full calendar years was generated from these products and services?</p>	<p>Musco Sports Lighting was founded in 1976 (49 years), and we've provided Sports and facility lighting with installation and related services since then.</p> <p>95% 2024 96% 2023 97% 2022</p>
<p>1.3.6. Geographic Reach. Describe your company's <u>current</u> service area in the United States and which areas you intend to offer services under a resulting contract if awarded.</p>	<p>Musco Sports Lighting, LLC is authorized to sell products and provide services in all fifty (50) states, the District of Columbia, and all United States territories. Musco will be able to fully serve all geographic areas through the proposed contract.</p>
<p>1.3.7. Socio-economically Disadvantaged Business Engagement. Does bidder commit to take all affirmative steps set forth in 2 CFR 200.321 to assure that minority businesses, women's business enterprises, labor surplus area firms are used when possible.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>1.3.8. Certifications and Licenses. Provide a detailed explanation outlining the licenses and certifications that are i) required to be held, and ii) actually held by your organization (including third parties and subcontractors that you use). Has your</p>	<p>Musco Sports Lighting, LLC is authorized to sell products and provide services in all 50 states, the District of Columbia, and all US territories. Musco complies with applicable federal, state, local, and industry laws for each purchasing customer. Musco holds contractor licenses throughout the United States of America. (Please see form 4 below for copies of certificates and</p>

<p>company maintained these certifications on an ongoing basis? If not, when and why did your company lose any referenced certifications?</p> <p>NOTE: Provide copies of any of the certificates or licenses included in your response in <u>Proposal Form 5 - Certifications and Licenses.</u></p>	<p>licenses).</p> <p>As a General Contractor, Musco selects and contracts with local subcontractor organizations that meet our quality standards and can fulfill our time constraints to perform the type of work outlined in the RFP. Musco does obtain license verification and insurance certificates for all subcontractors who work with us.</p> <p>Musco has a number of designs and technology protected by U.S. and foreign patent(s), both issued and pending. Musco has numerous UL product certifications, and our luminaries have been reviewed by UL to UL and CSA standards.</p> <p>Musco has processes in place to comply with the requirements of the Buy American Act on a project basis. Musco also has processes in place to provide documentation to support the use of US steel in our products, specifically in reference to US steel certification and requirements. In addition to the company's U.S.-based roots, workforce, manufacturing and assembly, Musco proudly partners with U.S.-based organizations including the National Recreation and Parks Association, US Soccer Foundation, and Little League® Baseball and Softball on initiatives to provide safer and more equitable access to sports.</p>
1.4. Public Sector Experience	
<p>1.4.1. Public Sector Cooperative Contracts. Provide a list of the public sector cooperative contracts (e.g., state term contracts, public sector cooperatives, etc.) you currently hold and the annual revenue through those contracts in each of the last three (3) calendar year. Please exclude information and data associated with federal agencies or GSA contracts</p>	<p>Due to our being a private company we do not disclose this information. Part of our cooperative strategy we partner with 16 different national/ state/ regional cooperatives across the USA at various volumes.</p>
<p>1.4.2. Education Success. What is the i) total dollar amount, and ii) percentage of your company's total annual revenue generated by sales to educational institutions (i.e., K-12 schools & school districts and high education)?</p>	<p>i. Musco Sports Lighting, LLC is a privately held company and does not release our financial information. ii.55%</p>
<p>1.4.3. Government Success. What is the i) total dollar amount, and ii) percentage of your company's total annual revenue generated by sales to local governments (i.e., municipalities, counties, special districts, and state agencies)?</p>	<p>i. Musco Sports Lighting, LLC is a privately held company and does not release our financial information. ii.45%</p>

<p>1.4.4. Customer References. Provide references of at least five (5) local government or educational institution customers for which your company has provided products and services similar in nature and scope to those defined in this RFP in the last three (3) years.</p> <p>Each reference should include:</p> <ul style="list-style-type: none"> a. Customer contact person and their title, telephone number, and email address; b. A brief description of the products and services provided by your company; c. Customer relationship starting and ending dates; and, d. Notes or other pertinent information relating to the customer and/or the products and services your company provided. 	<p>1a. Fairfax County Park Authority; Paul Shirey; 703-324-8738; paul.shirey@fairfaxcounty.gov;</p> <p>1b. Sports and facility lighting with installation and related services.</p> <p>2a. Denver Public Schools; Josh Griesbach; 720-423-1913;</p> <p>2b. Sports and facility lighting with installation and related services.</p> <p>3a. University of Iowa; Laura Hawks; 319-467-1626; laura-hawks@uiowa.edu</p> <p>3b. Sports and facility lighting with installation and related services.</p> <p>4a. The City Waxahachie James Villarreal 972-937-7330 jvillarreal@waxahachie.com</p> <p>4b. Sports and facility lighting with installation and related services.</p> <p>5a. Montgomery County Mason Ramsay 936-672-9795 mason.ramsay@mctx.org</p> <p>5b. Sports and facility lighting with installation and related services.</p>
---	---

2. Products & Services

2.1. PRODUCTS & SERVICES

<p>2.1.1. Product Offering & Description(s). Provide a detailed description of the products you are offering as a part of your proposal.</p> <p>Your response may include, but is not limited to, information related to lighting options, controls, performance characteristics, differentiators, manufacturing capabilities & advantages, innovation and technology, regulatory & safety standards, or any other piece of information that would help understand the breadth and depth of the proposed product offering.</p> <p>IMPORTANT. This description along with the products and services included in the Attachment B – Cost Proposal will be utilized to define the</p>	<p>Musco has specialized in the design and manufacture of sports and transportation/infrastructure lighting solutions for nearly 50 years. Musco's Total Light Control – TLC for LED™ technology is the solution of choice for new and retrofit installations at hometown fields, professional stadiums, international superspeedways, Olympic Games, and the biggest ports, airports, and railyards in the world. Musco's facility solutions also include Show-Light® special effects, the Mini-Pitch System™ modular sports solution, and the Communication-Structure System™ monopole for wireless Internet.</p> <p>Our Light-Emitting Diode (LED) sports lighting solutions for new and retrofit projects incorporates lighting, structural, and electrical components, which provides streamlined installation, trouble-free operation, and long-term reliability. We specialize in outdoor lighting, indoor lighting, special effects lighting, and other facility solutions.</p> <p>We've researched LED's distinctive challenges and advantages and applied our knowledge of light control to the unique characteristics of the diode, assuring the quality of lighting for which Musco is known. We've paired our expertise in controlling</p>
---	---

<p>overall products and services available under a resulting contract.</p>	<p>light with the advancing output of LED to the point where we're confident it's a cost-effective option to consider for transportation facilities.</p> <p>LED brings many benefits and new opportunities, but it's a tool, not a solution. Controlling the LED's intense, "rifle shot" of light is challenging. But with Total Light Control—TLC for LED™, we're able to achieve things never before possible—from pinpoint precision to instant on/off, to varying light levels for different needs.</p> <p>The key issues in lighting haven't changed: generating light, projecting it onto the target, keeping it out of the neighborhood and night sky, and creating an operating environment that allows it to last in real world conditions. Musco is able to carve out the area to be lighted and dramatically cut off any impact on the surrounding area. We use more of the light produced by the fixture, lose less light, and don't abuse the surrounding area.</p> <p>Light-Structure System™ lighting with Total Light Control - TLC for LED™ technology is for new outdoor lighting applications. It is engineered as a 5 Easy Pieces™ complete system from foundation to poletop designed to a customers needs. Lights, structures, and electrical components are engineered to work together. This ensures the designed lighting gets in place and stays there over the life of the system, while also maintaining and protecting the operation environment so the components continue to function. We've included features like factory aimed luminaires, easy to reach remote drivers, integrated grounding, and surge protection to ensure the longevity of the lighting system. Musco's Light-Structure System™ is engineered as a complete system including the precast concrete base, galvanized steel pole, electrical components enclosure, wire harness and poletop luminaire assembly. This allows for installation ease and reduced time and expense. Musco's TLC for LED® luminaire is available in several wattage, Kelvin & CRI combinations to meet custom project requirements. Multiple light control visor options are available to allow for precise light control therefore dramatically reducing glare and spill. Our unique heat sink has convective air-cooling design that maintains a low LED junction temperature during high wattage operation. This system includes our Control-Link® control system for remote operation and is covered by Musco's Constant 25™ product assurance and warranty program.</p> <p>Musco's System Upgrade Solutions technology is for outdoor and indoor lighting applications. It is a modular photometric unit, factory aimed and tested, to interface with a customer's existing structures, making an easy retrofit lighting solution. Musco's System Upgrade Solutions are available in several wattage, Kelvin & CRI combinations to meet custom project requirements.</p>
--	---

Multiple light control visor options are available to allow for precise light control therefore dramatically reducing glare and spill. Our unique heat sink has convective air-cooling design that maintains a low LED junction temperature during high wattage operation. This system includes our optional Control-Link® control system for remote operation and is covered by Musco's Constant 10™ product assurance and warranty program, contingent upon Musco's inspection and approval of existing structure and electrical wiring.

Control-Link® control and monitoring system offers efficient, cost-effective tools that are both cutting-edge and simple to use. Musco will have your back 24/7/365 to ensure your lights are only on when needed, keeping neighbors and taxpayers happy. Because more than anything, it's about peace of mind. The Control-Link® system provides comprehensive scheduling assistance, system monitoring, secure password-protected access, automated equipment controls, and valuable usage data.

Show-Light® entertainment services provide a cost-effective way for you to bring professional light shows to your facility. From pre-game introductions to halftime shows, to celebrating big plays and big wins, this special effect lighting will energize players and fans and take your game atmosphere to a new level. Special effects light shows aren't just for the pros anymore. Musco's Show-Light® technology utilizes instant on/off and the advanced control capabilities of LED, is easy to use, and delivers both predesigned and customized light shows. Show-Light® entertainment services can also tap into advanced customization capabilities and more complex light shows that incorporate music along with the special effects lighting. Musco is not responsible for obtaining rights to or any cost associated with music licenses.

Mini-Pitch System™ modular sports solution has an innovative, all-in-one design to help communities create fun and active play spaces by revitalizing public areas. Created to assist the U.S. Soccer Foundation in providing safer places to play the game, the Mini-Pitch System™ solution is ideal for transforming abandoned courts and other underutilized areas into places where children and families can come together in the spirit of teamwork, empowerment, and physical activity. It comes as a modular system complete with lighting, fencing, goals, benches, ADA-compliant access, and lockable storage.

Musco will provide all materials and labor to maintain operation of its lighting system to original design criteria of the warranty period up to 25 years (depending on product). Musco products are guaranteed to perform for the as detailed in our warranty documents.

	<p>Installation services are available on a per-project basis dependent upon Musco's compliance with state and local licensing requirements. Labor and materials for the complete installation, including but not limited to foundations, pole erection, trenching, backfill, conduit, wire, electrical distribution and service cabinet(s) and site restoration shall utilize the current RS Means pricing, coefficient and must also include the appropriate City Cost Index.</p>
<p>2.1.2. Service & Solution Capabilities. Provide a detailed description of the services you are offering as a part of your proposal.</p> <p>Your response may include, but is not limited to, information related to turnkey capabilities, project management, design, need analysis, engineering, installation or set-up, technology, integration, training services, maintenance services, testing, or any other piece of information that would help understand the breadth and depth of your products and service offering.</p> <p>IMPORTANT. This description along with the products and services included in the Attachment B – Cost Proposal will be utilized to define the overall products and services available under a resulting contract.</p>	<p>Musco Sports Lighting, LLC offers custom designed engineered to order lighting systems. On a per project basis Musco can provide turnkey solutions, project management, design, engineering, installation, setup, maintenance, testing, and training.</p> <p>Installation services are available on a per project basis dependent upon Musco's compliance with state and local licensing requirements. Labor and materials for the complete installation, including foundations, pole erection, trenching, backfill, conduit, wire, electrical distribution and service cabinet(s) and site restoration shall utilize the current RS Means pricing, coefficient and must also include the appropriate City Cost Index.</p> <p>Once installation of the Musco lighting system is completed, Musco's Sales Team and/or Project Manager will complete an overview of the lighting system final light level evaluations. They will then assist in arranging a more in-dept training with our Control Link Central™ Team.</p> <p>Additionally, Musco can provide parts and service as needed.</p>
<p>2.1.3. Value-Add or Additional Offering. Please include any additional products and services your organization offers but is not included in the scope of this solicitation and will enhance and add value to this contract's participating agencies.</p>	<p>Communication-Structure System™ monopole for wireless Internet.</p> <p>Musco Mobile Lighting – Rental of Temporary Lighting Solutions</p>
<p>2.1.4. Open Market Products. Provide a detailed description of your ability to accommodate requests for Open Market Products. Open Market Products is a category of products that cannot be found in your standard catalog offering or non-inventory products.</p> <p>NOTE: For a definition of Open Market Items, please refer to Part One, Section 5.4 – Other Pricing Scenarios.</p>	<p>Musco Sports Lighting, LLC will work with the Equalis member regarding pricing and delivery of any open market, sourced and/or non-standard solutions which would be desired by the Equalis member. Musco and the Equalis member will agree upon a desired outcome and reflect this in the customer quote for use in issuing a purchase order.</p>

<p>2.1.5. Warranty. Provide a copy of the manufacturer's warranty. If required, please attach the warranty as an attachment, as instructed in this document. Describe notable features and/or characteristics of the warranty that a public sector customer would find interesting or appealing. Pricing related to the any extended warranty options must be included in <u>Attachment B – Cost Proposal.</u></p>	<p>Musco Sports Lighting, LLC will provide all materials and labor to maintain operation of its lighting system to original design criteria for 25 or 10 years. Musco products are guaranteed to perform for the customer as detailed in the Musco Constant 25™ or Musco Constant 10™ documents. Musco shall monitor the performance of the lighting system on/off status, hours of usage, and luminaire outage. If outages that affect playability are detected, Musco will contact you and proactively dispatch technicians.</p> <p>To assist with the determination of repairs, Musco will utilize the field monitoring system and any information provided by the customer to determine when the usage of the field is materially impacted. From this information, Musco will determine needed repair and/or replacement of Covered Product(s) and parts. Repair will be with Product(s) of like kind and quality.</p> <p>The only requirement Musco has is the customer agrees to check fuses and to replace fuses as needed. Musco provides spare fuses in the lowest alphanumeric enclosure, which is located 10-12 feet above grade and is reachable by a ladder. Musco will replenish spare fuses as needed.</p> <p>Under the Musco Constant 25™ or Musco Constant 10™ Product Assurance & Warranty Program, Musco pays any upfront cost for shipping cost, installation cost, and any associated rental equipment cost & disposal cost for the replaced equipment.</p> <p>Please see the attached : Technical Proposal- Musco Sports Lighting, LLC Section 2.1.5- Warranty Information</p>
--	--

3. Business Operations

3.1. Logistics

<p>3.1.1. Locations; Distribution & Shipping Capabilities. Describe how supplier proposes to distribute the products/services in Respondent's defined geographic reach.</p> <p>Your response may include, but is not limited to, information related to the number of store or showroom locations, distribution facilities, supply chain partners, fill rates, on-time delivery rates,</p>	<p>Since 1976, Musco Sports Lighting, LLC (Musco) has had office and manufacturing facilities in Oskaloosa, IA and Muscatine, IA. We have a workforce of approximately 1551 Team Members located in these facilities and regional sales offices conveniently located around the United States of America. In addition, we have approximately 239 Team Members located outside of the United States of America supporting our manufacturing facilities in Shanghai, China, and Gumi, South Korea and multiple sales offices globally.</p> <p>Musco Sports Lighting, LLC has a successful partnership with an Iowa based shipping company that is dedicated to ensuring shipment of our solutions are completed in a timely fashion.</p>
---	--

and your ability to accommodate expedited orders.	
3.2. Customer Service	
3.2.1. Customer Service Department. Describe your company's customer service department & operations. Your description may include, but is not limited to, hours of operation, number and location of service centers, parts outlets, number of customer service representatives. Clarify if the service centers are owned by your company or if they are a network of subcontractors.	<p>Musco has offices and manufacturing facilities in Oskaloosa, IA and Muscatine, IA. We have a workforce of approximately 1551 Team Members located in these facilities and regional sales offices conveniently located around the United States of America. Beyond our sales team our staff includes; engineering, manufacturing, research and development, and credit personnel.</p> <p>Our Control-Link Central™ service center is staffed 24/7/365 with trained operators who provide scheduling and report assistance, along with one-on-one phone/video training. Proactive nightly testing is done to assure customer's control systems are operating properly and field operations are constantly monitored. The Control-Link system provides comprehensive scheduling assistance, system monitoring, secure password-protected access, automated equipment controls, and valuable usage data.</p>
3.3. Customer Set Up; Order & Invoice Processing; Payment	
3.3.1. Proposal Development, Order, and Invoice Process. Describe your company's proposal development, order, and invoice process.	Our Sales Team Members work with customers on the project proposal, development, and order. Once a PO is received an order is placed, and our manufacturing team receives the order. Invoices are sent from our accounting team, and customers are given net 30. Carrying charges accrue in the amount of one- and one-half percent (1 ½%) per month.
3.3.2. Financing. Does your company offer any financing services? If yes, describe the financing options available to Members.	Musco Finance ™ was established in 2006, it provides competitive financing solutions that enable customers to realize the benefits of Musco products and services. Hundreds of customers have used these solutions to complete their lighting projects. Musco Finance ™ has provided budget- accommodating financing for governmental, commercial, and not-for-profit entities throughout the United States of America.
3.4. Bonding Capabilities	
3.4.1. Bonding. Describe your company's bonding capacity. Your response may include, but is not limited to, the bonding company's surety rating.	\$15,000,000 Single / \$150,000,000 Aggregate A.M. Best Rating- A++ Financial Size Category -XV
3.5. Sustainability, Reclamation, and Recycling Initiatives	
3.5.1. Sustainable Company Initiatives. Describe the ways in which your company is addressing the issue of sustainability.	Musco is committed to excellence and leadership in the protection of the environment, and the implementation of sustainable guidelines. We minimize the emissions to air, water,

	<p>and land through programs to reduce pollution at its source and will conserve energy using energy efficient lighting systems.</p> <p>Product:</p> <ul style="list-style-type: none"> · Musco's Green Generation Lighting® (HID) and TLC for LED® technology are 30 to 80 percent more energy efficient than traditional lighting equipment. · Customized optics direct light onto the desired surface, reducing wasted light into the surrounding area. · Control-Link® system provides remote on/off control, allowing customers to schedule our light systems to help maximize energy efficiency. · Eases pollution by eliminating or reducing the use of hazardous substances and reducing greenhouse gas emissions. <p>Manufacturing:</p> <ul style="list-style-type: none"> · On-site waste management includes recycling manufacturing scrap materials, wooden skids, paper and other packaging materials. · Packaging of our Light-Structure System™ contains between 30 to 50 percent recycled material. · Reusable packaging is used to move components from original fabrication through the complete manufacturing process. · During the spot maintenance and complete system lamping provided by Musco, all HID lamps are recycled to salvage both the mercury and glass. · Reuse water during the manufacturing process and conserve water when possible. <p>Office:</p> <ul style="list-style-type: none"> · Electronic components that are not re-usable due to equipment failure or are below minimum requirements are recycled through an E-Waste Facility. · Use geothermal heating and air conditioning to minimize energy consumption. · Our facilities have automatic toilets and faucets to minimize water usage.
--	---

4. PRICING

4.1. Cost Proposal

<p>4.1.1. Pricing Model. Provide a description of your pricing model or methodology identifying how the model works for the products and services included in your proposal. Your response should describe how the proposed pricing model is able to</p>	<p>Musco Sports Lighting provides a custom designed, engineered to order lighting system, pricing is based per the RFP. This price list should not be considered complete and exhaustive due to the nature of each project being a unique, custom design build situation. Extreme spill and glare concerns, pole locations, and wind zone variance</p>
---	--


<p>be audited by an Equalis Group member to assure compliance with the pricing in the Master Agreement.</p>	<p>may affect price. RFP quoted pricing is for the most common field designs based on structural code and utilizing IBC 2018, 110 mph, Exposure C.</p> <p>Installation services are available on a per project basis dependent upon Musco's compliance with state and local licensing requirements. Labor and materials for the complete installation, including foundations, pole erection, trenching, backfill, conduit, wire, electrical distribution and service cabinet(s) and site restoration shall utilize the current RS Means pricing, coefficient and must also include the appropriate City Cost Index.</p>
<p>4.1.2. Auditable. Describe how the proposed pricing model is able to be audited by public sector agencies or CCOG to assure compliance with pricing in the Master Agreement.</p>	<p>Standard engineering scans can be provided for field types based on IBC 2018, 110 mph, and Exposure C. These scans can confirm the number of poles and fixtures that would be needed. Cost adders and variances will be applied when the project design varies from the standard fields proposed.</p> <p>RS Means reports can be provided to review the installation portion of project pricing.</p>
<p>4.1.3. Cost Proposal Value. Which of the following statements best describes the pricing offered included in Respondent's cost proposal.</p>	<p>The prices offered in your Cost Proposal are:</p> <p><input type="checkbox"/> lower than what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments.</p> <p><input checked="" type="checkbox"/> equal to what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments.</p> <p><input type="checkbox"/> higher than what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments.</p> <p><input type="checkbox"/> not applicable. Please explain below.</p>
	<p>Click or tap here to enter text.</p>
<p>4.1.4. Additional Savings. Describe any quantity or volume discounts or rebate programs included in your Cost Proposal.</p>	<p>N/A</p>
<p>4.1.5. Cost of Shipping. Is the cost of shipping included in the pricing submitted with your response? If no, describe how freight, shipping, and delivery costs are calculated.</p>	<p>Yes</p>
<p>4.1.6. Pricing Open Market or Sourced Goods. If relevant, propose a method for the pricing of Open Market Items or Sourced Goods.</p> <p>NOTE: For a definition of Open Market Items, please refer to <u>Part One, Section 5.4 – Other Pricing Scenarios.</u></p>	<p>We will follow the same pricing methods as described above.</p>

<p>4.1.7. Total Cost of Acquisition. Identify any components from the total cost of acquisition that are <u>NOT</u> included in the Cost Proposal. This would include all additional charges that are not directly identified as freight or shipping. For example, permitting, installation, set up, mandatory training, site work, or initial inspection may be required but not initially considered in the Cost Proposal. Identify any parties that impose such costs and their relationship to the Respondent.</p>	<p>Please see lines A-O on our price list provided.</p>
--	---

5. GO-TO-MARKET STRATEGY

5.1. Respondent Organizational Structure & Staffing of Relationship

<p>5.1.1. Key Contacts. Provide contact information and resumes for the person(s) who will be responsible for the following areas;</p> <ol style="list-style-type: none"> 1. Executive Contact 2. Contract Manager 3. Sales Leader 4. Reporting Contact 5. Marketing Contact. <p>***Indicate who the primary contact will be if it is not the Sales Leader.</p>	<p>1.Executive Contact: Chris Hailey; chris.hailey@musco.com 818-856-5068</p> <p>2.Contract Manager (PRIMARY CONTACT): Beth Sheeley; musco.contracts@musco.com 800-825-6030</p> <p>3.Sales Leader Doug Miller; doug.miller@musco.com 630-290-9588</p> <p>4.Reporting Contact: Beth Sheeley; musco.contracts@musco.com 800-825-6030</p> <p>5.Marketing Contract: Beth Sheeley; musco.contracts@musco.com 800-825-6030</p>
<p>5.1.2. Sales Organization. Provide a description of your sales organization, including key staff members, the size of the organization, in-house vs. third-party sales resources, geographic territories, vertical market segmentation, etc.</p>	<p>Since 1976, Musco Sports Lighting, LLC (Musco) has had office and manufacturing facilities in Oskaloosa, IA and Muscatine, IA. We have a workforce of approximately 1551 Team Members located in these facilities and regional sales offices conveniently located around the United States of America. In addition, we have approximately 239 Team Members located outside of the United States of America supporting our manufacturing facilities in Shanghai, China, and Gumi, South Korea and multiple sales offices globally.</p>
<h3>5.2. Contract Implementation Strategy & Expectations</h3>	
<p>5.2.1. Contract Expectations. What is your company's strategy to increase market share in the public sector while leveraging an Equalis Group Master Agreement?</p>	<p>Musco Sports Lighting, LLC markets our products through tradeshow, conventions, direct mail, and advertising. Musco does targeted, personalized marketing promotions to specific customer groups and would be able to provide information on Equalis as appropriate in those promotions. Additionally, we would continue to use our Equalis Customer Information package for customers.</p>

<p>5.2.2. Five (5) Year Sales Vision & Strategy. Describe your company's vision and strategy to leverage a resulting contract with Equalis over the next five (5) years. Your response may include but is not limited to; the geographic or public sector vertical markets being targeted; your strategy for acquiring new business and retaining existing business; how the contract will be deployed with your sales team; how you will market the contract, including deployment of the contract on your company website; and the time frames in which this will be completed.</p>	<p>Musco Sports Lighting has been using our COG-2102A contract to generate sales. As of March 7, 2025 Musco has sold 81 projects totaling \$24,566,917 through the Equalis contract.</p> <p>If awarded the contract under RFP# COG-2166 we would continue to deploy the contract to our sales team and set up meetings with Equalis Member Engagement Team to better understand the contract and how to leverage it.</p> <p>We continue to add sales resources to the market that will allow us to sustain and add growth to our portfolio. Our goal would be 5%-8% per year increase.</p>
<p>5.2.3. Sales Objectives. What are your top line sales objectives in each of the five (5) years if awarded this contract?</p>	<p>If awarded the contract our goal would be to continue education regarding the availability of the contract with the goal to increase sales through it each year.</p>
<p>6. ADMIN FEE & REPORTING</p>	
<p>6.1. Administration Fee & Reporting</p>	
<p>6.1.1. Administrative Fee. Equalis Group only generates revenue when the Winning Supplier generates revenue based on contract utilization by current and future Members.</p> <p>The administrative fee is normally calculated as a percentage of the total Spend for agencies accessing product and services through the Master Agreement and is typically between two percent (2%) to three percent (3%). In some categories, a flat fee or another fee structure may be acceptable.</p> <p>Please provide your proposed Administrative Fee percentage or structure.</p> <p>NOTE: The proposed Administrative Fee language for this contract is based on the terms disclosed in the Attachment A – Model Administration Agreement.</p>	
<p>6.1.2. Sales & Administrative Fee Reporting. Equalis Group requires monthly reports detailing sales invoiced the prior month</p>	<p>Yes</p>

<p>and associated Administrative Fees earned by the 15th of each month. Confirm that your company will meet this reporting requirement. If not, explain why and propose an alternative time schedule for providing these reports to Equalis Group.</p>	
<p>6.1.3. Contract Utilization Tracking. Define the specific, step-by-step process for your sales and/or quote generation team to tie a quote, proposal, invoice, and/or purchase order to the Equalis cooperative contract in your Customer Relationship Management ("CRM"), sales system, or Enterprise Resource Planning ("ERP") system. Include any individuals and/or teams involved in this process.</p>	<p>We have a contract specific Method of Purchase option that the sales team will choose when setting the project up in our system. Our internal team reviews all sold projects based on Method of Purchase. Reports are generated on a Monthly, Quarterly, and Annual basis to facilitate administration fees to our cooperative partners.</p>
<p>6.1.4. Self-Audit. Describe any self-audit process or program that you plan to employ to verify compliance with your proposed contract with Equalis Group. This process includes ensuring that your sales organization provides, and Members obtain the correct pricing, reports reflect all sales made under the Contract, and Winning Supplier remit the proper admin fee to Equalis.</p>	<p>A self-audit process is in place specifically intended to verify compliance of cooperative purchasing contracts.</p> <ul style="list-style-type: none"> • Cooperative Contract Specialist pulls monthly contract paid project report for the cooperative purchasing contract and its associated fee for that time period. • Each contract project PO is checked and validated that it is an awarded contract purchase • Project awarded contract fee is validated as correct • When validation complete, report sent to cooperative purchasing organization • Invoice documents for projects of a contract member are available for review upon request

PROPOSAL FORM 2: COST PROPOSAL

A template for the Cost Proposal has been included as **Attachment B** and must be uploaded as a separate attachment to a Respondent's proposal submission. Respondents are permitted to revise any part of the spreadsheet to the Cost Proposal to accurately reflect the column titles, details, discounts, pricing categories of products, services, and solutions being offered to Equalis Group Members.

Respondent's Cost Proposal must include the information requested in **Section 5 – Cost Proposal & Pricing**.

NOTE: Cost Proposals will remain sealed and will only be opened and reviewed for those Respondents that meet the minimum Technical Proposal score threshold as described in **Section 6.2 - Evaluation and Scoring of Proposals**.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 3: DIVERSITY VENDOR CERTIFICATION PARTICIPATION

Diversity Vendor Certification Participation - It is the policy of some Members participating in Equalis Group to involve minority and women business enterprises (M/WBE), small and/or disadvantaged business enterprises, disabled veterans business enterprises, historically utilized businesses (HUB) and other diversity recognized businesses in the purchase of goods and services. Respondents shall indicate below whether or not they hold certification in any of the classified areas and include proof of such certification with their response.

a. Minority Women Business Enterprise

Respondent certifies that this firm is an MWBE: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

b. Small Business Enterprise (SBE) or Disadvantaged Business Enterprise ("DBE")

Respondent certifies that this firm is a SBE or DBE: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

c. Disabled Veterans Business Enterprise (DVBE)

Respondent certifies that this firm is an DVBE: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

d. Historically Underutilized Businesses (HUB)

Respondent certifies that this firm is an HUB: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

e. Historically Underutilized Business Zone Enterprise (HUBZone)

Respondent certifies that this firm is an HUBZone: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

f. Other

Respondent certifies that this firm is a recognized diversity certificate holder: ☐ Yes ☒ No

List certifying agency: Click or tap here to enter text.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 4: CERTIFICATIONS AND LICENSES

Provide a copy of all current licenses, registrations and certifications issued by federal, state and local agencies, and any other licenses, registrations or certifications from any other governmental entity with jurisdiction, allowing Respondent to provide the products and services included in their proposal which can include, but not limited to licenses, registrations or certifications. M/WBE, HUB, DVBE, small and disadvantaged business certifications and other diverse business certifications, as well as manufacturer certifications for sales and service must be included if applicable

Please also list and include copies of any certificates you hold that would show value for your response not already included above.

MUSCO SPORTS LIGHTING, LLC /STATE CONTRACTING LICENSES

State	License Number	Type	Term	Expiration
Alabama	38480	General Contractor	1 year	4/30/2025
Alabama	07506	Electrical Contractor	1 Year	6/30/2025
Arizona	164216	Electrical	2 year	4/30/2025
Arkansas	0328230521	General Contractor	1 year	5/31/2025
Arkansas	M-9071	Master Electrician	1 year	11/30/2025
California	797757	Electrical / C-10	2 year	2/28/2026
California	1000004278	Public Works Contractor	3 year	6/30/2025
Delaware	2001107480	Contractor-Non-Resident	3 year	12/31/2027
Delaware	2001108865	Wholesaler License	3 year	12/31/2027
Delaware	DE-2022-000005352	Contractor Registration Certificate	4 year	5/19/2026
District of Columbia	70106835	General Contractor	2 year	7/31/2026
Florida	ECA000891	Electrical Contractor	2 year	8/31/2026
Florida – Brevard County	EL03442	Electrician Journeyman	1 year	8/31/2025
Georgia	EN218931	Electrical Contractor	2 year	6/30/2026
Idaho	031579	Electrical Contractor	1 year	12/31/2025
Idaho	031531	Public Works	1 year	12/31/2025
Idaho	025773	Master Electrician	3 year	3/31/2025
Idaho	RCE-56488	General Contractor	1 year	12/1/2025
Illinois	TCG134239	General Contractor	1 year	12/5/2025
Indiana	1079	Contractor	1 year	11/15/2025
Iowa	EL207800EC	Electrical Contractor	3 year	12/31/2025
Iowa	C093887	Contractor	1 year	10/05/2025
Iowa	EL060764MA	Master Class A	3 year	12/31/2025
Iowa	EL009823MA	Master Class A	3 year	12/31/2022
Iowa	EL002571MA	Master Class A	3 year	12/31/2025
Iowa	EL006452MA	Master Class A	3 year	12/31/2025
Iowa	EL000103MA	Master Class A	3 year	12/31/2025
Louisiana	18243	Electrical	3 year	10/11/2027
Maryland	30256582 10031704	Construction	1 year	4/30/2025
Minnesota	EA673399	Electrical Contractor – Class A	2 year	2/28/2026
Minnesota	AM672536	Master A Electrician	2 year	2/28/2025
Mississippi	20092-MC	Electrical Contractor	1 year	7/25/2025
Missouri	2024014420	Electrical Contractor	2 year	9/30/2026
Montana	162133	Contractor Registration	2 year	5/01/2025
Nebraska	21967	Contractor Registration	1 year	10/01/2025

Nevada	0087136	C-2 Electrical	2 year	9/30/2026
New Jersey	668131	Public Works Contractor	2 year	01/06/2027
New Mexico	372271	Electrical	3 year	11/30/2026
New Mexico	24215117542018	Public Works Contractor	2 year	12/5/2026
New York	24-637RC-CR	Contractor Registration	2 year	12/29/2026
North Carolina	U.34958	Electrical Contractor	1 year	12/27/2025
North Carolina	76348	General Contractor	1 year	12/31/2025
North Dakota	43962 Class A	Contractor License / General Contractor	1 year	3/01/2026
Ohio	50840	Electrical Contractor	1 year	10/1/2025
Oregon	182477	Construction	2 year	6/09/2026
Rhode Island	34588	Contractor Registration	1 year	3/01/2025
South Carolina	CLM.103943	Contractor	2 year	10/31/2025
South Dakota	EC 3023	Electrical Contractor	2 year	6/30/2026
Tennessee	00045527	Electrical	2 year	5/31/2025
Utah	9181121-5501	Contractor [GC]	2 year	11/30/2025
Utah	8926662-5502	Master Electrician	2 year	11/30/2026
Virginia	2705 061726A	Electrical	2 year	4/30/2025
Virginia	2710024100	Tradesman		9/30/2025
Virginia	2710075736	Tradesman	3 year	9/30/2027
Washington	CC MUSCOSL992JB	General Construction	2 year	7/10/2025
Washington	EC MUSCOSL888BD	Electrical Contractor	2 year	1/07/2026
West Virginia	WV050531	Electrical Contractor	1 year	3/07/2025
West Virginia	M0068BM0918	Masters Electrician	1 year	6/30/2027

(The rest of this page is intentionally left blank)

PROPOSAL FORM 5: UNRESOLVED FINDINGS FOR RECOVERY

O.R.C. Chapter 9.24 prohibits CCOG from awarding a contract to any entity against whom the Auditor of State has issued a finding for recovery, if such finding for recovery is “unresolved” at the time of award. By submitting a proposal, a Respondent warrants that it is not now, and will not become, subject to an “unresolved” finding for recovery under **O.R.C. Chapter 9.24** prior to the award of any contract arising out of this RFP, without notifying CCOG of such finding. The Proposal Review Team will not evaluate a proposal from any Respondent whose name, or the name of any of the subcontractors proposed by the Respondent, appears on the website of the Auditor of the State of Ohio as having an “unresolved” finding for recovery.

Is your company the subject of any unresolved findings for recoveries?

- ☐ Yes
☒ No

(The rest of this page is intentionally left blank)

PROPOSAL FORM 6: MANDATORY DISCLOSURES

1. *Mandatory Contract Performance Disclosure.*

Disclose whether your company's performance and/or the performance of any of the proposed subcontractor(s) under contracts for the provision of products and services that are the same or similar to those to be provided for the Program which is the subject of this RFP has resulted in any formal claims for breach of those contracts. For purposes of this disclosure, "**formal claims**" means any claims for breach that have been filed as a lawsuit in any court, submitted for arbitration (whether voluntary or involuntary, binding or not), or assigned to mediation. For any such claims disclosed, fully explain the details of those claims, including the allegations regarding all alleged breaches, any written or legal action resulting from those allegations, and the results of any litigation, arbitration, or mediation regarding those claims, including terms of any settlement. While disclosure of any formal claims will not automatically disqualify a Respondent from consideration, at the sole discretion of Equalis Group, such claims and a review of the background details may result in a rejection of a Respondent's proposal. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Respondent's performance of the work, and the best interests of Members.

Provide statement here. Musco Sports Lighting, LLC has not been subject to any claims for breach of contracts.

2. *Mandatory Disclosure of Governmental Investigations.*

Indicate whether your company and/or any of the proposed subcontractor(s) has been the subject of any adverse regulatory or adverse administrative governmental action (federal, state, or local) with respect to your company's performance of services similar to those described in this RFP. If any such instances are disclosed, Respondents must fully explain, in detail, the nature of the governmental action, the allegations that led to the governmental action, and the results of the governmental action including any legal action that was taken against the Respondent by the governmental agency. While disclosure of any governmental action will not automatically disqualify a Respondent from consideration, such governmental action and a review of the background details may result in a rejection of the Respondent's proposal at Group's sole discretion. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Respondent's performance of the work, and the best interests of Members.

Provide statement here. Musco Sports Lighting LLC has not been subject to any adverse regulatory or adverse governmental action.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 7: DEALER, RESELLER, AND DISTRIBUTOR AUTHORIZATION

CCOG allows Suppliers to authorize dealers, distributors, and resellers to sell the products and services made available through, and consistent with the Terms and Conditions set forth in, the Master Agreement. If Supplier intends to authorize their dealers, distributors, or resellers access to the Master Agreement in the event of a contract award Supplier must provide a list, either in the form of a document or a weblink, to identify those organizations who are being authorized access to the Master Agreement.

Will the Supplier authorize dealers, distributors, resellers access to Master Agreement?

- ☐ Yes
- ☒ No

If yes, how will Supplier disclose which organization(s) will have access to the Master Agreement? This list can be updated from time to time upon CCOG’s approval.

Respondent Response: N/A

(The rest of this page is intentionally left blank)

PROPOSAL FORM 8: MANDATORY SUPPLIER & PROPOSAL CERTIFICATIONS

CCOG may not enter into contracts with any suppliers who have been found to be ineligible for state contracts under specific federal or Ohio statutes or regulations. Companies responding to any CCOG RFP MUST certify that they are NOT ineligible by signing each of the statements below. **Failure to provide proper affirming signature on any of these statements will result in a Respondent's proposal being deemed nonresponsive to this RFP.**

I, James Hansen, hereby certify and affirm that Musco Sports Lighting, LLC, has not been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions by the United States Department of Labor, the United States Department of Health and Human Services, or any other federal department or agency as set forth in 29 CFR Part 98, or 45 CFR Part 76, or other applicable statutes.

AND

I, James Hansen, hereby certify and affirm that Musco Sports Lighting, LLC, is in compliance with all federal, state, and local laws, rules, and regulations, including but not limited to the Occupational Safety and Health Act and the Ohio Bureau of Employment Services and the following:

- Not penalized or debarred from any public contracts or falsified certified payroll records or any other violation of the Fair Labor Standards Act in the last three (3) years;
- Not found to have violated any worker's compensation law within the last three (3) years;
- Not violated any employee discrimination law within the last three (3) years;
- Not have been found to have committed more than one (1) willful or repeated OSHA violation of a safety standard *(as opposed to a record keeping or administrative standard)* in the last three (3) years;
- Not have an Experience Modification Rating of greater than 1.5 (a penalty-rated employer) with respect to the Bureau of Workers' Compensation risk assessment rating; and
- Not have failed to file any required tax returns or failed to pay any required taxes to any governmental entity within the past three (3) years.

AND

I, James Hansen, hereby certify and affirm that Musco Sports Lighting, LLC, is not on the list established by the Ohio Secretary of State, pursuant to **ORC Section 121.23**, which identifies persons and businesses with more than one unfair labor practice contempt of court finding against them.

AND

I, James Hansen, hereby certify and affirm that **Musco Sports Lighting, LLC** either is not subject to a finding for recovery under **ORC Section 9.24**, or has taken appropriate remedial steps required under that statute to resolve any findings for recovery, or otherwise qualifies under that section to enter into contracts with CCOG.

I, James Hansen, hereby affirm that this proposal accurately represents the capabilities and qualifications of Musco Sports Lighting, LLC, and I hereby affirm that the cost(s) proposed to CCOG for the performance of services and/or provision of goods covered in this proposal in response to this CCOG RFP is a firm fixed price structure as described in the Cost Proposal, inclusive of all incidental as well as primary costs. *(Failure to provide the proper affirming signature on this item may result in the disqualification of your proposal.)*

PROPOSAL FORM 9: CLEAN AIR ACT & CLEAN WATER ACT

The Respondent is in compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act of 1970, as Amended (42 U.S. C. 1857 (h)), Section 508 of the Clean Water Act, as amended (33 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15 as required under OMB Circular A-102, Attachment O, Paragraph 14 (1) regarding reporting violations to the grantor agency and to the United States Environment Protection Agency Assistant Administrator for the Enforcement.

Authorized signature:



Printed Name:

James Hansen

Company Name:

Musco Sports Lighting, LLC

Mailing Address:

100 1st Ave West PO BOX 808 Oskaloosa, IA
52577

Email Address:

secretary@musco.com

Job Title:

Secretary

(The rest of this page is intentionally left blank)

PROPOSAL FORM 10: DEBARMENT NOTICE

I, the Respondent, certify that my company has not been debarred, suspended or otherwise ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension", as described in the Federal Register and Rules and Regulations.

Respondents Name:

James Hansen

Mailing Address:

100 1st Ave West Po Box 808 Oskaloosa, IA
52577

Signature



Title of Signatory:

Secretary

(The rest of this page is intentionally left blank)

PROPOSAL FORM 11: LOBBYING CERTIFICATIONS

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by **Section 1352, Title 31, U.S. Code**. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to civil penalty of not less than ten thousand dollars (\$10,000) and not more than one hundred thousand dollars (\$100,000) for each such failure.

The undersigned certifies, to the best of his/her knowledge and belief, on behalf of Respondent that:

1. No Federal appropriated funds have been paid or will be paid on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding one hundred thousand dollars (\$100,000) in Federal funds at all appropriate tiers and that all sub-recipients shall certify and disclose accordingly.

Signature:

Date:


3/25/25

(The rest of this page is intentionally left blank)

PROPOSAL FORM 12: CONTRACTOR CERTIFICATION REQUIREMENTS

1. Contractor's Employment Eligibility

By entering the contract, Contractor warrants compliance with the Federal Immigration and Nationality Act (FINA), and all other federal and state immigration laws and regulations. The Contractor further warrants that it is in compliance with the various state statutes of the states it will operate this contract in.

Participating Government Entities including School Districts may request verification of compliance from any Contractor or subcontractor performing work under this Contract. These Entities reserve the right to confirm compliance in accordance with applicable laws.

Should the Participating Entities suspect or find that the Contractor or any of its subcontractors are not in compliance, they may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.

The Respondent complies and maintains compliance with the appropriate statutes which requires compliance with federal immigration laws by State employers, State contractors and State subcontractors in accordance with the E-Verify Employee Eligibility Verification Program.

Contractor shall comply with governing board policy of the CCOG Participating entities in which work is being performed.

2. Fingerprint & Criminal Background Checks

If required to provide services on school district property at least five (5) times during a month, contractor shall submit a full set of fingerprints to the school district if requested of each person or employee who may provide such service. Alternately, the school district may fingerprint those persons or employees. An exception to this requirement may be made as authorized in Governing Board policy. The district shall conduct a fingerprint check in accordance with the appropriate state and federal laws of all contractors, subcontractors or vendors and their employees for which fingerprints are submitted to the district. Contractor, subcontractors, vendors and their employees shall not provide services on school district properties until authorized by the District.

The Respondent shall comply with fingerprinting requirements in accordance with appropriate statutes in the state in which the work is being performed unless otherwise exempted.

Contractor shall comply with governing board policy in the school district or Participating Entity in which work is being performed.

Signature:

Date:


3/25/25

(The rest of this page is intentionally left blank)

PROPOSAL FORM 13: BOYCOTT CERTIFICATION

Respondent must certify that during the term of any Agreement, it does not boycott Israel and will not boycott Israel. "Boycott" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

Does Respondent agree? JMH

(Initials of Authorized Representative)

(The rest of this page is intentionally left blank)

PROPOSAL FORM 14: FEDERAL FUNDS CERTIFICATION FORMS

When a participating agency seeks to procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. This includes, but is not limited to, the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 CFR 200 (sometimes referred to as the "Uniform Guidance" or "EDGAR" requirements).

All Respondents submitting proposals must complete this Federal Funds Certification Form regarding Respondent's willingness and ability to comply with certain requirements which may be applicable to specific participating agency purchases using federal grant funds. This completed form will be made available to Members for their use while considering their purchasing options when using federal grant funds. Members may also require Supplier Partners to enter into ancillary agreements, in addition to the contract's general terms and conditions, to address the member's specific contractual needs, including contract requirements for a procurement using federal grants or contracts.

For each of the items below, respondent should certify their agreement and ability to comply, where applicable, by having respondents authorized representative complete and initial the applicable lines after each section and sign the acknowledgment at the end of this form. If a Respondent fails to complete any item in this form, CCOG will consider the Respondent's response to be that they are unable or unwilling to comply. A negative response to any of the items may, if applicable, impact the ability of a participating agency to purchase from the Supplier Partner using federal funds.

1. *Supplier Partner Violation or Breach of Contract Terms*

Contracts for more than the simplified acquisition threshold currently set at one hundred fifty thousand dollars (\$150,000), which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 USC 1908, must address administrative, contractual, or legal remedies in instances where Supplier Partners violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Any contract award will be subject to Terms and Conditions of the Master Agreement, as well as any additional terms and conditions in any purchase order, participating agency ancillary contract, or Member construction contract agreed upon by Supplier Partner and the participating agency which must be consistent with and protect the participating agency at least to the same extent as the CCOG Terms and Conditions.

The remedies under the contract are in addition to any other remedies that may be available under law or in equity. By submitting a proposal, you agree to these Supplier Partner violation and breach of contract terms.

Does Respondent agree? JMH

(Initials of Authorized Representative)

2. *Termination for Cause or Convenience*

When a participating agency expends federal funds, the participating agency reserves the right to immediately terminate any agreement in excess of ten thousand dollars (\$10,000) resulting from this procurement process in the event of a breach or default of the agreement by Offeror in the event Offeror fails to: (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. Participating agency also reserves the right to terminate the contract immediately, with written notice to offeror, for convenience, if participating agency believes, in its sole discretion that it is in the best interest of participating agency to do so. Respondent will be compensated for work performed and accepted and goods accepted by participating agency as of the termination date if the contract is terminated for convenience of participating agency. Any award under this procurement process is not exclusive and participating agency reserves the right to purchase goods and services from other offerors when it is in participating agency's best interest.

Does Respondent agree? JMH
(Initials of Authorized Representative)

3. Equal Employment Opportunity

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

The equal opportunity clause provided under 41 CFR 60-1.4(b) is hereby incorporated by reference. Supplier Partner agrees that such provision applies to any participating agency purchase or contract that meets the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 and Supplier Partner agrees that it shall comply with such provision.

Does Respondent agree? JMH
(Initials of Authorized Representative)

4. Davis-Bacon Act

When required by Federal program legislation, Supplier Partner agrees that, for all participating agency prime construction contracts/purchases in excess of two thousand dollars (\$2,000), Supplier Partner shall comply with the Davis-Bacon Act (40 USC 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, Supplier Partner is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determinate made by the Secretary of Labor. In addition, Supplier Partner shall pay wages not less than once a week.

Current prevailing wage determinations issued by the Department of Labor are available at www.wdol.gov. Supplier Partner agrees that, for any purchase to which this requirement applies, the award of the purchase to the Supplier Partner is conditioned upon Supplier Partner's acceptance of the wage determination.

Supplier Partner further agrees that it shall also comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States". The Act provides that each Supplier Partner or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

Does Respondent agree? JMH
(Initials of Authorized Representative)

5. *Contract Work Hours and Safety Standards Act*

Where applicable, for all participating agency contracts or purchases in excess of one hundred thousand dollars (\$100,000) that involve the employment of mechanics or laborers, Supplier Partner agrees to comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 USC 3702 of the Act, Supplier Partner is required to compute the wages of every mechanic and laborer on the basis of a standard work week of forty (40) hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of forty (40) hours in the work week. The requirements of 40 USC 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Does Respondent agree? JMH

(Initials of Authorized Representative)

6. *Right to Inventions Made Under a Contract or Agreement*

If the participating agency's Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

Supplier Partner agrees to comply with the above requirements when applicable.

Does Respondent agree? JMH

(Initials of Authorized Representative)

7. *Clean Air Act and Federal Water Pollution Control Act*

Clean Air Act (42 USC 7401-7671q.) and the Federal Water Pollution Control Act (33 USC 1251-1387), as amended – Contracts and subgrants of amounts in excess of one hundred fifty thousand dollars (\$150,000) must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 USC 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 USC 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

When required, Supplier Partner agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act and the Federal Water Pollution Control Act.

Does Respondent agree? JMH

(Initials of Authorized Representative)

8. *Debarment and Suspension*

Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689

(3CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Supplier Partner certifies that Supplier Partner is not currently listed on the government-wide exclusions in SAM, is not debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier Partner further agrees to immediately notify the Cooperative and all Members with pending purchases or seeking to purchase from Supplier Partner if Supplier Partner is later listed on the government-wide exclusions in SAM, or is debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Does Respondent agree? JMH
(Initials of Authorized Representative)

9. *Byrd Anti-Lobbying Amendment*

Byrd Anti-Lobbying Amendment (31 USC 1352) – Supplier Partners that apply or bid for an award exceeding one hundred thousand dollars (\$100,000) must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 USC 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. As applicable, Supplier Partner agrees to file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 USC 1352).

Does Respondent agree? JMH
(Initials of Authorized Representative)

10. *Procurement of Recovered Materials*

For participating agency purchases utilizing Federal funds, Supplier Partner agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency maybe required to confirm estimates and otherwise comply. The requirements of Section 6002 includes procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds ten thousand dollars (\$10,000) or the value of the quantity acquired during the preceding fiscal year exceeded ten thousand dollars (\$10,000); procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Does Respondent agree? JMH
(Initials of Authorized Representative)

11. *Profit as a Separate Element of Price*

For purchases using federal funds in excess of one hundred fifty thousand dollars (\$150,000), a participating agency may be required to negotiate profit as a separate element of the price. See, 2 CFR 200.324(b). When required by a participating agency, Supplier Partner agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, Supplier Partner agrees that the total price, including

profit, charged by Supplier Partner to the participating agency shall not exceed the awarded pricing, including any applicable discount, under Supplier Partner's Group Purchasing Agreement.

Does Respondent agree? JMH
(Initials of Authorized Representative)

12. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

Vendor agrees that recipients and subrecipients are prohibited from obligating or expending loan or grant funds to procure or obtain, extend or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system from companies described in Public Law 115-232, section 889. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country are also prohibited.

Does Respondent agree? JMH
(Initials of Authorized Representative)

13. Domestic preferences for procurements

For participating agency purchases utilizing Federal funds, Respondent agrees to provide proof, where applicable, that the materials, including but not limited to, iron, aluminum, steel, cement, and other manufactured products are produced in the United States.

"Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

"Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Does Respondent agree? JMH
(Initials of Authorized Representative)

14. General Compliance and Cooperation with Members

In addition to the foregoing specific requirements, Vendor agrees, in accepting any purchase order from a Member, it shall make a good faith effort to work with Members to provide such information and to satisfy such requirements as may apply to a particular participating agency purchase or purchases including, but not limited to, applicable recordkeeping and record retention requirements.

Does Respondent agree? JMH
(Initials of Authorized Representative)

15. Applicability to Subcontractors

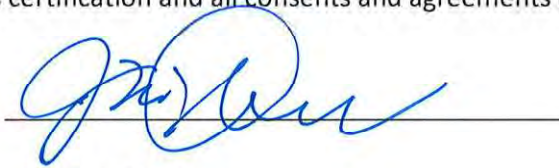
Offeror agrees that all contracts it awards pursuant to the Contract shall be bound by the foregoing terms and conditions.

Does Respondent agree? JMH

(Initials of Authorized Representative)

By signature below, I certify that the information in this form is true, complete, and accurate and that I am authorized by my company to make this certification and all consents and agreements contained herein.

Authorized signature:



Printed Name:

James Hansen

Company Name:

Musco Sports Lighting, LLC

Mailing Address:

100 1st Ave West PO BOX 808 Oskaloosa, IA 52577

Job Title:

Secretary

(The rest of this page is intentionally left blank)

PROPOSAL FORM 15: FEMA FUNDING REQUIREMENTS CERTIFICATION FORMS

Please answer the following question. If yes, complete this Proposal Form.

In the event of a contract award, does the Respondent intend to make their products and services available to public agencies utilizing FEMA funds or seeking reimbursement from FEMA?	<input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No
--	---

When a participating agency seeks to procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. This includes, but is not limited to, the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 CFR 200 (sometimes referred to as the "Uniform Guidance" or "EDGAR" requirements). Additionally, Appendix II to Part 200 authorizes FEMA to require or recommend additional provisions for contracts.

All Respondents submitting proposals who desire to work with Members utilizing FEMA funds must complete this FEMA Recommended Contract Provisions Form regarding Respondent's willingness and ability to comply with certain requirements which may be applicable to specific participating agency purchases using FEMA funds. This completed form will be made available to Members for their use while considering their purchasing options when using FEMA grant funds. Members may also require Supplier Partners to enter into ancillary agreements, in addition to the contract's general terms and conditions, to address the member's specific contractual needs, including contract requirements for a procurement using federal grants or contracts.

For each of the items below, Respondent should certify Respondent's agreement and ability to comply, where applicable, by having respondents authorized representative complete and initial the applicable lines after each section and sign the acknowledgment at the end of this form. If a Respondent fails to complete any item in this form, CCOG will consider the respondent's response to be that they are unable or unwilling to comply. A negative response to any of the items may, if applicable, impact the ability of a participating agency to purchase from the Supplier Partner using federal funds.

1. Access to Records

For All Procurements

The Winning Supplier agrees to provide the participating agency, the pass-through entity (if applicable), the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

The Winning Supplier agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Winning Supplier agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

Does Respondent agree? JMH

(Initials of Authorized Representative)

For Contracts Entered into After August 1, 2017, Under a Major Disaster or Emergency Declaration

In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, the participating agency, and the Winning Supplier acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.”

Does Respondent agree? JMH
(Initials of Authorized Representative)

2. Changes

FEMA recommends that all contracts include a changes clause that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may depend on the nature of the contract and the procured item(s) or service(s). The participating agency should also consult their servicing legal counsel to determine whether and how contract changes are permissible under applicable state, local, or tribal laws or regulations.

Does Respondent agree? JMH
(Initials of Authorized Representative)

3. Use of DHS Seal, Logo, and Flags

The Winning Supplier shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontracts.

Does Respondent agree? JMH
(Initials of Authorized Representative)

4. Compliance with Federal Law, Regulations, And Executive Orders and Acknowledgement of Federal Funding

This is an acknowledgement that when FEMA financial assistance is used to fund all or a portion of the participating agency’s contract with the Winning Supplier, the Winning Supplier will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

Does Respondent agree? JMH
(Initials of Authorized Representative)

5. No Obligation by Federal Government

The federal government is not a party to this or any contract resulting from this or future procurements with the participating agencies and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

Does Respondent agree? JMH
(Initials of Authorized Representative)

6. Program Fraud and False or Fraudulent Statements or Related Acts

The Winning Supplier acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor’s actions pertaining to this contract.

Does Respondent agree? JMH
(Initials of Authorized Representative)

7. Affirmative Socioeconomic Steps

If subcontracts are to be let, the Winning Supplier is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

Does Respondent agree? JMH

(Initials of Authorized Representative)

8. License and Delivery of Works Subject to Copyright and Data Rights

The Winning Supplier grants to the participating agency, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the Winning Supplier will identify such data and grant to the participating agency or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Winning Supplier will deliver to the participating agency data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the (insert name of the non-federal entity).

Does Respondent agree? JMH

(Initials of Authorized Representative)

By signature below, I certify that the information in this form is true, complete, and accurate and that I am authorized by my company to make this certification and all consents and agreements contained herein.

Authorized signature:



Printed Name: James Hansen

Company Name: Musco Sports Lighting, LLC

Mailing Address: 100 1st Ave West Po Box 808 Oskaloosa IA 52577

Job Title: Secretary

PROPOSAL FORM 16: ARIZONA CONTRACTOR REQUIREMENTS

Please answer the following question. If yes, please complete this Proposal Form.

In the event of a contract award, does the Respondent intend to make their products and services available to public agencies in the State of Arizona?	<input checked="" type="checkbox"/>	Yes
	<input type="checkbox"/>	No

In the event the Awarded Supplier desires to pursue public sector opportunities in the State of Arizona, it is important to understand the requirements for working with those public agencies. The documentation and information contained in this proposal form are intended to provide the Respondent with documentation that could be relevant to the providing products & services to public agencies in the State of Arizona. It is the responsibility of the public agency to ensure they are in compliance with local requirements.

AZ Compliance with Federal and State Requirements

Contractor agrees when working on any federally assisted projects with more than \$2,000.00 in labor costs, to comply with all federal and state requirements, as well as Equal Opportunity Employment requirements and all other federal and state laws, statutes, etc. Contractor agrees to post wage rates at the work site and submit a copy of their payroll to the member for their files. Contractor must retain records for three years to allow the federal grantor agency access to these records, upon demand. Contractor also agrees to comply with the Arizona Executive Order 75-5, as amended by Executive Order 99-4.

When working on contracts funded with Federal Grant monies, contractor additionally agrees to comply with the administrative requirements for grants, and cooperative agreements to state, local and federally recognized Indian Tribal Governments.

AZ compliance with workforce requirements

Pursuant to ARS 41-4401, Contractor and subcontractor(s) warrant their compliance with all federal and state immigration laws and regulations that relate to their employees, and compliance with ARS 23-214 subsection A, which states, "... every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program"

CCOG reserves the right to cancel or suspend the use of any contract for violations of immigration laws and regulations. CCOG and its members reserve the right to inspect the papers of any contractor or subcontract employee who works under this contract to ensure compliance with the warranty above.

AZ Contractor Employee Work Eligibility

By entering into this contract, contractor agrees and warrants compliance with A.R.S. 41-4401, A.R.S. 23-214, the Federal Immigration and Nationality Act (FINA), and all other Federal immigration laws and regulations. CCOG and/or CCOG members may request verification of compliance from any contractor or sub-contractor performing work under this contract. CCOG and CCOG members reserve the right to confirm compliance. In the event that CCOG or CCOG members suspect or find that any contractor or subcontractor is not in compliance, CCOG may pursue any and all remedies allowed by law, including but not limited to suspension of work, termination of contract, suspension and/or debarment of the contractor. All cost associated with any legal action will be the responsibility of the contractor.

AZ Non-Compliance

All federally assisted contracts to members that exceed \$10,000.00 may be terminated by the federal grantee for noncompliance by contractor. In projects that are not federally funded, Respondent must agree to meet any federal, state or local requirements as necessary. In addition, if compliance with the federal regulations increases the contract costs

beyond the agreed upon costs in this solicitation, the additional costs may only apply to the portion of the work paid by the federal grantee.

Registered Sex Offender Restrictions (Arizona)

For work to be performed at an Arizona school, contractor agrees that no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are present, or reasonably expected to be present. Contractor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the CCOG member's discretion. Contractor must identify any additional costs associated with compliance to this term. If no costs are specified, compliance with this term will be provided at no additional charge.

Offshore Performance of Work Prohibited

Due to security and identity protection concerns, direct services under this contract shall be performed within the borders of the United States.

Terrorism Country Divestments: In accordance with A.R.S. 35-392, CCOG and CCOG members are prohibited from purchasing from a company that is in violation of the Export Administration Act. By entering into the contract, contractor warrants compliance with the Export Administration Act.

The undersigned hereby accepts and agrees to comply with all statutory compliance and notice requirements listed in this document.

Does Respondent agree? JMH

(Initials of Authorized Representative)

Date: 03/25/2025

(The rest of this page is intentionally left blank)

PROPOSAL FORM 17: NEW JERSEY REQUIREMENTS

Please answer the following question. If yes, complete this Proposal Form.

Does the awarded supplier intend to make their products and services available to public agencies in the State of New Jersey?	<input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No
---	---

In the event the Awarded Supplier desires to pursue public sector opportunities in the State of New Jersey, it is important to understand the requirements for working with those public agencies. The documentation and information contained in this proposal form are intended to provide the Respondent with documentation that could be relevant to the providing products & services to public agencies in the State of New Jersey. It is the responsibility of the public agency to ensure they are in compliance with local requirements.

New Jersey vendors are also required to comply with the following New Jersey statutes when applicable:

- All anti-discrimination laws, including those contained in N.J.S.A. 10:2-1 through N.J.S.A. 10:2-14, N.J.S.A. 10:5-1, and N.J.S.A. 10:5-31 through 10:5-38.
- Compliance with Prevailing Wage Act, N.J.S.A. 34:11-56.26, for all contracts within the contemplation of the Act.
- Compliance with Public Works Contractor Registration Act, N.J.S.A. 34:11-56.26
- Bid and Performance Security, as required by the applicable municipal or state statutes.

A. Ownership Disclosure Form (N.J.S. 52:25-24.2)

Pursuant to the requirements of P.L. 1999, Chapter 440 effective April 17, 2000 (Local Public Contracts Law), the Respondent shall complete the form attached to these specifications listing the persons owning 10 percent (10%) or more of the firm presenting the proposal.

Company Name:	Musco Sports Lighting, LLC
Street:	100 1 st Ave West Po Box 808
City, State, Zip Code:	Oksalooa, IA 52577

Complete as appropriate:

I, [Click or tap here to enter text.](#), certify that I am the sole owner of [Click or tap here to enter text.](#), that there are no partners and the business is not incorporated, and the provisions of N.J.S. 52:25-24.2 do not apply.

OR:

I, [Click or tap here to enter text.](#), a partner in [Click or tap here to enter text.](#), do hereby certify that the following is a list of all individual partners who own a 10% or greater interest therein. I further certify that if one (1) or more of the partners is itself a corporation or partnership, there is also set forth the names and addresses of the stockholders holding 10% or more of that corporation's stock or the individual partners owning 10% or greater interest in that partnership.

OR:

I, James Hansen, an authorized representative Musco Sports Lighting, LLC, a corporation, do hereby certify that the following is a list of the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class. I further certify that if one (1) or more of such stockholders is itself a corporation or partnership, that there is also set forth the names and addresses of the stockholders holding 10% or more of the corporation's stock or the individual partners owning a 10% or greater interest in that partnership.

(Note: If there are no partners or stockholders owning 10% or more interest, indicate none.)

Name	Address	Interest
------	---------	----------

Musco Corporation	100 1 st Ave West Oskaloosa IA 52577	100%		
Joe P. Crookham Family	815 Woodland Road Oskaloosa IA 52577	More than Corporation	10%	Musco
Myron K. Gordin Family	2756 Merino Avenue Oskaloosa IA 52577	More than Corporation	10%	Musco

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Signature:



Date:

3/25/25

(The rest of this page is intentionally left blank)

B. Non-Collusion Affidavit

Respondent Name: Musco Sports Lighting, LLC

Street Address: 100 1st Ave West Po Box 808

City, State Zip: Oskaloosa IA 52577

State of Iowa

County of Mahaska

I, James Hansen of the Oskaloosa in the County of Mahaska, State of Iowa, of full age, being duly sworn according to law on my oath depose and say that:

I am the Secretary of the firm of Musco Sports Lighting, LLC the Respondent making the Proposal for the goods, services or public work specified under the Harrison Township Board of Education attached proposal, and that I executed the said proposal with full authority to do so; that said Respondent has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above proposal, and that all statements contained in said bid proposal and in this affidavit are true and correct, and made with full knowledge that the Harrison Township Board of Education relies upon the truth of the statements contained in said bid proposal and in the statements contained in this affidavit in awarding the contract for the said goods, services or public work.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by

Authorized signature:

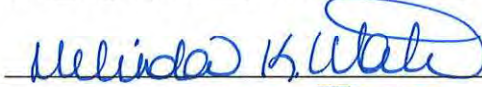


Job Title:

Secretary

Subscribed and sworn before me

this 25 day of March, 2025



Notary Public of New Jersey Iowa

My commission expires 4/24, 2025



SEAL

C. Affirmative Action Affidavit (P.L. 1975, C.127)

Company Name: Musco Sports Lighting, LLC
Street Address: 100 1st Ave West Po Box 808
City, State, Zip Code: Oskaloosa, IA 52577

Bid Proposal Certification:

Indicate below your compliance with New Jersey Affirmative Action regulations. Your proposal will be accepted even if you are not in compliance at this time. No contract and/or purchase order may be issued, however, until all Affirmative Action requirements are met.

Required Affirmative Action Evidence:

Procurement, Professional & Service Contracts (Exhibit A)

Suppliers must submit with proposal:


1. A photo copy of their Federal Letter of Affirmative Action Plan Approval
OR
2. A photo copy of their Certificate of Employee Information Report
OR
3. A complete Affirmative Action Employee Information Report (AA302)

Public Work – Over \$50,000 Total Project Cost:

☐ No approved Federal or New Jersey Affirmative Action Plan. We will complete Report Form AA201-A upon receipt from the Harrison Township Board of Education

☒ Approved Federal or New Jersey Plan – certificate enclosed pg 49

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Authorized Signature: 
Title of Signatory: Secretary
Date: 3/25/25

P.L. 1995, c. 127 (N.J.A.C. 17:27)

MANDATORY AFFIRMATIVE ACTION LANGUAGE

PROCUREMENT, PROFESSIONAL AND SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. The contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment

advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this non-discrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisement for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to attempt in good faith to employ minority and female workers trade consistent with the applicable county employment goal prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the Affirmative

Action Office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time.

The contractor or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of it testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the state of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

The contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and lay-off to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor and its subcontractors shall furnish such reports or other documents to the Affirmative Action Office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Affirmative Action Office for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (NJAC 17:27).



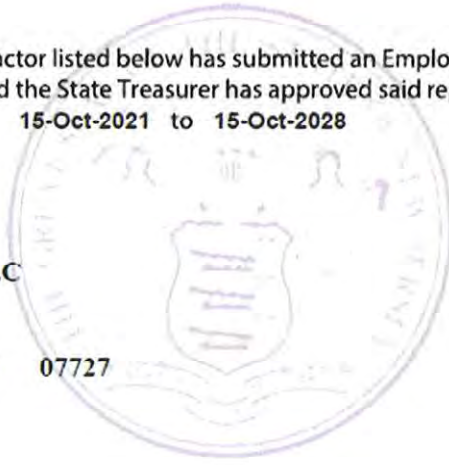
Signature of Procurement Agent

(The rest of this page is intentionally left blank)

CERTIFICATE OF EMPLOYEE INFORMATION REPORT RENEWAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of **15-Oct-2021 to 15-Oct-2028**

MUSCO SPORTS LIGHTING, LLC
5146 W. HURLEY POND ROAD
FARMINGDALE NJ 07727



Elizabeth Maher Muoio
ELIZABETH MAHER MUOIO
 State Treasurer

D. C. 271 Political Contribution Disclosure Form

PUBLIC AGENCY INSTRUCTIONS

This page provides guidance to public agencies entering into contracts with business entities that are required to file Political Contribution Disclosure forms with the agency. **It is not intended to be provided to contractors.** What follows are instructions on the use of form local units can provide to contractors that are required to disclose political contributions pursuant to N.J.S.A. 19:44A-20.26 (P.L. 2005, c. 271, s.2). Additional information is available in Local Finance Notice 2006-1 (https://www.nj.gov/dca/divisions/dlgs/resources/lfns_2006.html).

1. The disclosure is required for all contracts in excess of \$17,500 that are **not awarded** pursuant to a “fair and open” process (N.J.S.A. 19:44A-20.7).
2. Due to the potential length of some contractor submissions, the public agency should consider allowing data to be submitted in electronic form (i.e., spreadsheet, pdf file, etc.). Submissions must be kept with the contract documents or in an appropriate computer file and be available for public access. **The form is worded to accept this alternate submission.** The text should be amended if electronic submission will not be allowed.
3. The submission must be **received from the contractor and** on file at least 10 days prior to award of the contract. Resolutions of award should reflect that the disclosure has been received and is on file.
4. The contractor must disclose contributions made to candidate and party committees covering a wide range of public agencies, including all public agencies that have elected officials in the county of the public agency, state legislative positions, and various state entities. The Division of Local Government Services recommends that contractors be provided a list of the affected agencies. This will assist contractors in determining the campaign and political committees of the officials and candidates affected by the disclosure.
 - a) The Division has prepared model disclosure forms for each county. They can be downloaded from the “County PCD Forms” link on the Pay-to-Play web site at https://www.state.nj.us/dca/divisions/dlgs/programs/pay_2_play.html. They will be updated from time-to-time as necessary.
 - b) A public agency using these forms **should edit them to properly reflect the correct legislative district(s)**. As the forms are county-based, **they list all legislative districts** in each county. **Districts that do not represent the public agency should be removed from the lists.**
 - c) Some contractors may find it easier to provide a single list that covers all contributions, regardless of the county. These submissions are appropriate and should be accepted.
 - d) The form may be used “as-is”, subject to edits as described herein.
 - e) The “Contractor Instructions” sheet is intended to be provided with the form. It is recommended that the Instructions and the form be printed on the same piece of paper. The form notes that the Instructions are printed on the back of the form; where that is not the case, the text should be edited accordingly.
 - f) The form is a Word document and can be edited to meet local needs, and posted for download on web sites, used as an e-mail attachment, or provided as a printed document.
5. It is recommended that the contractor also complete a “Stockholder Disclosure Certification.” This will assist the local unit in its obligation to ensure that contractor did not make any prohibited contributions to the committees listed on the Business Entity Disclosure Certification in the 12 months prior to the contract. (See Local Finance Notice 2006-7 for additional information on this obligation) A sample Certification form is part of this package and the instruction to complete it is included in the Contractor Instructions. **NOTE: This section is not applicable to Boards of Education.**

CONTRACTOR INSTRUCTIONS

Business entities (contractors) receiving contracts from a public agency in the state of New Jersey that are NOT awarded pursuant to a "fair and open" process (defined at N.J.S.A. 19:44A-20.7) are subject to the provisions of P.L. 2005, c. 271, s.2 (N.J.S.A. 19:44A-20.26). This law provides that 10 days prior to the award of such a contract, the contractor shall disclose contributions to:

- any State, county, or municipal committee of a political party
- any legislative leadership committee*
- any continuing political committee (a.k.a., political action committee)
- any candidate committee of a candidate for, or holder of, an elective office:
 - of the public entity awarding the contract
 - of that county in which that public entity is located
 - of another public entity within that county
 - or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county. The disclosure must list reportable contributions to any of the committees that exceed \$300 per election cycle that were made during the 12 months prior to award of the contract. See N.J.S.A. 19:44A-8 and 19:44A-16 for more details on reportable contributions.

N.J.S.A. 19:44A-20.26 itemizes the parties from whom contributions must be disclosed when a business entity is not a natural person. This includes the following:

- individuals with an "interest" ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit
- all principals, partners, officers, or directors of the business entity or their spouses
- any subsidiaries directly or indirectly controlled by the business entity
- IRS Code Section 527 New Jersey based organizations, directly or indirectly controlled by the business entity and filing as continuing political committees, (PACs). When the business entity is a natural person, "a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity." [N.J.S.A. 19:44A-20.26(b)] The contributor must be listed on the disclosure. Any business entity that fails to comply with the disclosure provisions shall be subject to a fine imposed by ELEC in an amount to be determined by the Commission which may be based upon the amount that the business entity failed to report. The enclosed list of agencies is provided to assist the contractor in identifying those public agencies whose elected official and/or candidate campaign committees are affected by the disclosure requirement. It is the contractor's responsibility to identify the specific committees to which contributions may have been made and need to be disclosed. The disclosed information may exceed the minimum requirement. The enclosed form, a content-consistent facsimile, or an electronic data file containing the required details (along with a signed cover sheet) may be used as the contractor's submission and is disclosable to the public under the Open Public Records Act. The contractor must also complete the attached Stockholder Disclosure Certification. This will assist the agency in meeting its obligations under the law.

NOTE: This section does not apply to Board of Education contracts.

¹ N.J.S.A. 19:44A-3(s): "The term "legislative leadership committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly or the Minority Leader of the General Assembly pursuant to section 16 of P.L.1993, c.65 (C.19:44A-10.1) for the purpose of receiving contributions and making expenditures."

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

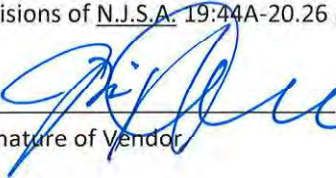
Required Pursuant To N.J.S.A. 19:44A-20.26

This form or its permitted facsimile must be submitted to the local unit no later than 10 days prior to the award of the contract.

Part I – Vendor Information

Vendor Name:	Musco Sports Lighting, LLC		
Address:	100 1 st Ave West PO BOX 808		
City:	Oskaloosa	State: IA	Zip: 52577

The undersigned being authorized to certify, hereby certifies that the submission provided herein represents compliance with the provisions of N.J.S.A. 19:44A-20.26 and as represented by the Instructions accompanying this form.

	James Hansen	Secretary
Signature of Vendor	Printed Name	Title

Part II – Contribution Disclosure

Disclosure requirement: Pursuant to N.J.S.A. 19:44A-20.26 this disclosure must include all reportable political contributions (more than \$300 per election cycle) over the 12 months prior to submission to the committees of the government entities listed on the form provided by the local unit.

☐ Check here if disclosure is provided in electronic form.

Contributor Name	Recipient Name	Date	Dollar Amount
N/A			\$

☐ Check here if the information is continued on subsequent page(s)

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Page ____ of ____

Contributor Name	Recipient Name	Date	Dollar Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount

Page | 53

List of Agencies with Elected Officials Required for Political Contribution Disclosure

N.J.S.A. 19:44A-20.26

County Name:

State: Governor, and Legislative Leadership Committees

Legislative District #s:

State Senator and two members of the General Assembly per district.

County:

Freeholders

County Clerk

Sheriff

{County Executive}

Surrogate

Municipalities (Mayor and members of governing body, regardless of title):

USERS SHOULD CREATE THEIR OWN FORM, OR DOWNLOAD FROM WWW.NJ.GOV/DCA/LGS/P2P A COUNTY-BASED, CUSTOMIZABLE FORM.

E. Stockholder Disclosure Certification

Name of Business:

☒ I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned.

OR

☐ I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned.

Check the box that represents the type of business organization:

- ☐ Partnership
- ☐ Corporation
- ☐ Sole Proprietorship
- ☐ Limited Partnership
- ☒ Limited Liability Corporation
- ☐ Limited Liability Partnership
- ☐ Subchapter S Corporation

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders:

Name: Musco Corporation- 100% of Musco Sports Lighting, LLC	Name: Stockholder Name
Home Address: 100 1 st Avenue West, Oskaloosa, IA 52577	Home Address:
Home Address	Home Address
Name: Joe P Crookham Family; more than 10% Musco Corporation	Name: Stockholder Name

Home Address: 815 Woodland Road Oskaloosa IA 52577

Home Address

Home Address:

Home Address

Name: Myron K. Gordin Family; more than 10% Musco Corporation

Home Address: 2756 Merino Avenue, Oskaloosa, IA 52577

Home Address

Name: Stockholder Name

Home Address:

Home Address

Subscribed and sworn before me this 25 day of

March, 25



(Notary Public)

Melinda K. Walter

My Commission expires: 4/24/25

(Affiant)

[Signature]

(Print name & title of affiant)

(Corporate Seal)

(The rest of this page is intentionally left blank)

PROPOSAL FORM 18: GENERAL TERMS AND CONDITIONS ACCEPTANCE FORM

Check one of the following responses to the General Terms and Conditions in this solicitation, including the Master Agreement:

☐ We take no exceptions/deviations to the general terms and conditions. (**Note:** *If none are listed below, it is understood that no exceptions/deviations are taken.*)

☒ We take the following exceptions/deviations to the general terms and conditions. All exceptions/deviations must be clearly explained. Reference the corresponding general terms and conditions that you are taking exceptions/deviations to. Clearly state if you are adding additions terms and conditions to the general terms and conditions. Provide details on your exceptions/deviations below:

"In paragraph 2.8 - it states Equalis Group, CCOG and their officers, directors, employees and agents will be named as **certificate holders on the policy**. Musco cannot do that. Were these meant to **be named as additional insureds?**"

(Note: Unacceptable exceptions shall remove your proposal from consideration for award. CCOG shall be the sole judge on the acceptance of exceptions/deviations and the decision shall be final.)

PROPOSAL FORM 19: EQUALIS GROUP ADMINISTRATION AGREEMENT DECLARATION

Attachment A - Sample Administration Agreement of this solicitation is for reference only. Contracting with Equalis Group and the Winning Supplier will occur after contract award.

Execution of the Administration Agreement is required for the Master Agreement to be administered by Equalis Group. **Attachment A - Sample Administration Agreement** defines i) the roles and responsibilities of both parties relating to marketing and selling the Program to current and prospective Members, and ii) the financial terms between Equalis Group and Winning Supplier.

Redlined copies of this agreement should not be submitted with the response. Should a Respondent be recommended for award, this agreement will be negotiated and executed between Equalis Group and the Respondent. Respondents must select one of the following options for submitting their response.

- ☐ Respondent agrees to all terms and conditions in **Attachment A - Sample Administration Agreement.**
- ☒ Respondent wishes to negotiate directly with Equalis Group on terms and conditions in the Sample Administration Agreement. Negotiations will commence with Equalis Group after CCOG has completed the contract award.

PROPOSAL FORM 20: MASTER AGREEMENT SIGNATURE FORM

RESPONDENTS MUST SUBMIT THIS FORM COMPLETED AND SIGNED WITH THEIR RESPONSE TO BE CONSIDERED FOR AWARD. RESPONDENTS WHO FAIL TO DO SO WILL BE DETERMINED UNRESPONSIVE AND WILL NO LONGER BE CONSIDERED FOR AWARD.

The undersigned hereby proposes and agrees to furnish Products & Services in strict compliance with the terms, specifications, and conditions contained within this RFP and the Master Agreement at the prices proposed within the submitted proposal unless noted in writing. The undersigned further certifies that he/she is an officer of the company and has authority to negotiate and bind the company named below and has not prepared this proposal in collusion with any other Respondent and that the contents of this proposal as to prices, terms or conditions of said proposal have not been communicated by the undersigned nor by any employee or agent to any person engaged in this type of business prior to the official opening of this proposal.

Company Name Musco Sports Lighting, LLC
Address 100 1st Ave West PO BOX 808
City/State/Zip Oskaloosa, IA 52577
Phone Number 800-825-6030
Email Address Musco.contracts@musco.com
Printed Name James Hansen
Job Title Secretary
Authorized Signature 

Initial Term of the Master Agreement

Contract Effective Date: July 1, 2025
Contract Expiration Date: June 30, 2029
Contract Number: _____

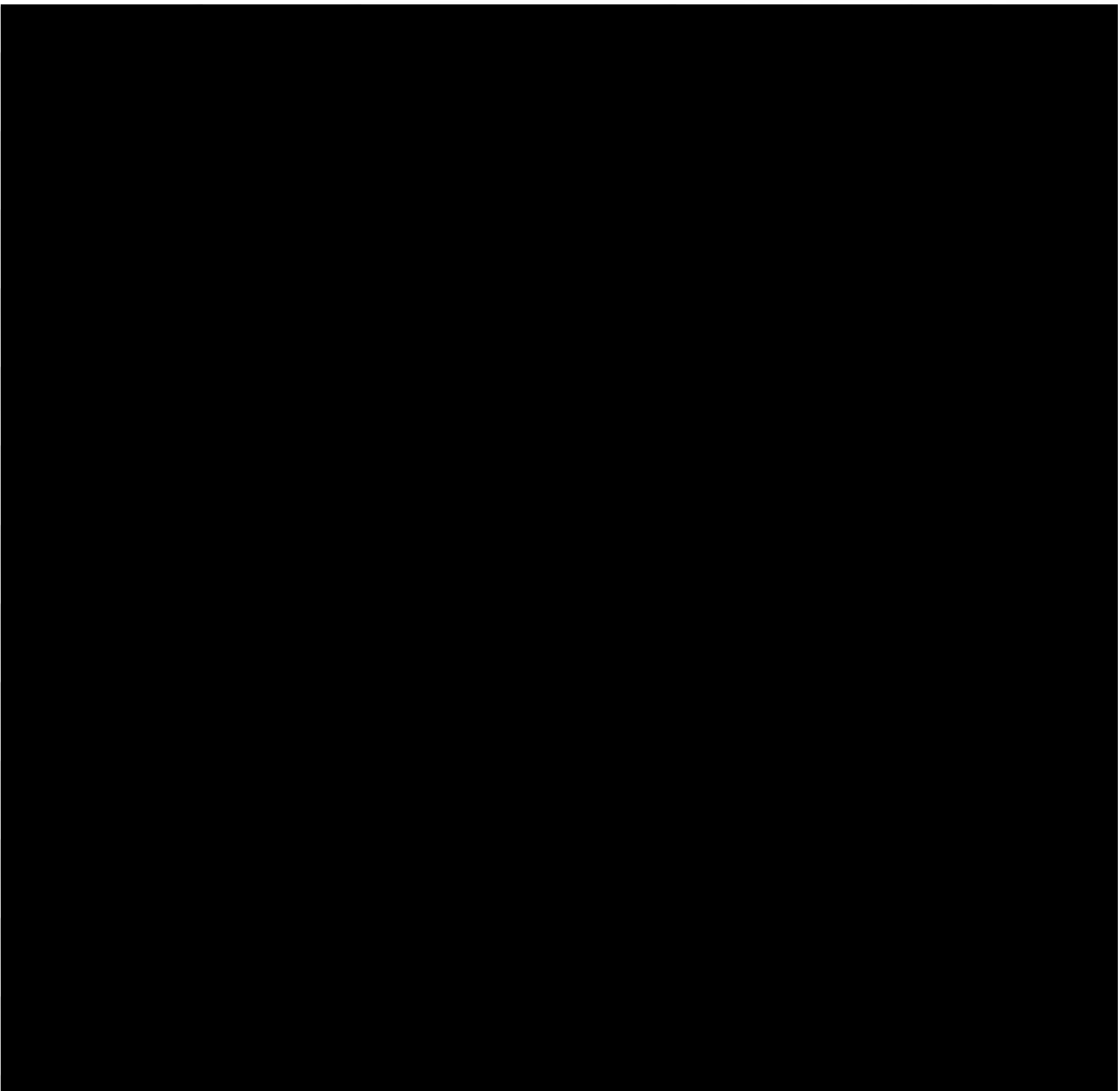
(Note: Contract Number will be applied prior to CCOG and Equalis Group countersigning.)

The Cooperative Council of Governments, Inc.
6001 Cochran Road, Suite 333
Cleveland, Ohio 44139

Equalis Group, LLC.
5540 Granite Parkway, Suite 200
Plano, Texas 75024

By: _____
Name: Franklyn A. Corlett
As: CCOG Board President
Date: _____

By: _____
Name: Eric Merkle
As: EVP, Procurement & Operations
Date: _____





Musco Constant 25™

25-Year Product Assurance & Warranty Program

Project name: _____ Project number: _____

Owner: _____ City: _____ State: _____

Covered product(s): _____

Date issued: _____ Expiration: _____

Musco Sports Lighting, LLC will provide all materials and labor to maintain operation of your lighting system to original design criteria for 25 years. Musco products and services are guaranteed to perform on your project as detailed in this document.

Light Performance

Specified illumination levels will be maintained and are marked as guaranteed in the Musco Illumination Summary.

Individual luminaire outages that occur during the warranty and maintenance period are repaired when the usage of any field is materially impacted.

Spill Light Control

If specified, spill light levels at identified locations are guaranteed to be controlled to the maximum values provided in the Musco Illumination Summary.

Energy Consumption

Total average kW consumption for your lighting system is guaranteed to be not more than the total load shown in the Musco Illumination Summary.

Monitoring, Maintenance, and Control Services

Musco shall monitor the performance of your lighting system, including on/off status, hours of usage, and luminaire outages. If outages that affect playability are detected, Musco will contact you and proactively dispatch technicians.

On-off control of your lighting system is provided via an easy-to-use web site scheduling system, smartphone app, phone, email, or fax. Our trained Control-Link Central™ service center staff is available toll-free 24/7. Regular usage reports are always available on Control-Link Central's web site.

Structural Integrity

Your project has been designed to _____
Structural integrity of equipment manufactured by Musco is guaranteed.

Musco has a team of people to ensure fulfillment of our product and services warranty and maintains financial reserves dedicated to support our fulfillment of this warranty. Please keep this document as your signed contract guaranteeing comprehensive service for the 25 year period.



Musco Constant 25™

25-Year Product Assurance & Warranty Program

Terms and Conditions

Service under this Contract is provided by Musco Sports Lighting, LLC ("Musco") or an authorized servicer approved by Musco. Services performed under this Contract shall consist of furnishing labor and parts necessary to restore the operation of the Covered Product(s) to original design criteria provided such service is necessitated by failure of the Covered Product(s) during normal usage. This Contract covers Product(s) consisting of Musco's Total Light Control - TLC for LED® with Control-Link® and any additional Musco manufactured product as listed on page 1.

"We", "us," and "our" mean Musco. "You" and "your" mean the purchaser of the Covered Product(s). No one has the authority to change this Contract without the prior written approval of Musco. Musco shall not assume responsibility for their agents or assignees other than as described below. If there is a conflict between the terms of this Contract and information communicated either orally or in writing by one or more of our employees or agents, this Contract shall control.

Additional Provisions

1. **Availability of Service:** Control-Link Central™ operators shall be available 24/7 via web site, phone, fax, or email. Maintenance service specialists shall be available 8AM to 5PM Central Time, and services shall be rendered during these same hours in your local time zone, Monday through Friday (with the exception of national holidays). Hours of operation are subject to change without notice to you. Musco will exercise all reasonable efforts to perform service under this Contract, but will not be responsible for delays or failure in performing such services caused by adverse weather conditions, acts of any government, failure of transportation, accidents, riots, war, labor actions or strikes or other causes beyond its control.
2. **Determination of Repairs:** Musco will utilize the field monitoring system and any information provided by the customer to determine when the usage of the field is materially impacted. From this information, Musco will determine needed repair and/or replacement of Covered Product(s) and parts. Repair will be with Product(s) of like kind and quality.
3. **Your Requirements Under this Contract:** You must meet all electrical and installation requirements as specified by the manufacturer. In addition, you promise and assure: full cooperation with Musco, Musco's technicians and authorized servicers during telephone diagnosis and repair of the Covered Product(s); reasonable accessibility of the Covered Product(s), a nonthreatening and safe environment for service.

You agree to check fuses and to replace fuses as needed. Musco provides spare fuses in the lowest alpha-numeric numbered enclosure. Musco will replenish spare fuses used.

You agree to keep your control system online. This means keeping the required control voltage to the control system at all times. Any deviation from this practice must be discussed with Musco's Warranty Department.
4. **Service Limitations — This Contract does not cover:** Maintenance, repair, or replacement necessitated by loss or damage resulting from any external causes such as, but not limited to, theft, environmental conditions, negligence, misuse, abuse, improper electrical/power supply, unauthorized repairs by third parties, attachments, damage to cabinetry, equipment modifications, vandalism, animal or insect infestation, physical damage to Covered Product(s) parts or components, failure of existing structures, supporting electrical systems or any non-Musco equipment, or acts of God/nature (including, but not limited to, earthquake, flood, tornadoes, typhoons, hurricanes, or lightning).

5. Contract Limitations:

- a. **EXCLUSIONS FROM COVERAGE:** IN NO EVENT WILL MUSCO BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH INCLUDE, BUT ARE NOT LIMITED TO, ANY DELAY IN RENDERING SERVICE OR LOSS OF USE DURING THE REPAIR PERIOD OF THE COVERED PRODUCT(S) OR WHILE OTHERWISE AWAITING PARTS.
- b. **Limitation of Liability:** To the extent permitted by applicable law, the liability of Musco, if any, for any allegedly defective Covered Product(s) or components shall be limited to repair or replacement of the Covered Product(s) or components at Musco's option. THIS CONTRACT IS YOUR SOLE EXPRESS WARRANTY WITH RESPECT TO THE COVERED PRODUCT(S). ALL IMPLIED WARRANTIES WITH RESPECT TO THE COVERED PRODUCT(S) INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED.
- c. For the purposes of and by your acceptance of this Contract you acknowledge and agree that if a surety bond ("Bond") is provided the warranty and/or maintenance guarantee provided for in this Contract and any corresponding liability on behalf of the issuing surety under the Bond is limited to the first twelve (12) months of said warranty and/or maintenance guarantee coverage period. Any warranty and/or guarantee coverage period in excess of said initial 12 month period does not fall within the scope of the Bond and shall be the sole responsibility of Musco.
- d. Musco requires reasonable access for a crane or man lift equipment to service the lighting system. Musco will not be responsible for damage from operating the vehicle on the property when the equipment is operated in the prescribed manner over the designated access route.
- e. **Obsolescence or Environmental Restrictions:** If during any maintenance or other work performed under this Warranty, any of the parts of the Covered Product(s) are found to be either obsolete, no longer available, or prohibited by any state or federal agency, Musco shall replace said parts with comparable parts and materials with equal operating characteristics solely at Musco's discretion. The cost of replacement of any obsolete cellular related technology shall be borne by you. Prior to completing any such work, Musco shall notify you of the cost (if any) you will incur in the replacement of such parts under this section.

6. **Transfer and Assignment:** Except to owners, you shall not have the right to assign or otherwise transfer your rights and obligations under this Contract except with the prior written consent of Musco, however, a successor in interest by merger, operation of law, assignment or purchase or otherwise of your entire business shall acquire all of your interests under this Contract.
7. **Governing Law:** Unless otherwise governed by applicable state law, the Contract shall be interpreted and enforced according to the laws of the State of Iowa.
8. **Subrogation:** In the event Musco repairs or replaces any Covered Product(s), parts or components due to any defect for which the manufacturer or its agents or suppliers may be legally responsible, you agree to assign your rights of recovery to Musco. You will be reimbursed for any reasonable costs and expenses you may incur in connection with the assignment of your rights. You will be made whole before Musco retains any amounts it may recover.

Signature: _____

Vice President of Sales



Musco Constant 10™

10-Year Product Assurance & Warranty Program

Project name: _____ Project number: _____

Owner: _____ City: _____ State: _____

Covered product(s): _____

Date issued: _____ Expiration: _____

Musco Sports Lighting, LLC will provide all materials and labor to maintain operation of your lighting system to original design criteria for 10 years. Musco products and services are guaranteed to perform on your project as detailed in this document.

Light Performance

Specified illumination levels will be maintained and are marked as guaranteed in the Musco Illumination Summary. Individual luminaire outages that occur during the warranty and maintenance period are repaired when the usage of any field is materially impacted.

Spill Light Control

If specified, spill light levels at identified locations are guaranteed to be controlled to the maximum values provided in the Musco Illumination Summary.

Energy Consumption

Total average kW consumption for your lighting system is guaranteed to be not more than the total load shown in the Musco Illumination Summary.

Monitoring, Maintenance, and Control Services

Musco shall monitor the performance of your lighting system, including on/off status, hours of usage, and luminaire outages. If outages that affect playability are detected, Musco will contact you and proactively dispatch technicians.

On-off control of your lighting system is provided via an easy-to-use web site scheduling system, smartphone app, phone, email, or fax. Our trained Control-Link Central™ service center staff is available toll-free 24/7. Regular usage reports are always available on Control-Link Central's web site.

Structural Integrity

Your project has been designed to _____.
Structural integrity of equipment manufactured by Musco is guaranteed.

Musco has a team to ensure fulfillment of our product and services warranty and maintains financial reserves dedicated to support our fulfillment of this warranty. Please keep this document as your signed contract guaranteeing comprehensive service for the 10 year period.



Musco Constant 10™

10-Year Product Assurance & Warranty Program

Terms and Conditions

Service under this Contract is provided by Musco Sports Lighting, LLC ("Musco") or an authorized servicer approved by Musco. Services performed under this Contract shall consist of furnishing labor and parts necessary to restore the operation of the Covered Product(s) to original design criteria provided such service is necessitated by failure of the Covered Product(s) during normal usage. This Contract covers Product(s) consisting of Musco's Total Light Control – TLC® for LED® with Control-Link® and any additional Musco manufactured product as listed on page 1.

"We", "us," and "our" mean Musco. "You" and "your" mean the purchaser of the Covered Product(s). No one has the authority to change this Contract without the prior written approval of Musco. Musco shall not assume responsibility for their agents or assignees other than as described below. If there is a conflict between the terms of this Contract and information communicated either orally or in writing by one or more of our employees or agents, this Contract shall control.

Additional Provisions

1. Availability of Service: Control-Link Central™ operators shall be available 24/7 via web site, phone, fax, or email. Maintenance service specialists shall be available 8AM to 5PM Central Time, and services shall be rendered during these same hours in your local time zone, Monday through Friday (with the exception of national holidays). Hours of operation are subject to change without notice to you. Musco will exercise all reasonable efforts to perform service under this Contract, but will not be responsible for delays or failure in performing such services caused by adverse weather conditions, acts of any government, failure of transportation, accidents, riots, war, labor actions or strikes or other causes beyond its control.

2. Determination of Repairs: Musco will utilize the field monitoring system and any information provided by the customer to determine when the usage of the field is materially impacted. From this information, Musco will determine needed repair and/or replacement of Covered Product(s) and parts. Repair will be with Product(s) of like kind and quality.

3. Your Requirements Under this Contract: You must meet all electrical and installation requirements as specified by the manufacturer. In addition, you promise and assure: full cooperation with Musco, Musco's technicians and authorized servicers during telephone diagnosis and repair of the Covered Product(s), reasonable accessibility of the Covered Product(s), a nonthreatening and safe environment for service.

You agree to check fuses and to replace fuses as needed. Musco provides spare fuses in the lowest alpha-numeric numbered enclosure. Musco will replenish spare fuses used.

You agree to keep your control system online. This means keeping the required control voltage to the control system at all times. Any deviation from this practice must be discussed with Musco's Warranty Department.

4. Service Limitations — This Contract does not cover: Maintenance, repair, or replacement necessitated by loss or damage resulting from any external causes such as, but not limited to, theft, environmental conditions, negligence, misuse, abuse, improper electrical/power supply, unauthorized repairs by third parties, attachments, damage to cabinetry, equipment modifications, vandalism, animal or insect infestation, physical damage to Covered Product(s) parts or components, failure of existing structures, supporting electrical systems or any non-Musco equipment, or acts of nature (including, but not limited to: earthquake, flood, tornadoes, typhoons, hurricanes, or lightning).

5. Contract Limitations:

a. **EXCLUSIONS FROM COVERAGE:** IN NO EVENT WILL MUSCO BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHICH INCLUDE, BUT ARE NOT LIMITED TO, ANY DELAY IN RENDERING SERVICE OR LOSS OF USE DURING THE REPAIR PERIOD OF THE COVERED PRODUCT(S) OR WHILE OTHERWISE AWAITING PARTS.

b. **LIMITATION OF LIABILITY:** To the extent permitted by applicable law, the liability of Musco, if any, for any allegedly defective Covered Product(s) or components shall be limited to repair or replacement of the Covered Product(s) or components at Musco's option. THIS CONTRACT IS YOUR SOLE EXPRESS WARRANTY WITH RESPECT TO THE COVERED PRODUCT(S). ALL IMPLIED WARRANTIES WITH RESPECT TO THE COVERED PRODUCT(S) INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED.

c. For the purposes of and by your acceptance of this Contract you acknowledge and agree that if a surety bond ("Bond") is provided the warranty and/or maintenance guarantee provided for in this Contract and any corresponding liability on behalf of the issuing surety under the Bond is limited to the first twelve (12) months of said warranty and/or maintenance guarantee coverage period. Any warranty and/or guarantee coverage period in excess of said initial 12 month period does not fall within the scope of the Bond and shall be the sole responsibility of Musco.

d. Musco requires reasonable access for a crane or man lift equipment to service the lighting system. Musco will not be responsible for damage from operating the vehicle on the property when the equipment is operated in the prescribed manner over the designated access route.

e. **Obsolescence or Environmental Restrictions:** If during any maintenance or other work performed under this Warranty, any of the parts of the Covered Product(s) are found to be either obsolete, no longer available, or prohibited by any state or federal agency, Musco shall replace said parts with comparable parts and materials with equal operating characteristics solely at Musco's discretion. The cost of replacement of any obsolete cellular related technology shall be borne by you. Prior to completing any such work, Musco shall notify you of the cost (if any) you will incur in the replacement of such parts under this section.

6. Transfer and Assignment: Except to owners, you shall not have the right to assign or otherwise transfer your rights and obligations under this Contract except with the prior written consent of Musco; however, a successor in interest by merger, operation of law, assignment or purchase or otherwise of your entire business shall acquire all of your interests under this Contract.

7. Governing Law: The Contract shall be interpreted and enforced according to the laws of the project location.

8. Subrogation: In the event Musco repairs or replaces any Covered Product(s), parts or components due to any defect for which the manufacturer or its agents or suppliers may be legally responsible, you agree to assign your rights of recovery to Musco. You will be reimbursed for any reasonable costs and expenses you may incur in connection with the assignment of your rights. You will be made whole before Musco retains any amounts it may recover.

Signature: _____
Vice President of Sales



Musco 10 Year Warranty

10-Year Product Assurance & Warranty Program

Project name: _____ Project number: _____

Owner: _____

City: _____ State: _____

Covered product(s) Mini-Pitch System™ modular sports solution with TLC for LED® luminaires

Date issued: _____ Expiration: _____

Musco Sports Lighting, LLC will provide all materials and labor to maintain operation of your Mini-Pitch System™ modular sports solution to original design criteria for 10 years. Musco products and services are guaranteed to perform on your project as detailed in this document.

Structural Integrity

Your Mini-Pitch System modular sports solution has been designed to meet or exceed local building codes and resist corrosion. Structural integrity of the system including fence panels, goals, seating, and light poles is guaranteed for the warranty period.

Light Performance

Luminaire outages that occur during the warranty and maintenance period will be repaired or replaced.

Control Services

On-off control of your lighting system is provided via an easy-to-use web site scheduling system, smartphone app, phone, or email. Our trained Control-Link Central™ service center team is available 24/7/365. Regular usage reports are always available on Control-Link Central's web site.

Musco has a team to ensure fulfillment of our product and services warranty and maintains financial reserves dedicated to support our fulfillment of this warranty. Please keep this document as your signed contract guaranteeing comprehensive service for the 10 year period.



Musco 10 Year Warranty

10-Year Product Assurance & Warranty Program

Terms and Conditions

Musco Sports Lighting, LLC ("Musco") or an authorized servicer shall furnish labor and parts necessary to restore operation of Covered Product(s) to original design criteria provided the failure was a result of normal usage.

This Contract covers Mini-Pitch System™ modular sports solution with Control-Link®, TLC for LED®, and any additional Musco manufactured product as listed on page 1. "We", "us," and "our" mean Musco. "You" and "your" mean the purchaser of the Covered Product(s).

This Contract cannot be changed without the prior written approval of Musco. If there is a conflict between the terms of this Contract and information communicated either orally or in writing by one or more of our employees or agents, this Contract shall control.

Additional Provisions

1. Availability of Service:

- Control-Link Central™ operators are available 24/7 via web site, phone, fax, or email.
- Maintenance service specialists are currently available 8AM to 5PM Central Time Monday through Friday, except for national holidays. Services shall be rendered during these same hours in your local time zone.

2. Determination of Repairs: Musco will utilize any information provided by the facility owner to determine any needed repair and/or replacement of Covered Product(s) and parts. Repair will be with Product(s) of like kind and quality.

3. Your Requirements Under this Contract: You agree to meet and maintain all electrical requirements (if any) and install as specified by Musco or as approved in advance by Musco's Warranty Department.

4. Service Limitations: Musco will exercise all reasonable efforts to perform service under this Contract but will not be responsible for delays or failure in performing such services due to causes beyond its control.

This Contract does not cover maintenance, repair, or replacement due to damage from:

- External causes such as but not limited to misuse, vandalism, or unauthorized repairs or modifications. (Unauthorized repairs or modifications void this warranty in its entirety.)
- Failure of any non-Musco equipment or electrical systems
- Acts of nature such as but not limited to weather events or lightning.

5. Contract Limitations:

a. **EXCLUSIONS FROM COVERAGE:** IN NO EVENT WILL MUSCO BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHICH INCLUDE, BUT ARE NOT LIMITED TO, ANY DELAY IN RENDERING SERVICE OR LOSS OF USE DURING THE REPAIR PERIOD OF THE COVERED PRODUCT(S) OR WHILE AWAITING PARTS.

b. **LIMITATION OF LIABILITY:** To the extent permitted by law, liability of Musco for any defective Covered Product(s) shall be limited to repair or replacement of the Covered Product(s). THIS CONTRACT IS YOUR SOLE EXPRESS WARRANTY. ALL IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED.

c. If applicable, the liability of the issuing surety of the surety bond is limited to the first 12 months of the warranty period.

d. Musco requires reasonable access for equipment to service the system. We will follow designated access routes but will not be responsible for damage on the property for operating equipment in the prescribed manner.

e. If we find that any parts of the Covered Products become obsolete, prohibited by law or regulation or are no longer available, Musco may replace them with comparable parts at our discretion. We will notify you of any replacement cost prior to starting the work.

6. Transfer and Assignment: Except to facility owners, you cannot assign your rights and obligations under this Contract without prior written consent of Musco. A successor of your entire business shall acquire your interests under this Contract.

7. Governing Law: Unless otherwise governed by applicable state law, the Contract shall be interpreted and enforced according to the laws of the State of Iowa.

8. Subrogation: In the event Musco repairs or replaces any Covered Product(s), parts or components due to any defect for which our vendors, agents or suppliers may be legally responsible, you agree to assign your rights of recovery to Musco. You will be reimbursed for any reasonable costs you may incur in connection with the assignment of your rights. You will be made whole before Musco retains any amounts it may recover.

Signature: _____

Vice President of Sales



**ALWAYS READY FOR
PLAY**



Musco's LED Solutions

As more organizations transition to LED field lighting, they're finding out that the performance of different LED sports lighting varies greatly.

We've spent over 40 years designing systems with one thing in mind — solving problems.

Our Total Light Control - TLC for LED® technology is the result of a depth of knowledge that cannot be matched, achieving results for customers — and solving their problems — in ways others simply can't.



Scan or visit to learn more:
www.musco.com/project-showcase/tlcled/



LakePoint Sporting Community wanted players to see the ball like never before.

With eight baseball fields for elite travel teams, LakePoint needed lighting that would enhance player visibility and let them track the ball's entire flight.

By using our TLC for LED system with BallTracker™ technology — which creates precisely-aimed vertical lighting targeted to enhance visibility of aerial balls — that's exactly what they got.



"When you stand at home plate and look out to center field and there's no glare, but the field is totally bright and the white of the ball pops, it looks amazing."
- Tyson Kimm, Vice President of Perfect Game USA, main tenant at LakePoint



Scan or visit to learn more:
www.musco.com/project-showcase/lakepoint/



When the original lights went on at Notre Dame Prep, nobody was happy.

Excessive glare and spill brought complaints from homeowners, motorists, and the City of Scottsdale, forcing the school to shut the lights down until a solution was found.

When the original manufacturer failed, we were brought in and custom-designed a TLC for LED solution that eliminated glare and spill from impacting the surrounding area.

"We could not imagine our field looking more beautiful than it does now. We are so grateful for the excellent products and customer service we received from Musco Lighting."
– Jill Platt, Principal, Notre Dame Preparatory High School

Scan or visit to learn more:
www.musco.com/project-showcase/ndprep/



Alpine Field needed a retrofit solution to replace its newly installed lights, fast.

The field at the University of Colorado Colorado Springs quickly became a source of complaints when its LED lighting from a different manufacturer created glare and spill for nearby homes.

Within weeks our TLC for LED system was retrofitted onto the original poles, saving UCCS money and eliminating the impact on neighbors.

"The results are absolutely phenomenal. I had neighbors calling saying they couldn't believe the difference. We got our nights back again."
— Ron Toman, EagleRock Neighborhood Association



Scan or visit to learn more:
www.musco.com/project-showcase/alpine/



With over 6,000 students playing intramurals, Clemson needed field lights it could count on.

High hours of usage at LoConte Family Field required lighting that was efficient, reliable, and easy to program given the field's remote location.

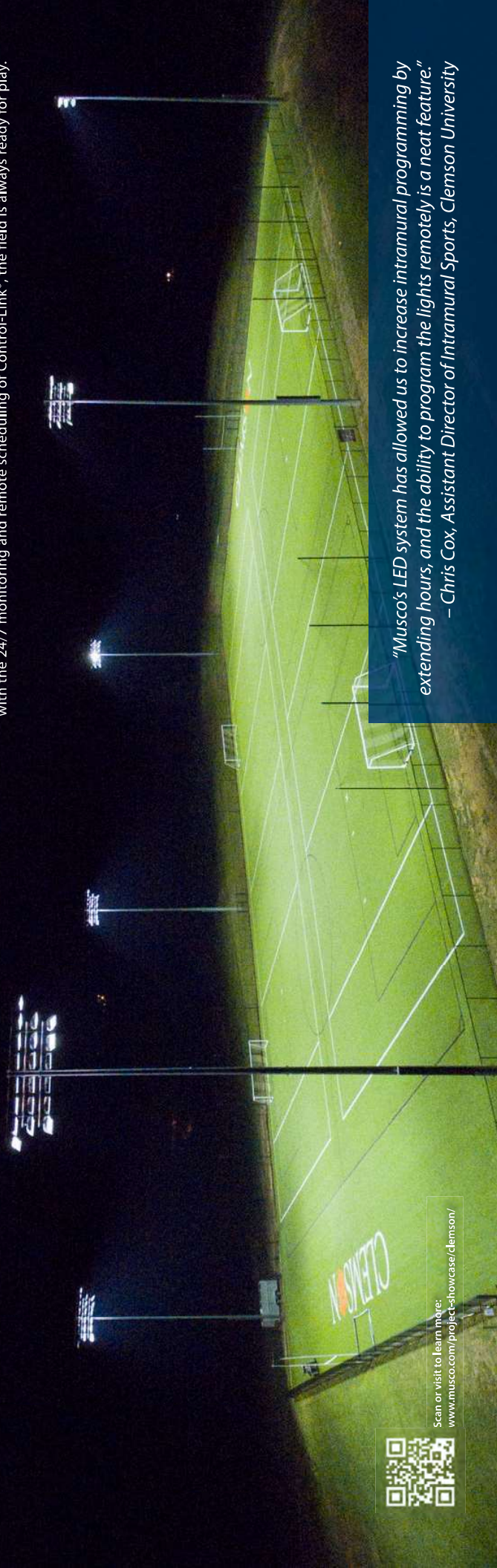
Our TLC for LED solution reduced energy consumption 63 percent compared to metal halide, and with the 24/7 monitoring and remote scheduling of Control-Link®, the field is always ready for play.



Scan or visit to learn more:
www.musco.com/project-showcase/clemson/

"Musco's LED system has allowed us to increase intramural programming by extending hours, and the ability to program the lights remotely is a neat feature."

– Chris Cox, Assistant Director of Intramural Sports, Clemson University



They didn't just want new lights at Pidgeon Stadium, they wanted to make history.

As a home stadium for the Cypress-Fairbanks School District, the 40-year-old venue needed to greatly improve on-field light quality.

Our TLC for LED system's custom optics provided superior light levels and uniformity, and made Pidgeon Stadium the first high school sports complex in the U.S. to be lit entirely with LED.

"We have an average maintained footcandle higher than anyone I know. And that's something to boast about. You could host ESPN games out here."

– Josh Solis, Project Manager, Cypress-Fairbanks Independent School District



Scan or visit to learn more:
www.musco.com/project-showcase/pridgeon/



Seminole County wanted a premier sports complex, without breaking the bank.

To make it happen they needed high-quality field lighting
that would eliminate maintenance concerns and costs.

Our parts and labor warranty, which covers every part and all labor, helped
Seminole County save over \$1 million in operating costs for the next decade.



Scan or visit to learn more:
www.musco.com/project-showcase/seminolecounty/

*"Players love it. We love it. It's saving us money. Musco has been
an incredible partner through the entire process."
– Joe Abel, Director of Leisure Services, Seminole County, Florida*

Energy efficiency was the name of the game for re-lighting Julian Fisher Park.

The City of Monrovia wanted high-quality lighting for the park's frequently used basketball courts that would conserve energy and keep costs down.

Our customized two-pole design and TLC for LED technology delivered the light levels and uniformity the courts needed, and cut energy consumption 51 percent compared to metal halide.

"Musco's state-of-the-art LED lighting not only reduced our electrical use, it also has improved the overall park lighting dramatically."

– Tina Cherry, Public Services Director, City of Monrovia



Scan or visit to learn more:
www.musco.com/project-showcase/julianfisher/

Will your story be next?

Whatever problem you're trying to solve, we've probably seen it and helped someone overcome it. Because that's what has driven us to design and create the most innovative sports lighting solutions in the world for over 40 years.

Will your story be next?
Call us today, 800/825-6030
or visit www.iwantlighting.com

 musco®





We Make It Happen®

www.musco.com
e-mail: lighting@musco.com

©2015, 2018 Musco Sports Lighting LLC · M-1897-enUS-2
U.S. and foreign patents issued and pending.

Mini-Pitch System™

MODULAR SPORTS SOLUTION



***The Mini-Pitch System™
modular sports solution has
an innovative, all-in-one design
to help communities create
fun and active play spaces by
revitalizing public areas.***

Created to assist the U.S. Soccer Foundation in providing safer places to play the game, the Mini-Pitch System is ideal for transforming abandoned courts and other underutilized areas into places where children and families can come together in the spirit of teamwork, empowerment, and physical activity. The system supports the Foundation's *It's Everyone's Game* movement to ensure that all children have access to the game and its many benefits.

Complete

The mini-pitch comes as a modular system complete with lighting, fencing, goals, benches, ADA-compliant access, and lockable storage.

Convenient

Assembly can be done by a three-person crew in approximately 16 hours.

Customizable

You'll have options on the size of your pitch and custom signage. Acrylic surfacing is provided and can be color customized.





"The new soccer pitches will allow our students to engage in physical fitness, learn the tenets of teamwork, and have fun. Partnerships that benefit our students are an essential part of our success as a district."

– Roger León, Newark Superintendent of Schools

Complete System

The Mini-Pitch System™ modular sports solution includes lighting, structural, and electrical components designed and engineered to work together for streamlined installation and reliable operation.

- Factory-built, wired, aimed, and tested.
- Fast, trouble-free installation.
- Rugged reliability, designed to be long-lasting in all weather conditions and atop all surfaces.
- 10-year warranty covers all parts and labor.

TLC for LED® Lighting

Enjoy the benefits of the LED sports lighting technology of choice at venues around the world.

- Custom optics create a more uniform distribution of light for better visibility.
- Patented glare control preserves darkness around your pitch, keeping neighbors happy.
- Instant on/off and energy efficient operation.

Control-Link® Service

Your system will be supported by Musco's Control-Link control system.

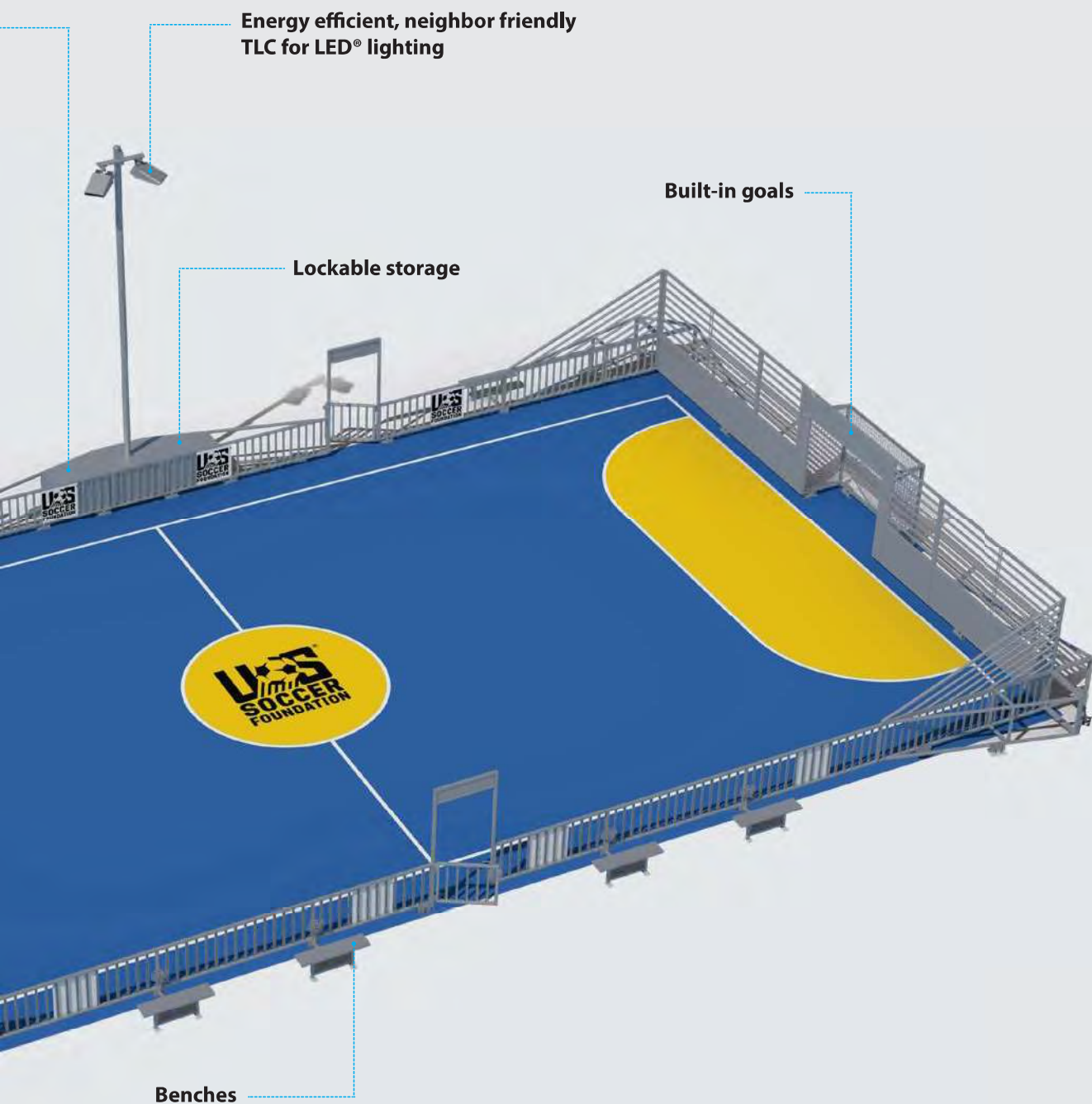
- Manage your lights instantly, from anywhere, with a touch of a smartphone.
- 24/7 support from the Musco Team includes troubleshooting and scheduling assistance.
- Get a real, live voice on the other end of the phone anytime you call Control-Link Central™ service center.

Lighting control system
with 24/7 support

ADA-compliant access



Galvanized steel
and structure



Steel fencing

10-Year Parts and Labor Warranty

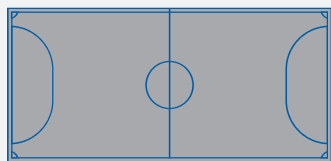
With Musco's long-term parts and labor warranty, you'll have the peace of mind in knowing that you won't have to pay for maintenance of your Mini-Pitch System™.

- No maintenance costs for the next decade.
- Every part and all labor covered.
- Supported by Musco's regionally-based technicians.

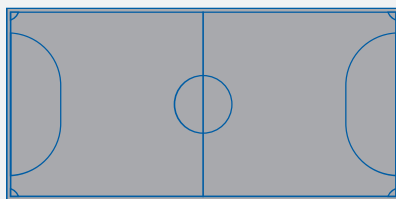
Separate playing surface warranty is provided by the surface contractor.

Your Pitch, Your Way

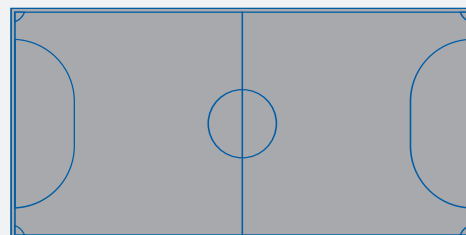
The Mini-Pitch System™ modular sports solution gives you customization options with the ability to combine any of the below widths and lengths to meet your exact needs.



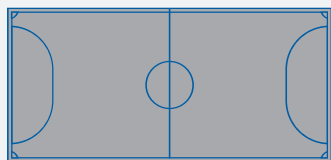
40 ft x 84 ft
12 m x 25 m



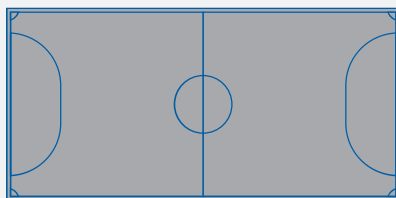
50 ft x 104 ft
15 m x 32 m



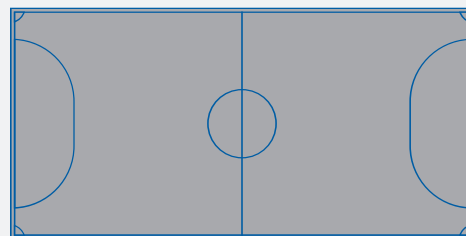
60 ft x 120 ft
18 m x 36 m



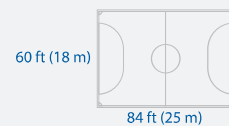
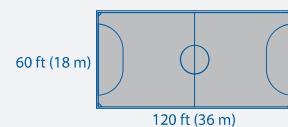
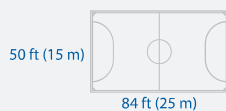
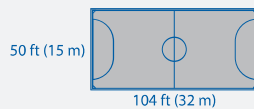
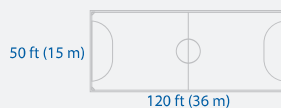
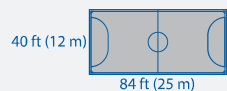
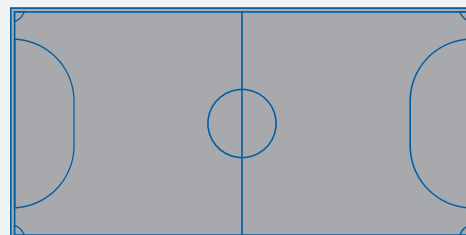
76 ft x 84 ft
23 m x 25 m



96 ft x 104 ft
29 m x 32 m



116 ft x 120 ft
35 m x 36 m



Dana Middle School, Hawthorne, California, USA



Sunrise Park, Pleasant Hill, Iowa, USA



Capitol Hill Middle School, Oklahoma City, Oklahoma, USA



We Make It Happen.

www.musco.com
e-mail: lighting@musco.com

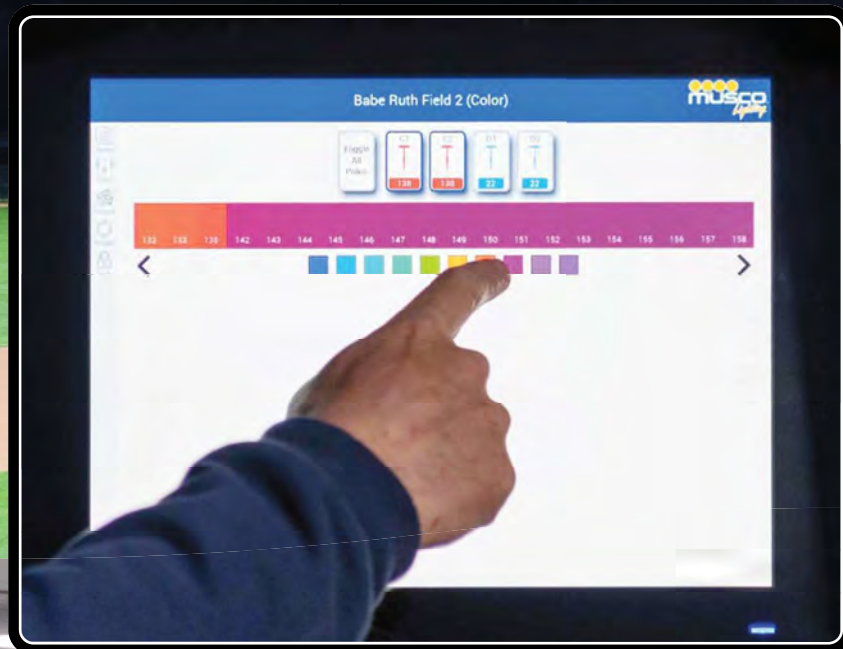


www.usoccerfoundation.org
e-mail: info@usoccerfoundation.org

©2021, 2023 Musco Sports Lighting LLC - M-5056-enUS-7
U.S. and foreign patents issued and pending.

US Soccer Foundation is a registered trademark in the United States to United States Soccer Foundation.

Control Solutions



Making Facility Management Easy Since 1999

The most innovative solutions are developed in response to real-world problems. In 1999 Musco introduced Control-Link® as a first-of-its-kind light management system to help customers who were getting calls from neighbors at 2 a.m. about lights left on, to help cut energy costs, and save staff time.

Since that first introduction, Musco has installed thousands of control systems from fully automated unmanned recreational sites to complex theatrical solutions for many of the largest stadiums in the world.

Anytime, Anywhere ...Control-Link management tools allow you to access and manage your lights instantly, from anywhere via a cellular internet connection.

A Real, Live Voice ...Control-Link Central™ Team will monitor, schedule, and help manage your lights 24/7/365, and a real live voice will be on the other end of the phone when you call.

Factory Wired, Programmed, and Tested ...our unique system approach streamlines installation and assures that your controls, from basic on/off to professional level light shows, will be ready to work on day one.



8.1 million

schedules managed
and monitored by our
Control-Link Central™
Team last year



270,000

calls fielded to assist
customers last year

How can controls enhance your facility?

Control-Link

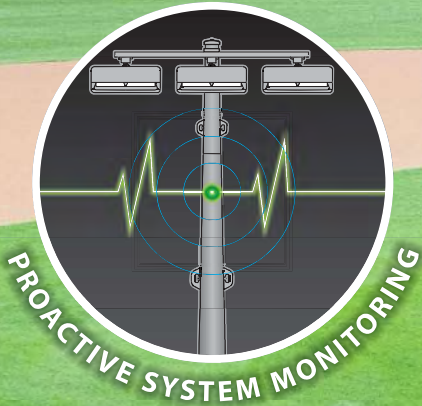
- ☐ **Easy, Instant Light Management**
Turn your lights on and schedule them from anywhere with your smartphone
- ☐ **Reduced Energy Consumption**
Three levels of dimming for different activities help save energy and costs
- ☐ **Proactive System Monitoring**
24/7 system monitoring means you'll be immediately alerted when any issues arise

Show-Light*

- ☐ **Light Shows**
Pre-designed and custom special effects, including lights synchronized to music, add excitement for players and spectators
- ☐ **Easy to Upgrade**
You can expand and customize your system as the needs at your facility change

Options

- ☐ **Color-Changing Technology**
Add colored pole accent lights or color washing capabilities with over 100 color options
- ☐ **Advanced Integration**
Add scoreboards, ribbon boards, other light sources, and video displays into light shows with custom integration



Flexible Control, Solid Management

Your Control-Link® control and monitoring system offers efficient, cost-effective tools that are both cutting-edge and simple to use.

Musco will have your back 24/7/365 to ensure your lights are only on when needed, keeping neighbors and taxpayers happy. Because more than anything, it's about your peace of mind.

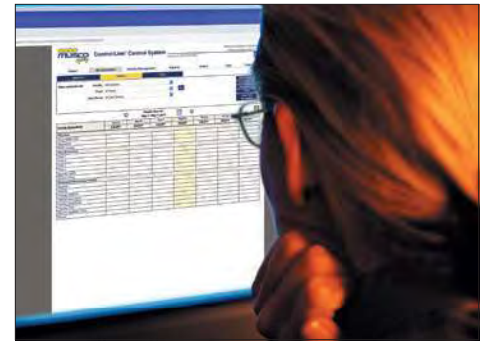
The Control-Link system provides comprehensive scheduling assistance, system monitoring, secure password-protected access, automated equipment controls, and valuable usage data.

Flexible and Reliable ... remote scheduling and controls mean no more staffing headaches, tracking multiple sets of keys, or late-night hours being on-site to turn your lights off.

24/7/365 Monitoring ... our Team will monitor your system's performance at the luminaire level, so if an issue arises we'll likely know about it before you do.

Better for Your Budget ... automated operation of your lights, as well as three levels of dimming that come standard, will reduce energy consumption and cut staffing costs.

Data You Can Use ... we'll help create usage reports and analytics for your facilities from the extensive data we store, which will help improve operational efficiencies and future planning.



Enter schedules up to 10 years in advance.

Summary by Facility		Total Auto Hours Usage		Total Hours Saved from Early Offs	
Facility	Field				
Cowley	Baseball	63:04		17:08	
Cowley	Basketball	49:46		0:00	

Dashboard tracking allows you to see the operation and service status of your fields.

Musco Control-Link Usage Report (Auto Only)
By Facility, Field
Usage Type of Light Usage
June, 2022

Summary by Facility		Total Auto Hours Usage		Total Hours Saved from Early Offs	
Facility	Field				
Cowley	Baseball	63:04		17:08	
Cowley	Basketball	49:46		0:00	

Control-Link Central database stores usage data by field and user group.

"In the past, a light could've gone out and our guys wouldn't see it for two to three weeks or until a whole pole went dark. Now if one light goes out we get an e-mail notice immediately from Musco's Control-Link Central."

– Chuck Vones, Parks and Recreation Director
Pembroke Pines, Florida

Control-Link® Control and Monitoring System

- ✓ **Easy, Instant Light Management**
Turn your lights on and schedule them from anywhere with your smartphone
- ✓ **Reduced Energy Consumption**
Three levels of dimming for different activities help save energy and costs
- ✓ **Proactive System Monitoring**
24/7 system monitoring means you'll be immediately alerted when any issues arise



Big Time Light Shows at Hometown Fields

Show-Light® special effects provide a cost-effective way for you to bring professional light shows to your facility. From pre-game introductions, to halftime shows, to celebrating big plays and big wins, this special effects lighting will energize players and fans and take your game atmosphere to a new level.

The technology behind Show-Light special effects, and the exciting atmosphere it creates, are the same as what we provide our NFL, MLB, NBA, and NHL customers. The system is easy to use and will provide an even more memorable game night experience.

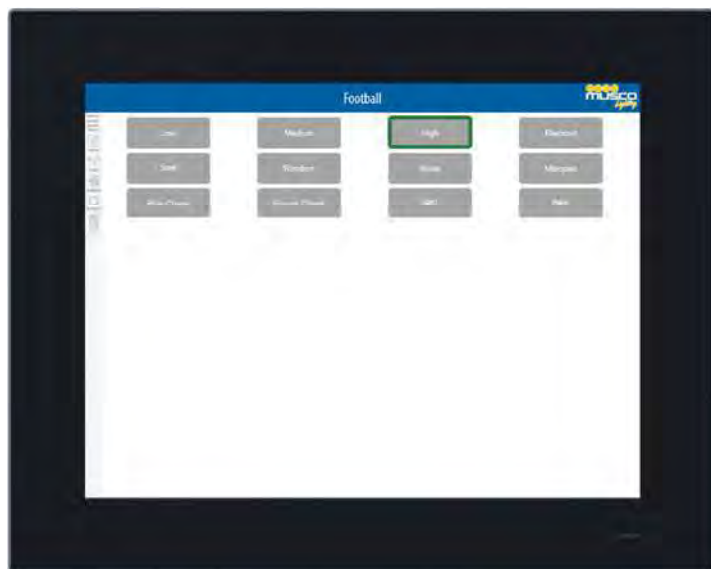
Set the Scene . . . you'll get preprogrammed lighting effects that will excite players and fans through the entire game night experience. In addition, you'll get custom programming to synchronize lights to four minutes of licensed music you provide.

Simple-to-Use Touchscreen . . . you'll be provided an industrial grade 15-inch smart device with touchscreen to start and stop effects, select dimming levels, and adjust optional features.

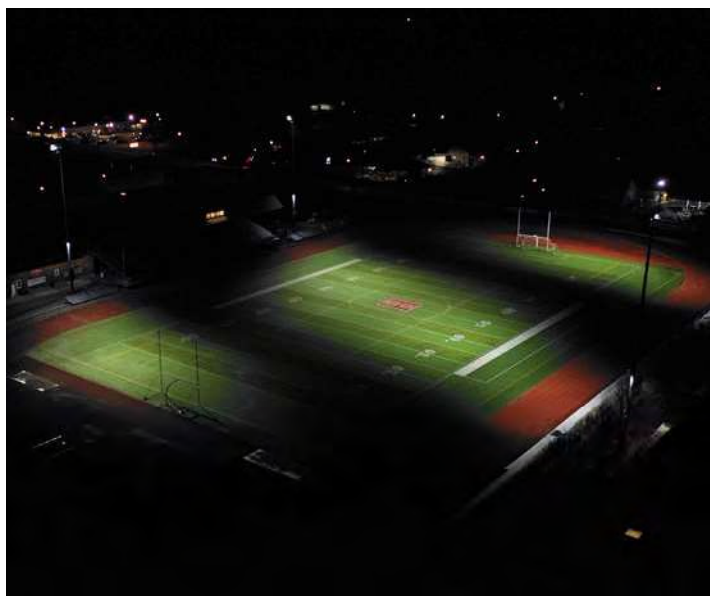
Reliable and Versatile . . . your programming will be stored on site and backed up at Control-Link Central™ data center.

Plenty of Options . . . the system is flexible and upgradable so you can add additional features as your needs change.

Responsible Programming . . . we follow industry best practices to minimize the potential impact for those with photosensitivity and encourage facilities to post notifications about the use of flashing lights during events.



Use the provided touchscreen device to start and stop effects, adjust dimming levels, or control optional features.



The number of songs used in your audio programming is flexible to meet your needs. You can choose one four-minute song, eight songs that last 30 seconds each, or any combination up to four minutes.

"I've had people come to the games because they saw the energy and excitement associated with the lights. When the lights first started flashing our baseball players poured out of the dugout and were making a big deal about it. I looked over at the coach and said, 'That is why we got the lights.' Musco had the same kind of excitement that we had. That tells me they believe in the product and know how important it is to our student-athletes, to our fans, and to people like me."

– Dr. Tom Huebner, President
Meridian Community College



Show-Light® Special Effects Package



Easy, Instant Light Management

Turn your lights on and schedule them from anywhere with your smartphone



Reduced Energy Consumption

Three levels of dimming for different activities help save energy and costs



Proactive System Monitoring

24/7 system monitoring means you'll be immediately alerted when any issues arise



Light Shows

Pre-designed and custom special effects, including lights synchronized to music, add excitement for players and spectators



Easy to Upgrade

You can expand and customize your Show-Light system as the needs at your facility change



*See Meridian Community College's
light shows in action.*

Take Your Light Shows to the Next Level

With our optional features, you can tap into advanced customization capabilities.

Custom integration provides programming and technical support required to include ribbon boards, scoreboards, video displays, or other third-party DMX or network capable equipment in your light shows.

Our color package includes custom programming and the color luminaires needed to create the effect you want for your facility — from accenting poles with color, to washing seating areas or the field of play in color changing effects.

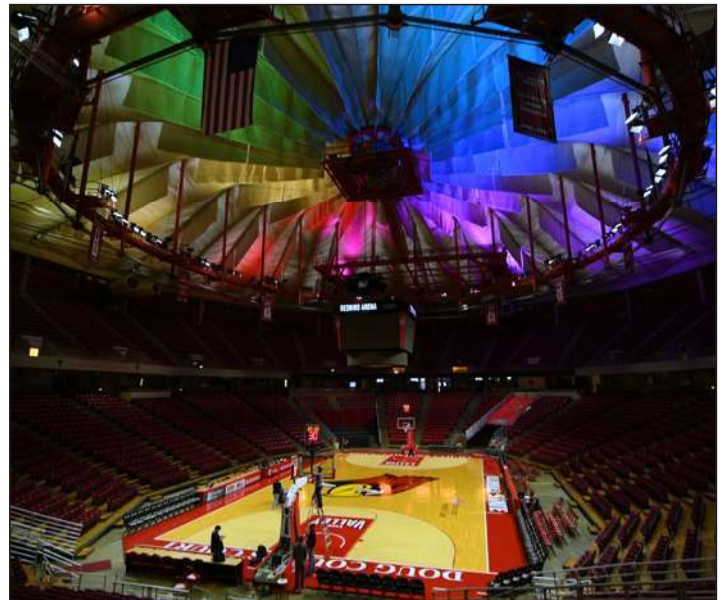
Tie It All Together . . . from simple programming to more complex solutions, we can help connect and control existing equipment or incorporate new equipment as your needs change.

Add Color . . . by adding optional color changing luminaires you can enhance shows with pops of color, color wash, or accent lighting.

Streamlined Solution . . . if you already have a DMX system, Show-Light® equipment will act as a fully integrated extension of that system.



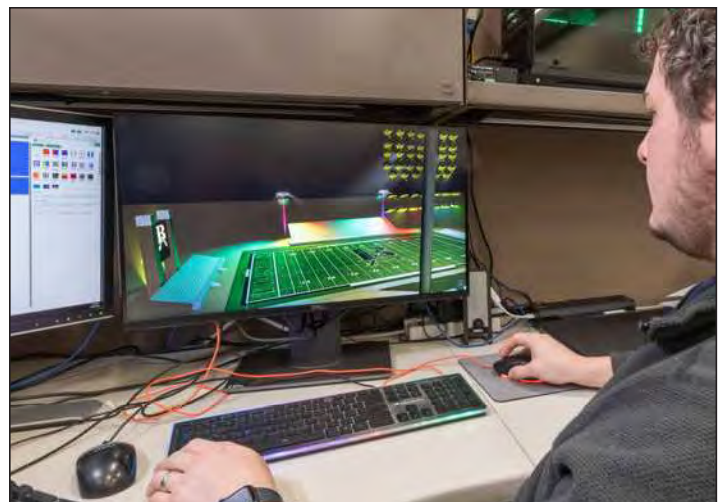
Optional color accent lighting highlights poles or other structures.



With optional color changing luminaires you can choose from over 100 color options to show your team color, highlight special events, or enhance light shows.

"The fan reaction has been great. I look for the lights to be as much of an entertainment vehicle as I do fireworks — seventh inning stretch, when we hit a home run, when we win the game. Everybody loves it, particularly when we make the lights flash and dance to the music."

– Sam Bernabe, President & General Manager
Iowa Cubs



Musco's programming specialists will customize a solution for your facility.

Show-Light® Options

- ✓ **Easy, Instant Light Management**
Turn your lights on and schedule them from anywhere with your smartphone
- ✓ **Reduced Energy Consumption**
Three levels of dimming for different activities help save energy and costs
- ✓ **Proactive System Monitoring**
24/7 system monitoring means you'll be immediately alerted when any issues arise
- ✓ **Light Shows**
Pre-designed and custom special effects, including lights synchronized to music, add excitement for players and spectators
- ✓ **Easy to Upgrade**
You can expand and customize your Show-Light® system as the needs at your facility change
- ✓ **Color-Changing Technology**
Add colored pole accent lights or color washing capabilities with over 100 color options
- ✓ **Advanced Integration**
Add scoreboards, ribbon boards, other light sources, and video displays into light shows with custom integration



*See Estadio Universitario's
light shows in action.*



Innovative, Streamlined Communications Managed by Our Team 24/7/365

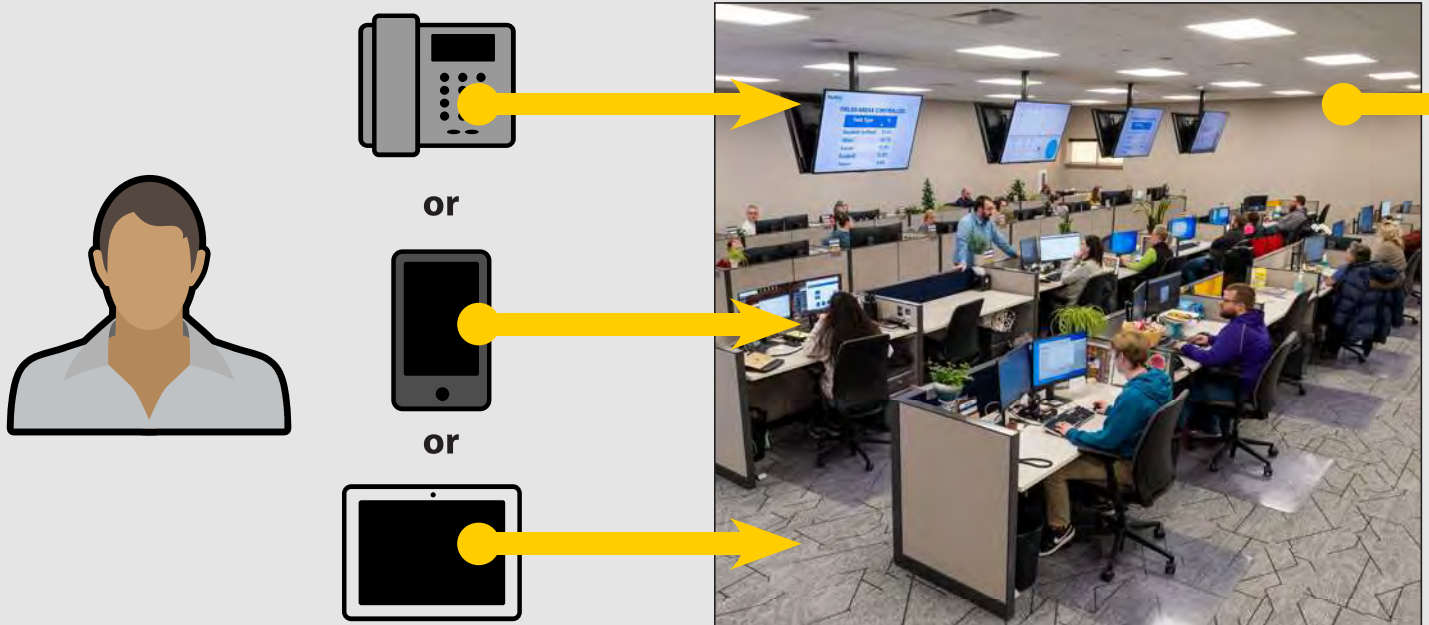
Each component of your control system is designed, factory-built and tested for seamless operation and integration with your lighting system.

Proven Technology, Innovated . . . Musco's advanced powerline communication technology provides robust control and monitoring for the system.

Reliable Installation and Operation . . . communication cables to the lights are eliminated, saving installation costs. Lights may be scheduled remotely or operated manually on site with a key switch.

Safety Features . . . electricity is only on when the system is in use, with built-in fusing and surge protection.

Monitoring and Support . . . our Control-Link Central™ Team monitors your system 24/7/365 to ensure schedules execute and to provide assistance.



1) Enter schedules at your convenience

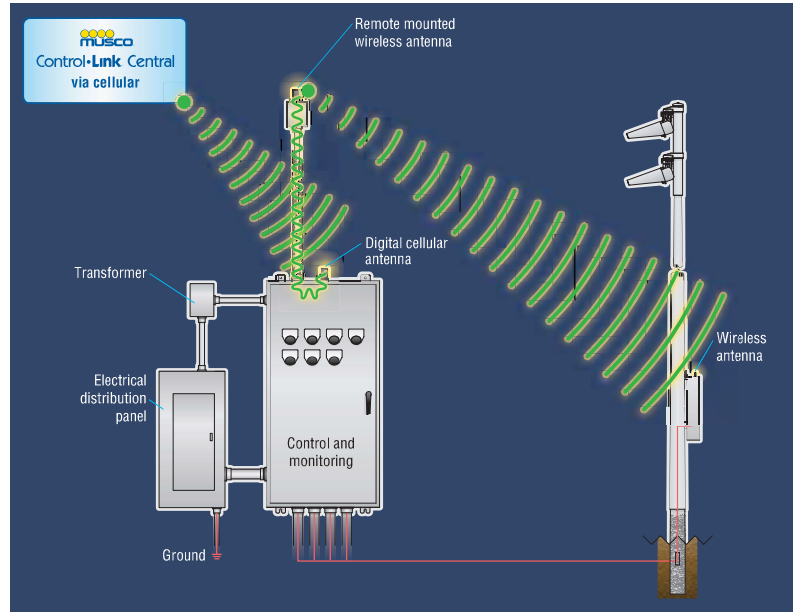
Based on security levels, users schedule field lighting and other equipment such as door locks, concession stands, and security lights from any location via website, smartphone app, or phone call.

2) Control-Link Central™ data center routes schedules, with 24/7/365 team member support

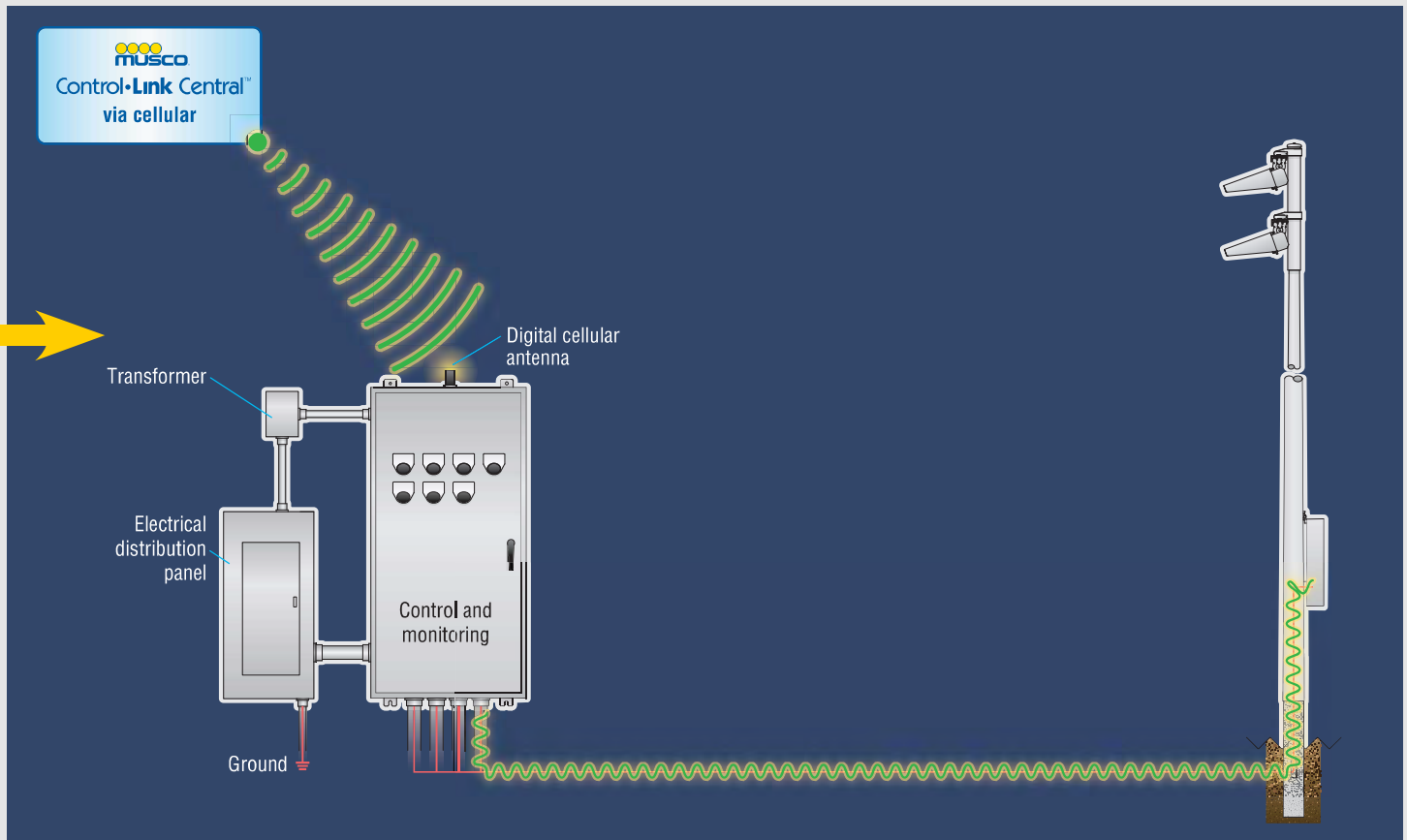
Schedules are received, routed to your site, and backed up at the Control-Link Central data center, where our staff provides scheduling support and verification, and monitors your lighting system operation.

Wireless Communication

An optional wireless mesh network is available depending on your project requirements



Powerline Communication System™ Uses supply wiring for control commands and monitoring feedback



3) Schedules are stored on-site

Schedules are transmitted to your facility via cellular technology and stored in the on-site equipment controller.

4) Equipment is controlled automatically with on-site show controls

Lights are operated per your schedules via Musco's Powerline Communication System technology. You can control optional Show-Light® features with the on-site tablet.

5) Continuous monitoring

Entire system is monitored during operation and the Control-Link Central Team is notified of any issues.



Unequaled performance . . .
for your budget, for the environment.



We Make It Happen.

www.musco.com

e-mail: lighting@musco.com

Phone: 800.825.6030

©1998, 2023 Musco Sports Lighting LLC - M-1546-enUS-16
All trademarks are property of Musco Corporation, U.S. and foreign patents issued and pending.

SPORTS LIGHTING

Answers to **9 common QUESTIONS**



With bonus LED Retrofit Information



MUSCO
Lighting
We Make It Happen.®



Contents

Decisions . . .

When it comes to sports lighting, there are a lot of them. It’s a big investment, and the decisions you make now can affect your community for the next 20 or 30 years.

The priorities are clear and consistent—it must be cost effective, trouble free, energy efficient, avoid maintenance headaches, and minimize the impact of spill and glare on neighbors.

Above all, you want the most value possible from the dollars you spend and field lighting that will be a source of pride for years to come.

The following are answers to the most common questions about sports lighting, so you can make the most informed decisions possible.

Common Questions

1. Should I retrofit with LED?	4
2. How much will it cost to install my lights?	6
3. How many lights do I need?	8
4. If they use the same wattage, aren’t all LED fixtures the same?	10
5. Why should I be concerned with spill light and glare?	12
6. Why does pole type and height matter?	14
7. How much will it cost to operate my lights?	16
8. How can I make sure I get the results I want?	18
9. Is there funding help available?	20
Lighting terms you’ll hear	22

RETROFITS

Thinking of retrofitting your old lighting?

Watch for the green text blocks for information specific to upgrading your lights while using existing structures and underground electrical supply.

1. Should I retrofit with LED?

For many years, metal halide was the typical light source used for sports lighting. Replacing existing metal halide with light-emitting diode (LED) technology can deliver many benefits, provided it's supported by a well-designed system of light control, structures, electrical and application.

Light Levels

As metal halide lighting ages, it's likely that on-field light levels decrease which can eventually affect safety and playability. Relamping and cleaning fixtures may recover some lost light. Retrofitting with LED can also improve light levels, but just swapping out your old lights with LED fixtures will not guarantee the light levels you need. The best way to ensure adequate light levels is by having photometric designs done prior to installation so there are no surprises.

Spill & Glare

Sports lighting is unique in that it requires high quantity of light projected over long distances in a way that avoids impacting the neighborhood and meets the differing viewing needs of players, fans, and often video broadcasts. The LED light source has the potential for extreme cut-off. However, if not properly controlled, the intensity of the multiple tiny light sources also has a greater risk of creating uncomfortable glare and spill light.

Energy Efficiency

LED can reduce energy consumption by as much as 80 percent compared to older light sources. And the instant on/off capabilities of LED also ensures a more energy efficient operation, as does the ability to dim LED lights and operate them at less than full power so you can tailor usage for multiple uses such as events, practices, and clean up.

Return On Investment

Most indoor sports facilities are used almost daily, so the energy savings with LED generally pay back the cost of retrofitting in just a few years. Outdoor recreational facilities are often used less than 500 hours per year. At 10 cents per kilowatt hour, the energy cost to light a youth soccer field with metal halide is less than \$2 per hour. In this case, return on investment through energy savings for an LED retrofit would take several years.

Warranty

Evaluate how retrofitting your existing lighting will impact the current warranty and services being provided by the original manufacturer. In some cases, you might still have several years of coverage that could become void if the equipment is modified. Automated on/off control service systems may also be impacted. If your warranty is expired, retrofitting may be a great way to extend your light level guarantee and coverage for parts and labor.

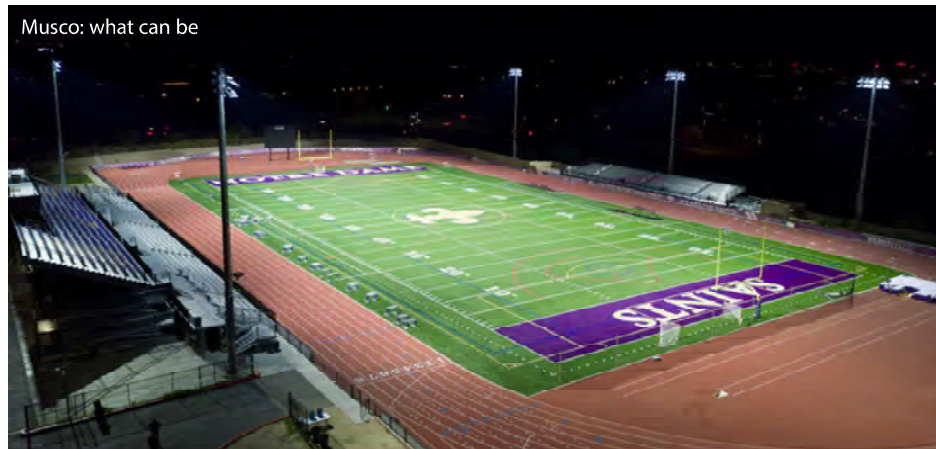
Add Entertainment Features

The instant on/off capabilities of LED enables well-designed system controls and special effects packages to present exciting light shows for team and game celebrations. These may include features such as light-to-music synchronization and color-changing Red-Green-Blue-White (RGBW) technology.

“Two aspects of energy efficiency are important to consider: the efficiency of the LED device itself (source efficacy) and how well the device and fixture work together in providing the necessary lighting (luminaire efficacy).”

— Source: U.S. Department of Energy, <http://energy.gov/eere/ssl/led-basics>

Light control matters



2017 · Retrofit with Musco TLC for LED® technology
Notre Dame Preparatory High School, Scottsdale, Arizona, USA



2016 · Other manufacturer's fixture with LED light source after an attempt to resolve glare complaints
Notre Dame Preparatory High School, Scottsdale, Arizona, USA

RETROFITS

Musco can help you evaluate the benefits and considerations for retrofitting your existing lighting.

2. How much will it cost to install my lights?

Every field is unique, and there are many things that impact the cost. The fixtures are only a small part of overall project cost, which can be broken into two categories: initial, and operating (or life-cycle) costs.

The initial cost of installing your project includes three components:

- Lighting
- Structural
- Electrical

For each of these three components, you will need to select someone to:

- Design
- Supply
- Install

Decisions you make in one area will affect the others. For example, variances in fixture efficiency will affect the number of fixtures needed and, as a result, could require larger poles to operate the system. Your choices in these areas will also impact operating and maintenance costs.

The following chart can be used to ensure all nine of these important decisions are covered.

9 Important Sports-Lighting Decisions

	LIGHTING	STRUCTURAL	ELECTRICAL
DESIGN	?	?	?
SUPPLY	?	?	?
INSTALL	?	?	?
OPERATE			

©1987, 2021 Musco Sports Lighting, LLC


RETROFITS

On retrofit projects, using your facility’s existing poles and electrical system can be a great way to reduce cost. Just be sure these components are evaluated for integrity, and you’ll want to make sure the new lights work as an integrated part of the overall system design to achieve the best possible results.

As you work through these decisions, it’s important to keep in mind a number of variables will affect the design and costs of your project. Here’s a checklist of things to discuss with your sports lighting representative:

Quantity and Quality of Light	Geographical Issues	Environmental Light Control Issues	Lighting Usage
<input type="checkbox"/> Facility type and size <input type="checkbox"/> Players’ skill level <input type="checkbox"/> Seating capacity <input type="checkbox"/> Television/video broadcast requirements <input type="checkbox"/> Lighting standards (for organizations such as Little League Baseball®)	<input type="checkbox"/> Location — structural and local/state building codes <input type="checkbox"/> Soil conditions <input type="checkbox"/> Existing structures <input type="checkbox"/> Pole setback requirements	<input type="checkbox"/> Proximity of neighbors <input type="checkbox"/> Community light ordinances <input type="checkbox"/> Nearby airports or observatories <input type="checkbox"/> Multi-field complexes	<input type="checkbox"/> Anticipated hours of operation <input type="checkbox"/> Local initiatives for reducing energy usage <input type="checkbox"/> Desire for dimming or special effects





Musco provides **FREE** project planning assistance to help you navigate the decisions that impact project cost. Our foundation-to-poletop systems and retrofit systems incorporate lighting, structural, and electrical components.

3. How many lights do I need?

When it comes to how much light you need, don't think about it in terms of number of fixtures. What you're really buying is quantity and quality of light on your field. With LED sports lighting, the quantity and quality of light is determined largely by the efficiency of reflector systems, light sources, and application expertise — all of which vary greatly based on the experience of your manufacturer.

Quantity of light

On-field lighting is measured in footcandles or lux. The amount of footcandles/lux required for your field is determined by:

- 1. Sport Type** — more light is needed for sports that use smaller, faster-moving objects (balls, pucks, skeet, etc.)
- 2. Skill Level** — higher light levels are needed for sports being played at higher skill levels to account for increased speed and gameplay accuracy.
- 3. Field Size** — the size of the playing area defines the number of square feet/meters that need to be lighted.
- 4. Seating Capacity** — the more seating your field has, the farther away some of the spectators will likely be, requiring more lighting to see the action on the field.
- 5. Video Broadcast Requirements** — a camera interprets images slower than the human eye and requires more light to be able to follow the action. Broadcasts include closeups of players during critical portions of an event and broadcasters often want the greatest depth of view possible.



Achieving and maintaining the right quantity and quality of light impacts tournament site selection.

RETROFITS

Simply swapping LED fixtures in for your existing lights on a 1:1 basis may not achieve necessary light levels or uniformity, and could lead to serious problems with glare and spill light.

Quality of light

Quality of light is referred to as uniformity or evenness on the playing surface. It's often stated as a ratio, such as 3:1, the minimum standard for most sports. This means the brightest point on the field should be no more than three times as bright as the darkest point. This ratio is important because a ball can appear to change speed as it passes from dark to light areas, making it difficult for players to safely track the ball's flight.

Initial vs. Target Light Levels

Light levels depreciate over time as the light source ages and dirt builds up on the fixture. How fast it depreciates depends on the fixture design, light source type and how it's operated. Initial light levels refer to how much light is on your field immediately upon installation, while target (or maintained) light levels refer to what you can expect over the life of your system. Each manufacturer bidding on your project should provide specific information on target light levels, as well as a uniformity ratio. This will ensure they're all designing to the same criteria when you're comparing proposals. You should also get written guarantees for the quantity and quality of light your system will provide.

Generally Accepted Lighting Standards

Sport	Sport Level	Seating Capacity	Footcandles	Lux
Baseball / Softball	Recreational	Limited or none	30/20	300/200
	Schools / Leagues	Up to 2000	50/30	500/300
	Schools / Leagues / Semi-Pro	Up to 5000	100/70	1000/700
Basketball (indoor)	Recreational	Limited or none	30	300
	Schools / Leagues	Up to 2000	50	500
	Schools / Leagues / Semi-Pro	Up to 5000	75	750
Football	Recreational	Limited or none	20	200
	Schools / Leagues	Up to 2000	30	300
	Schools / Leagues / Semi-Pro	Up to 5000	50	500
	Schools / Leagues / Semi-Pro	Over 5000	100	1000
Soccer	Recreational	Limited or none	20	200
	Schools / Leagues	Up to 2000	30	300
	Schools / Leagues / Semi-Pro	Up to 5000	50	500
Tennis – 2 court (side by side)	Recreational	Limited or none	30	300
	Schools / Leagues	Up to 2000	50	500
	Schools / Leagues / Semi-Pro	Up to 5000	75	750

Based on IES Recommended Practice: Lighting Sports and Recreational Areas RP-6-20. For larger facilities, please contact Musco.

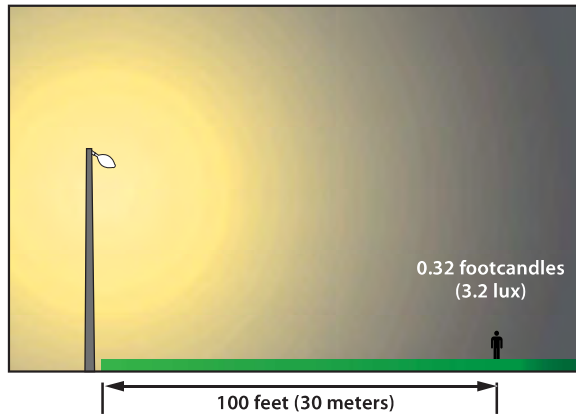


Musco provides FREE photometric design and computer modeling services to you or your consultant to help you achieve guaranteed light quantity and quality on your field.

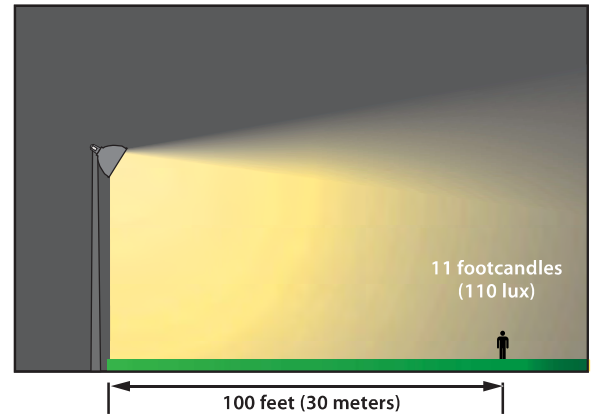
4. If they use the same wattage, aren't all LED fixtures the same?

No. The manufacturer's reflector design and application expertise determine how effectively the light energy is projected onto the playing surface. Technology allows wasted spill light to be redirected back onto the playing surface, increasing light on the field.

Lamp with no reflector



Lamp with reflector



Same Light Source, Different Results

It's a common mistake to specify a number of fixtures rather than the quantity of light delivered to the field. Specifying a set number of fixtures simply spells out the amount of light that will be generated by the fixture at the top of the pole, not the amount of light on the field.

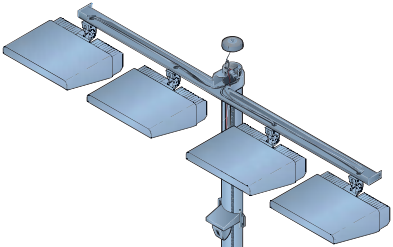
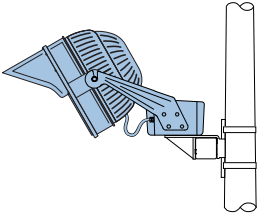
In the illustration above, the fixture produces the same amount of light at the poletop. Without a reflector, it projects less than one footcandle (10 lux) onto an area 100 feet (30 meters) away. With a basic reflector it projects 30 times that amount, redirecting what would otherwise be wasted spill light onto the field.

RETROFITS

There are big differences in efficiency of LED luminaires used for sports lighting. Make sure to evaluate the on-field performance to ensure you get the light levels you need.

System vs Parts

Sports lighting may be purchased as a complete system, or as a single fixture that must then be matched up with parts and pieces from a variety of sources. Here's an analysis:

 <p>Shaded areas indicate engineered components</p>	
<p>Engineered as a complete system</p> <ul style="list-style-type: none"> • Parts selected by trained engineers for compatibility • Critical components assembled in controlled environment • Tested prior to shipping • Single source accountability with light level guarantee and warranty on entire system 	<p>Parts and pieces of unknown strength and quality put together by the installer</p> <ul style="list-style-type: none"> • Inconsistent warranties from several sources • Exposed wiring creates maintenance problems
<p>Factory aimed</p> <ul style="list-style-type: none"> • Reduced installation time and expense • Known results 	<p>Individual fixture-by-fixture aiming from the top of the pole</p> <ul style="list-style-type: none"> • Adds installation time and cost • Unknown results
<p>Electrical components mounted at pole base</p> <ul style="list-style-type: none"> • Easier maintenance • Weight reduction at poletop assures better fixture alignment 	<p>Electrical components on fixture</p> <ul style="list-style-type: none"> • Troubleshooting must be done from the top of the pole • Increases chance of misalignment
<p>Built-in lightning and surge protection</p> <ul style="list-style-type: none"> • Assures it's installed and operating 	<p>Unknown protection</p>



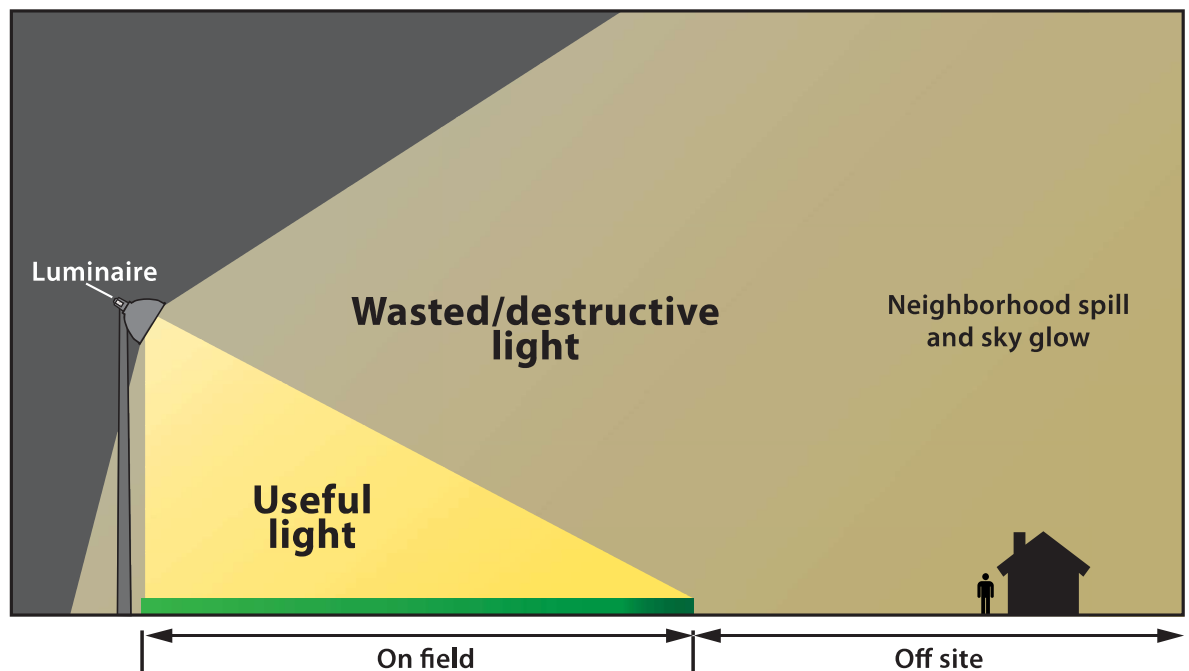
Musco's complete system is engineered from foundation to poletop in 5 Easy Pieces™ for optimal light control, easy installation, and trouble-free operation.

5. Why should I be concerned with spill light and glare?

The ability to effectively control spill light and glare is critical for a number of reasons.

Spill Light is Wasted Energy

Fixtures with poor light control waste light by allowing it to go off the field into neighborhood spill and sky glow. Proper light control redirects wasted spill light back onto the playing surface. Efficient fixture and system design, along with application expertise, will reduce the number of fixtures needed to get useful light onto the field. This can also significantly cut the energy consumption and carbon footprint at your facility.



RETROFITS

Planning a retrofit in which new LEDs are swapped in for old fixtures on a 1:1 basis can lead to serious problems with glare and spill if the fixture is not properly designed. Since LED involves hundreds of tiny light sources instead of one large one, effectively controlling the light being emitted is more challenging.

Impact on Players and Fans

Due to the intensity of the LED light source, increased measures should be taken to provide optic controls that minimize glare. Poorly designed fixtures create excessive glare, making it difficult for fans to follow the action and for players to follow the ball, creating the possibility for injury. Players competing on multi-field complexes can also be affected by glare from adjacent fields.

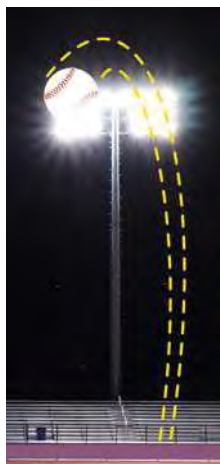
Impact on Neighbors

Neighboring homes and businesses can be significantly impacted if your lights create glare and/or spill that disrupt their evening hours. Some schools and organizations have even been forced to leave their lights off by homeowners associations and municipalities until they resolve problems with glare and spill.

There's a growing concern for wasting energy and for limiting the impact of light pollution. Many communities are enacting environmental light pollution ordinances to keep wasted light from impacting roadways, astronomical research facilities, and nearby wildlife habitats.

Community Growth

Even if there aren't currently homes in the immediate area around your facility, that could change. Communities often grow around sports facilities, and your lighting system should last 20 years or more. By minimizing spill light and glare now, you'll ensure happy neighbors when they do arrive and receive fewer complaints in the future.



Glare impacts players



Musco gets the glare out of the players' eyes



Musco has been evolving its advanced glare and spill control technology for over four decades, and has nearly two dozen patents focused on better light control.

6. Why does pole type and height matter?

Poles are an integral part of a lighting system. The right poles help ensure proper aiming, long-term reliability, and reduced maintenance expense.

Pole Types

Pole Type	Benefits	Drawbacks
Wood	<ul style="list-style-type: none">• Low cost of material	<ul style="list-style-type: none">• Poles not tall enough to allow proper mounting height• Fixture misalignment because wood twists and leans over time• Safety hazards: rotting wood, exposed electrical conduit, toxic preservatives
Concrete	<ul style="list-style-type: none">• Can be direct buried, eliminating the cost of footings• Corrosion and moisture resistant• Pleasing appearance	<ul style="list-style-type: none">• Poles are heavier and more expensive to set• High freight costs often limit their use to areas near concrete pole manufacturing plants
Base-plate Galvanized Steel	<ul style="list-style-type: none">• Pleasing appearance• Lighter weight than concrete, easy to handle	<ul style="list-style-type: none">• Higher initial cost• Require construction of concrete foundation with anchor bolts to mount poles and sufficient curing time for concrete• Curing time of concrete base• Corrosion at ground level• Difficulty with pole orientation
Direct Burial Galvanized Steel	<ul style="list-style-type: none">• Pleasing appearance• Lightweight	<ul style="list-style-type: none">• Underground corrosion accelerated due to moisture and soil chemicals (often undetectable prior to pole failure)• Unpredictable life expectancy• Increase installation time and cost depending on structural engineer's criteria



Combination Concrete and Steel Pole

There are also combination concrete and steel poles, which offer the advantages of steel and concrete without many of the drawbacks. Well-designed steel and concrete poles can help simplify installation, save costs, and reduce concerns about corrosion at and below ground level.

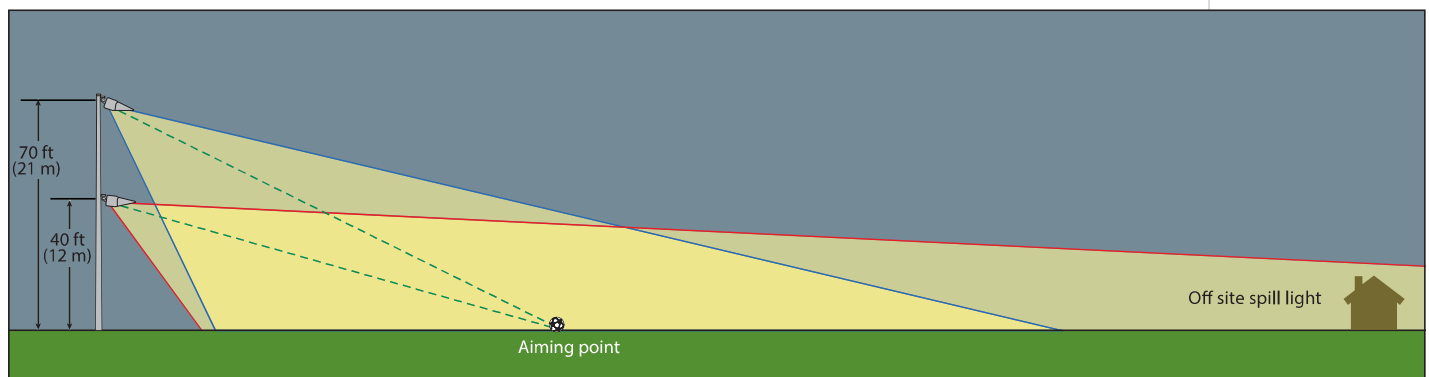
Musco's Light-Structure System™ combines the benefits of both concrete and steel poles.

RETROFITS

Among the first steps of any LED retrofit project is to examine your existing poles to ensure structural reliability. Even if your poles are structurally sound, you should check your poletop mounting structures as well to determine if new crossarms are needed.

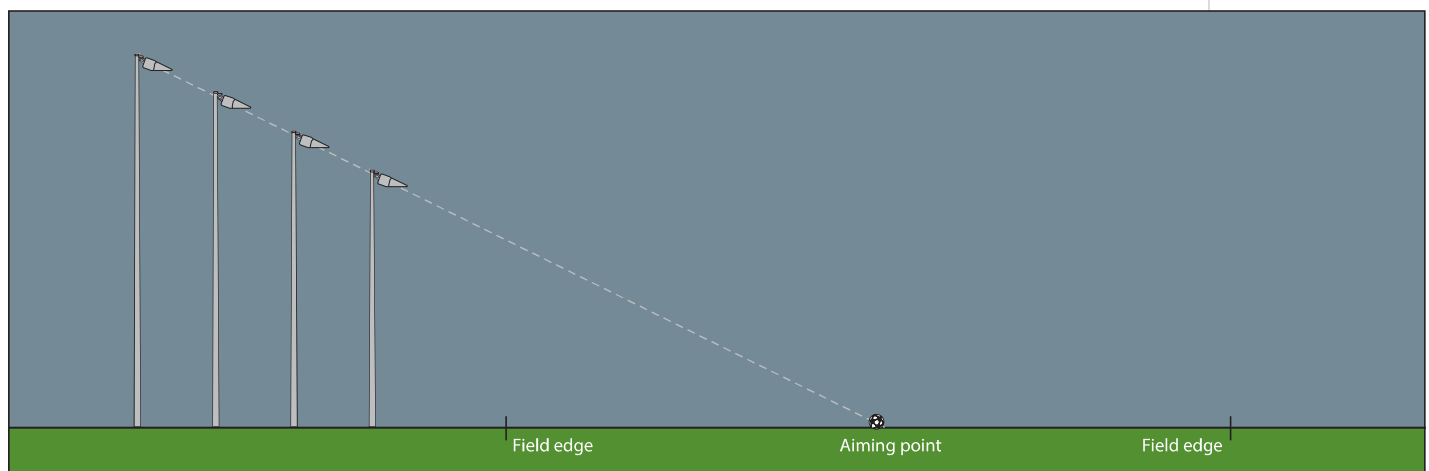
Pole Height

Pole height impacts aiming angles, which directly affect the evenness of light distribution across the field and the potential for spill light pollution. Normally, taller poles allow fixtures to be aimed more directly down onto the playing surface, reducing the amount of light spilling into unwanted areas. In some cases, city ordinances or other factors require the use of shorter poles, a challenge that experienced manufacturers can typically resolve with customizations like additional poles or creative aiming strategies to achieve your lighting goals on and off the field.



Pole Distance

The optimal height of the poles needed for your lighting system and resulting project cost is also affected by their distance from the playing surface. Structures such as bleachers and buildings will impact pole location and resulting distance from the field. Future expansions or other facility plans should be discussed with your lighting manufacturer.



Musco's expert project managers and engineers will work with you to design the ideal lighting system for your specific needs.

7. How much will it cost to operate my lights?

The cost to operate your lights can be broken out into four categories:

Electrical Costs

Electrical cost to operate lights is less than many think. Light sources vary in how efficiently they convert electrical energy into light energy. LED can cut energy consumption by as much as 80 percent. However, your hours of usage will determine how much you could save on annual energy cost. Here's an example:

Standard soccer field — 360 x 225 ft (110 x 69 m), 30 footcandles (300 lux)

	Musco		Other Manufacturer
	TLC for LED® Technology	1500 W Metal Halide	1500 W Metal Halide
Fixtures required	24	32	52
Hourly energy cost	\$3.02	\$5.00	\$8.42
Annual energy cost	\$1,510	\$2,502	\$4,212
25-year energy cost	\$37,750	\$62,560	\$105,300

Assumes 10¢ per kW-h electrical rate, 500 hours per year operation

Staffing Costs

As public concern for energy conservation grows and budget constraints impact staffing, automated control systems can help keep those costs in check. Automated systems are more reliable than timers, better accommodate last-minute changes, save energy, and eliminate staff travel to fields to turn lights on and off.

Some systems provide reports that track hours by user, helping you set user fees to offset operating costs. Monitoring services are also available to ensure on/off schedules are completed and provide alerts to you or your warranty provider for fixture outages that may affect playability.

Routine Maintenance Costs

Older metal halide light sources required group relamping prior to end of lamp life to maintain target light levels on the field. LEDs used for sports lighting should not burn out before the end of system life, provided there is adequate design for the supporting structural and electrical components.

Regardless of light source technology, the basics of lighting maintenance remain the same: cleaning, monitoring, aiming alignment, and troubleshooting. Fuses will need to be replaced as needed. You may need to rent equipment if the electrical components such as fuses and drivers are not accessible at ground level.

Costs include:

- Equipment rental to get to top of pole (\$75 to \$150 per hour)
- Labor (approximately \$60 - \$100/hour average)

RETROFITS

LED is not maintenance free. Find out if your manufacturer includes parts, shipping, onsite labor and lift equipment. Electrical components located remotely near the base of the pole, so routine servicing can be done from a step ladder, eliminate the expense of a crane or lift to reach drivers or fuses located in the fixtures.

Unexpected Repair Costs

Unexpected repairs can take significant time and money to fix. A well-designed system will be durable enough to withstand the elements and have features designed to reduced unexpected costs.

Re-aiming — make sure your manufacturer guarantees fixture alignment. Over time, factors like weather can cause misalignment resulting in less light on the field. Labor and equipment cost to correct this can be significant.

Fixture outages — Each driver or fixture should be individually fused. This minimizes multiple or “gang” failures. If your manufacturer does not include labor for fixture repairs, you will be responsible for lift and labor to remove and ship a fixture in for repair or replacement. Upon return, you will need to reinstall the new fixture.

Troubleshooting — Easy-to-access systems have electrical components such as ballasts/drivers, capacitors, and fuses located close to the ground to save time and money.

Lightning and surge protection — Built-in lightning grounding and surge protection helps avoid equipment damage. This is especially critical with the electronics involved in LED lighting.



Misalignment of as little as 10 degrees shifts light off the playing field into the stands.



Having major electrical components accessible at ground level avoids hiring a \$100/hour crane to replace a \$10 fuse.



Musco's systems are efficient, include automated controls, can be turned on/off instantly with the touch of a phone, are proactively monitored with 24/7 call-center support, and are backed by a no-touch warranty covering all parts, labor, and routine maintenance.

8. How can I make sure I get the results I want?

Sports lighting is a big investment that can bring a wide range of benefits to your community for years to come. There are some important steps you can take to ensure you get the results you want.

Define Standards

Make sure to get written specifications that establish the performance you expect. Remember to incorporate the lighting, structural, and electrical components and the costs involved for design, supply, installation, and operation (see page 6) into your planning. Specify the values you want for playability, environmental light control, life-cycle cost savings, and warranty.

Clearly defined standards will help you avoid two problems on bid date:

- Insufficient, cheap equipment substitutions to lower bid price
- High bids to cover the uncertain costs of an underdefined project

Seek Accountability

Having a manufacturer that stands behind its product and provides good service will make a huge difference in long-term satisfaction with your lighting system.

Require Written Guarantees — Manufacturers can provide written performance guarantees for light levels and your entire system from the foundation to the fixtures. This will ensure the specifications you establish are met. Getting this guarantee from a single-source system provider will save you the headache of sorting out responsibility among multiple manufacturers should a problem arise.

Compare Warranties and Services — It's essential to understand and compare different manufacturer warranties. The warranty reflects a manufacturer's confidence in how its lighting will perform. Some manufacturers provide single-source accountability, offering a long-term warranty covering all parts and onsite labor. Other manufacturers' lighting includes several warranties from a variety of suppliers whose parts and pieces are included, which can lead to confusion as to what's covered, for how long, and by whom. Some manufacturers include services such as on/off controls and proactive system monitoring.

RETROFITS

All LED sports lighting is not created equal, so if you're considering an LED retrofit it's important to visit other facilities similar to yours that have recently completed retrofit installations to see how different manufacturers' lighting performs.

Get References — Ask for references and review each manufacturer's reputation and track record for service. A good question to ask is if there will be an on-site field performance evaluation after the installation, as well as how far away the manufacturer's service technicians are. This will impact how long it takes to address problems that may arise.

See For Yourself — There's no better way to compare and contrast the performance of different manufacturers' lighting than by getting out onto fields and seeing it firsthand. Ask to visit nearby facilities that are similar to yours, and talk with the owners about their overall experience and how well the manufacturer did at helping them achieve their lighting goals.

“The bitterness of poor quality remains long after the sweetness of low price is forgotten.”

— Benjamin Franklin



Musco's long-term warranty and performance guarantee covers every part and all labor, and is backed by a service Team of more than 170 professionals including regionally-based technicians, 24/7 proactive monitoring, instant on/off controls, and the support of a fully-staffed call center.



9. Is there funding help available?

Funding is often the most critical and challenging aspect of a sports lighting project. It's important to know there are options available that can bring your project within financial reach.

Utility Grants & Rebates

Many utility companies offer incentives to promote the use of energy-efficient products, including sports lighting. Incentives vary and come in the form of rebates, grants, low-interest loans, and/or reduced kilowatt rates. Once the utility company completes an energy-savings audit, it can help fund new lights or upgrade your existing equipment with an energy-efficient system. Make sure that the replacement system meets the light level, light control, warranty, and other specifications.

Manufacturer Financing

Well-established manufacturers may offer financing programs for municipalities, public schools, and other organizations to provide a “budget stretcher” to help with facility improvements. The added revenue from expanded use of your facility can help make the annual payments and allow you to enjoy the benefits of your lighted facility sooner. Plus, a set payment can be built into your annual budget, freeing you from budget uncertainties and cash flow implications of a large purchase.

Unique Fundraising

Look for fundraising campaigns and programs that may be out there in conjunction with manufacturers and organizations, such as Little League® and Babe Ruth®. Check with local businesses to gauge their interest in purchasing advertising at your field as a way to raise funds for lighting.

Volunteer Installation

Well-designed sports lighting systems can offer a simplified and streamlined installation, in which case you can recruit volunteers to assist with the process. This is a good way to save money and reduce your overall costs.

RETROFITS

If you are working with an Energy Service Company, or ESCO, be sure to take into account important aspects such as on-field light levels, spill and glare control, and warranty to ensure your retrofit project doesn't sacrifice quality.



Musco offers financing options and a resource database to identify grants and incentives available to make your project happen. Musco also partners with organizations such as Little League®, Babe Ruth®, and U.S. Soccer Foundation to award field lighting systems at a discount. Musco's unique Pennant Program™ fundraising provides advertising opportunities using pennants displayed on light poles to help with both initial and annual operating costs.

Lighting terms you'll hear

Creating Light Energy

Light-emitting diode (LED): Small semiconductor device that creates light when electricity passes through it.

High intensity discharge (HID) lamp: Metal halide, high-pressure sodium, and mercury vapor — a group of light sources that create light when electricity ignites gases inside an arc tube.

Incandescent: A light source that creates light when electricity passes through a filament.

Measuring Light Energy

Lumen (1 lm): Measure of light, much like a liter is a measure of volume.

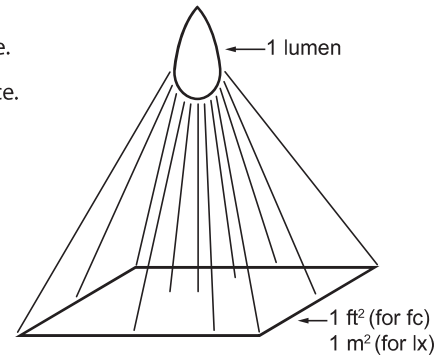
Footcandle (fc): One lumen of light spread over 1 square-foot of surface. A light level of 30 footcandles means that 30 lumens of light are being projected onto each square foot of playing surface.

Lux (lx): Lux is the metric equivalent to a footcandle. A lux is 1 lumen spread over 1 square meter.

Candela (cd): Measure of the intensity of a light source. Relates to predicting on-field and off-field glare. You can relate this to car headlights: high beam = approximately 30,000 cd, low beam = approximately 12,000 cd.

Coloring rendering index (CRI): A scale from 0–100 used to measure a light source's ability to show colors realistically as compared to natural light (daylight). Higher CRI values mean a light source is more true to color.

Color temperature: A unit of measure in degrees Kelvin that indicates the color of a light source. Temperatures below 3500K appear yellow or warmer. Above 4500K appear bluish white or cooler. Absolute white is 5000K.



Controlling Light — Lighting Performance

Photometrics: Control of light energy through redirection.

Constant light level: The amount of light you can expect on the field at any given time over the extended life of the fixture or system.

Initial footcandles or lux: The amount of light on the field when the lighting system is first put into use.

Target (maintained) footcandles or lux: The lowest average amount of light you should always have on your field to meet minimum performance requirements.

Light loss: Amount of brightness from a fixture lost over time due to aging of the light source, dirt accumulation, temperature and voltage variations, and maintenance.

Lumen maintenance (Lp): The number of operating hours an LED light source will maintain the percentage (p) of its initial light output, noted as Lp.

Uniformity: The smoothness of light on the field.

Point by point scan: Computer-generated model of your proposed lighting system showing footcandle/lux readings at given points on your field.

Spill light: Wasted light that falls off the field into undesired areas, such as a neighbor's back yard.

Glare: Destructive light from a light source that shines in players', spectators', or neighbors' eyes, making it difficult to see.

Sky glow: Destructive light in the night sky which results from light that is reflected upwards.



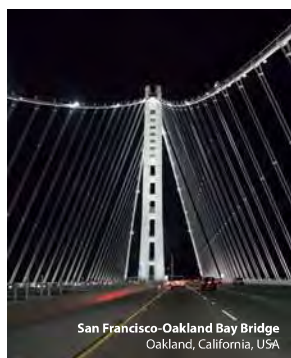
Point by point scan

We will help get you started

From our expert project managers to our team of certified engineers, we will work with you to design a custom foundation-to-poletop or retrofit lighting solution that:

- Reduces your facility's energy and life-cycle costs
- Delivers superior controlled light guaranteed to meet specified light levels
- Controls spill light, glare, and sky glow
- Eliminates maintenance costs
- Simplifies operation and reduces cost with our Control-Link® system monitoring, management tools, and on/off control.

Lighting solutions for your large area applications



San Francisco-Oakland Bay Bridge
Oakland, California, USA



Mount Rushmore National Memorial
Keystone, South Dakota, USA



Smokey Row Coffee Company Parking Lot
Des Moines, Iowa, USA

Need to light a non-sports project?

Musco's team of expert engineers create innovative lighting solutions for a variety of applications from small parking lots to large ports and national monuments. Since 1976, Musco has established itself as the global leader in sports and large area lighting solutions. For innovative lighting systems that enhance light quality, improve effectiveness, reduce spill light and glare, cut costs, and minimize the impact on our environment, contact Musco.

- Parking lots
- Buildings and architecture
- Monuments
- Ports, airports, and rail yards
- Construction sites
- Bridges and roadways
- Security
- And much more



For **FREE** planning assistance for your sports-lighting project contact:



We Make It Happen.

www.musco.com

lighting@musco.com

Phone: 641.673.0411

Toll-free: 800.825.6030

Connect with us:



©1996, 2021 Musco Sports Lighting, LLC - M-1252-enUS-16

Introducing
TLC[®] *for* LED[®]
Total Light Control[™]



We Make It Happen.[®]

TLC[®] for LED[®]

Total Light Control[™]

Continuing the commitment to excellence...

Keeping good lighting affordable...

Guaranteed for 10 years, from foundation to poletop.

Light-Emitting Diode (LED) is a new tool but the issues for transportation and infrastructure are the same. For nearly a decade, the Musco Team has been testing the LED light source and applying it on projects where it was the best choice.

We've researched LED's distinctive challenges and advantages and applied our knowledge of light control to the unique characteristics of the diode, assuring the quality of lighting for which Musco is known.

We've paired our expertise in controlling light with the advancing output of LED to the point where we're confident it's a cost-effective option to consider for transportation facilities.

The result is a system that makes *Musco's* great lighting even better.

Better for facility operators...

who want a safer work environment free from disruptive glare.

Better for the surrounding area...

light is not creating glare on nearby highways, residential areas, or impacting wildlife.

Better for the night sky...

with bright, uniform light directed onto the target area and not spilling above it.

Better for your budget...

an affordable system that's built to last and control operating costs.

And...you can mark maintenance off your list for 10 years!

The Musco Team looks for the best combination of issues to achieve a solution to meet your needs—from structures, to quality of light on the target area, to off-site impact, to energy and costs.



Harry Reid International Airport (LAS)
Paradise, Nevada, USA



Blount Island Marine Terminal – JAXPORT
Jacksonville, Florida, USA



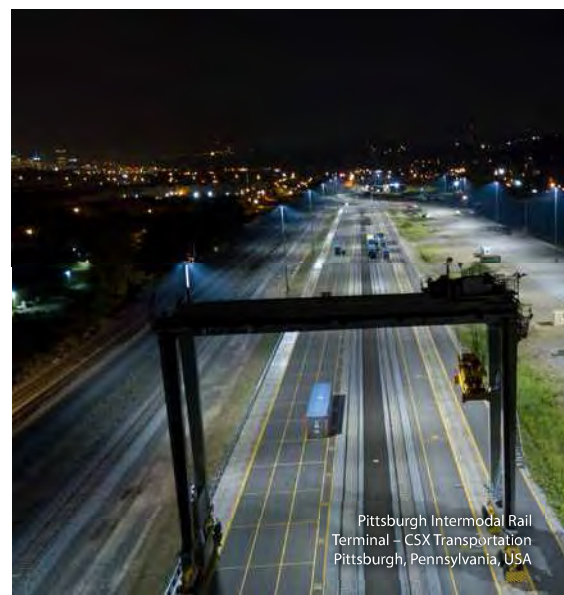
Mason Empty Depot – Georgia
Ports Authority
Savannah, Georgia, USA



Vancouver International Airport (YVR)
Vancouver, British Columbia, Canada



Des Moines Wastewater Treatment
Des Moines, Iowa, USA



Pittsburgh Intermodal Rail
Terminal – CSX Transportation
Pittsburgh, Pennsylvania, USA

Light-Structure System™

5 Easy Pieces™ complete from foundation to poletop.

Our Light-Structure System™ has delivered long-term performance for thousands of customers around the world.

Lights, structures, and electrical components are engineered to work together. This assures the designed lighting gets in place and stays there over the life of the system, while also maintaining and protecting the operating environment so the components continue to function.

We've included features like easy to reach remote drivers, integrated grounding, and surge protection to ensure the longevity of the LED's sensitive electronic components.

For retrofit applications, Musco continues its system approach by providing remote drivers, wire harnesses, crossarms, luminaries, and mounting hardware all custom designed for existing structures.

10 years of proven performance



"The Musco team was great to work with from the beginning. They provided all of the engineering and backup documents we needed to ensure their system would exceed the design requirements. The new lights provided better light level coverage, reduced glare, and reduced wind loading on existing poles and foundations."

— Dustin Colwell, Engineer
Kimley-Horn and Associates, Inc.

Control
from the foundation to the poletop.

An Ideal New or Retrofit System Solution

Whether installed as a retrofit or foundation to poletop solution, Musco's LED system is factory aimed, wired, and tested for easy installation and trouble-free operation.

And for your peace of mind, both are backed by a long-term parts and labor warranty — supported by a 160-member service team — eliminating maintenance costs for 10 years.

Foundation to Poletop System

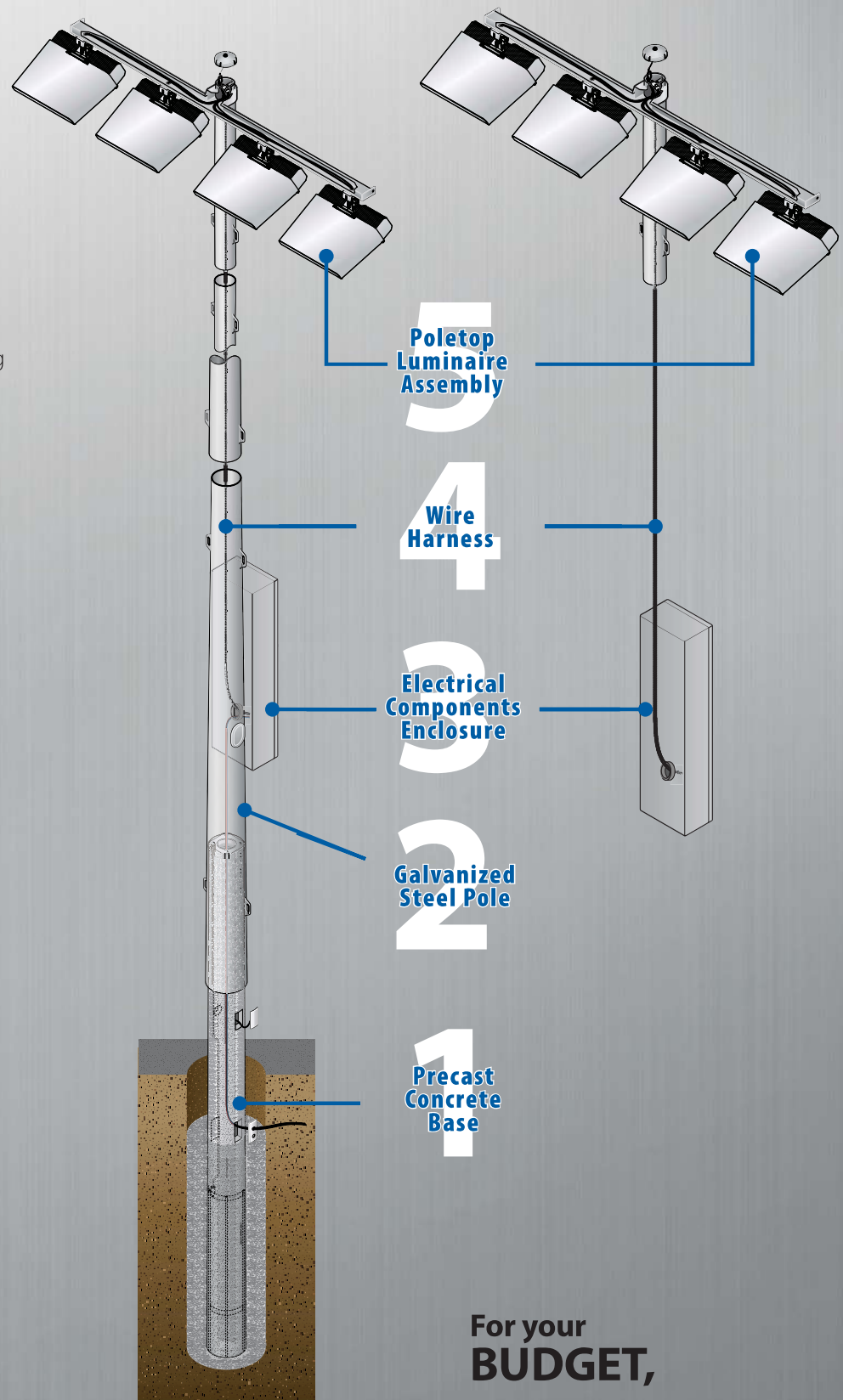
5 Easy Pieces™ from foundation to poletop includes lighting, electrical, and structural components designed to work together and a small structural footprint to maximize available area around the poles.

Retrofit System

New cross arms for structural integrity, new wire harnesses to ensure no exposed wiring and solid connections with quick-connect plug-ins, mounted to existing poles.

Foundation to Poletop Solution Light-Structure System™

Retrofit Solution



For your
BUDGET,
for the
ENVIRONMENT.

Musco can light a facility better than ever for

We create controlled light, not floodlights.

Most LED floodlights are a serious step backward when it comes to the quality of light at your facility. It may flood light into the surrounding area, into the night sky, and into the eyes of operators.

New Tool

LED brings many benefits and new opportunities, but it's a tool, not a solution. Controlling the LED's intense, "rifle shot" of light is challenging. But with Total Light Control—TLC for LED™, we're able to achieve things never before possible—from pinpoint precision, to instant on/off, to varying light levels for different needs.

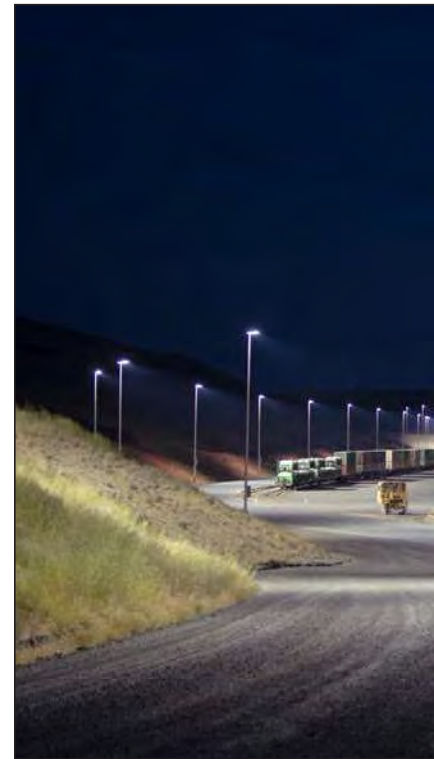
Same Issues

The key issues in lighting haven't changed: generating light, projecting it onto the target, keeping it out of the neighborhood and night sky, and creating an operating environment that allows it to last in real world conditions. Musco is able to carve out the area to be lighted and dramatically cut off any impact on the surrounding area. We use more of the light produced by the fixture, lose less light, and don't abuse the surrounding area.

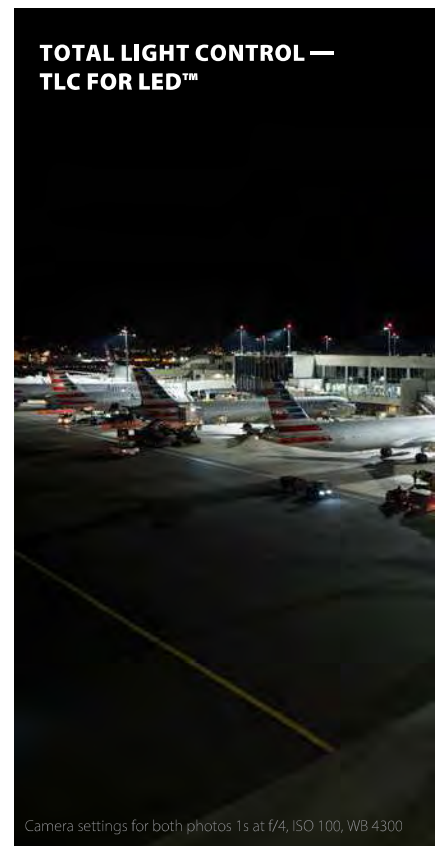
"Our primary objective is to operate and maintain a safe, secure and sustainable airport. The new apron lighting system significantly reduces YVR's energy consumption, while streamlining operations and improving safety with improved coverage, reduced glare and increased lighting levels. It's a win-win situation."

— Don Ehrenholz
Vice President, Engineering
Vancouver Airport Authority

Control
from the light source to the target area.



Waste Management, Columbia Ridge Landfill - Arlington, Oregon, USA



Camera settings for both photos 1s at f/4, ISO 100, WB 4300

Los Angeles International Airport (LAX)
Los Angeles, California, USA

operators and the surrounding environment.



Control-Link® provides remote schedule with dimming capabilities.



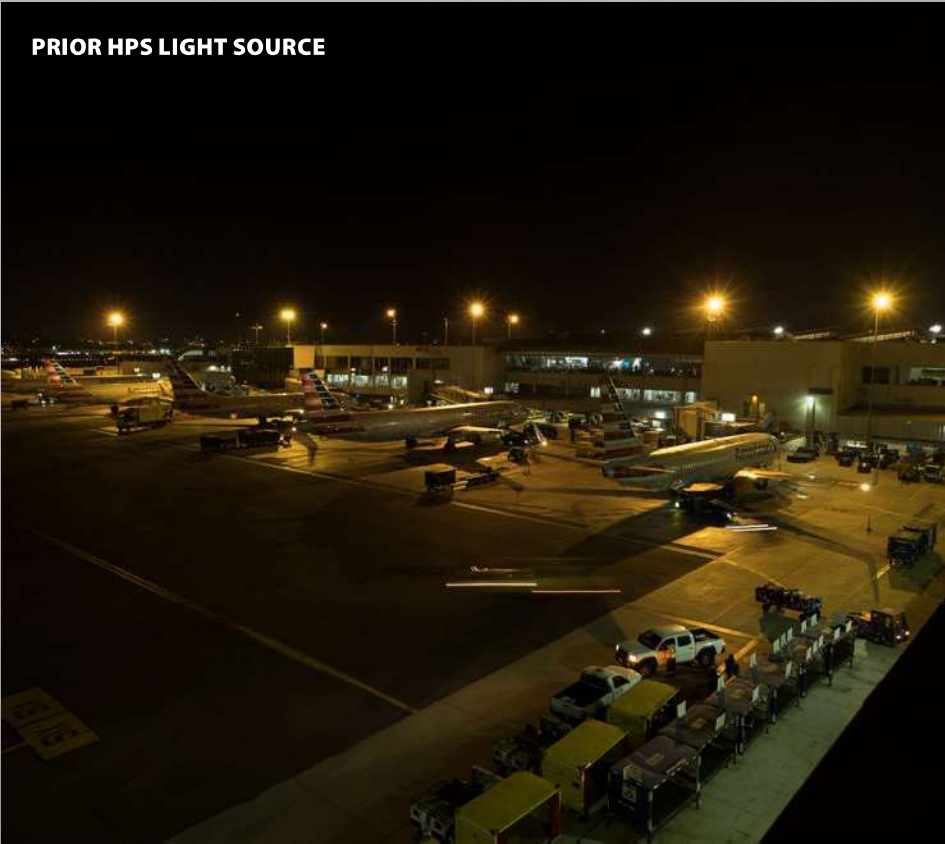
Mount Rushmore - Keystone, South Dakota, USA

Pinpoint control from 1,100 feet away highlights the target area while preserving surrounding darkness.



Associated British Ports - Newport, South Wales, UK

Lighting can be dimmed to preset levels for operations and security usage.



Strategically aimed luminaires and better color rendering provide a safer work environment for operators

Creating light is easy, controlling it requires

Musco cares as much about preserving darkness as it does about creating light.

Emitting light is easy. But LED fixtures that can't effectively control the light being emitted brings the unintended consequences of glare for operators and neighbors, and wasteful spill into the night sky.

With Musco's Total Light Control—TLC for LED™, we've taken LED to a level of performance and precision never before seen in transportation and infrastructure lighting. It means no disruptive glare into the surrounding area and the preservation of dark skies above.

Control
preserving the night sky.

"We've found Musco's system to be a better solution, offering improved visibility during nighttime operations, which aids both efficiency and safety on terminal. The GPA has also realized significant cost savings through seasonal light scheduling, and through more efficient fixtures that direct light where it's needed."

— Griff Lynch
Executive Director, Georgia Ports Authority



innovation.

increasing efficiency and decreasing environmental impact.

Today

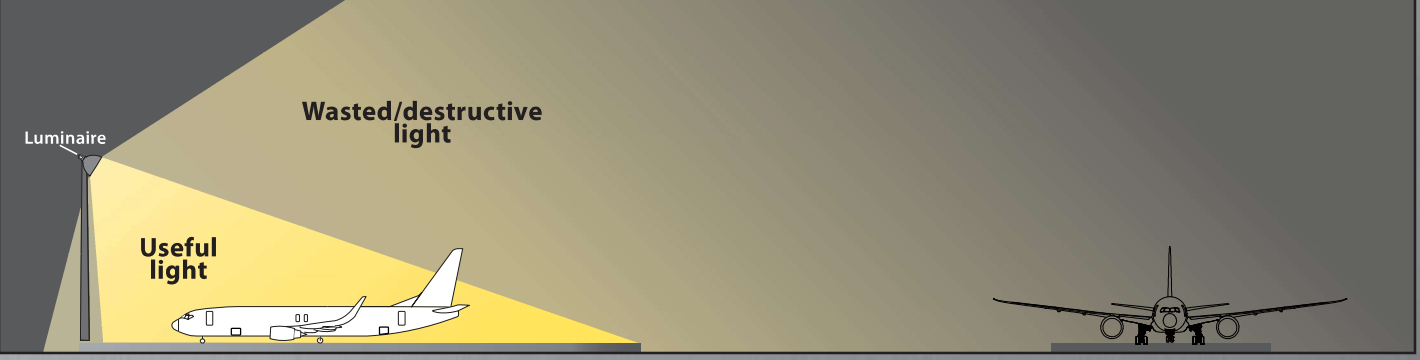
Musco LED System

Today

Other Luminaire Manufacturer LED



Light Energy: Use, Lose, Abuse



And, your facility is always ready to use.

Here's a look at what the Musco Team has done in the last year as a partner in service to customers like you...

- Turned lights on and off remotely for more than 4 million events
- Conducted routine inspections and maintenance at over 11,000 facilities
- Taken more than 350,000 calls, answering questions and helping with scheduling
- Carried out group lamp replacements on more than 40,000 metal halide fixtures
- Traveled enough miles servicing facilities to circle the equator 33 times

And here's what our customers enjoy for 10 years...

Peace of mind for 3,650 days knowing that if a problem arises, we'll be there, and a budget with virtually ***zero dollars spent on maintenance, increased staff productivity*** resulting from not having to worry about managing your lights.

Control assuring the results you expect.



We do the R&D to create it. We customize and apply solutions to your facility.

As we embarked upon this project, the primary goals for Harry Reid were to maximize energy savings while increasing lighting and visibility with minimal glare. The Musco system allowed us to achieve just that.

— James Chrisley, Deputy Director of Aviation
Harry Reid International Airport



Experienced project managers and a network of more than 1,800 partnered contractors available.



We provide 24–7 Control-Link® support to monitor and operate your facility.

Musco's Total Light Control—TLC for LED™ technology performs in real world conditions ***for 10 years, guaranteed.***
We Make It Happen.®





Control

from foundation to poletop...

from the light source to the target area,
preserving the night sky...

assuring the results you expect,
day 1... year 1... and for 10 years.





System Upgrade Solutions

Retrofit to TLC for LED® Technology



We Make It Happen.®



Before – other manufacturer's LED equipment



- ✗ Shut down by neighborhood glare concerns
- ✗ Unable to maintain light levels on the field

After – Musco TLC for LED® technology



- ✓ Resolved neighborhood concerns
- ✓ Met light level and uniformity requirements for player safety

Upgrading Your System With TLC for LED® Technology

The quality of LED sports lighting is only as good as the system that applies it. Sports venues of all sizes are discovering this every day.

At Musco, we're using our more than 45 years of experience in light and glare control to take advantage of the unique characteristics of the LED source to provide a system upgrade with benefits you won't find with other lighting equipment.



Better On-Field Lighting for Improved Playability

Photometric designs and application expertise deliver the light levels, uniformity, and ability to track aerial balls for player safety and a better experience for fans.

Reduced Energy Consumption for Cost Savings

TLC for LED® can reduce energy consumption by as much as 80 percent compared to HID.

Minimized Glare and Spill for Happy Neighbors

Custom optics and patented luminaire visoring provides superior control, minimizes spill and glare, and creates a curtain of darkness around your field.

Complete System Design for Better Reliability

Using existing poles saves money, and our system ensures that your poletop mounting structures will be reliable for the long term.

With Musco's parts and labor warranty, you won't pay maintenance costs for 10 years or more. And the Control-Link® control system provides proactive system monitoring and call center support 24/7/365.

Notre Dame Preparatory High School • Scottsdale, AZ, USA

Not long after Notre Dame Preparatory High School installed other LED lighting equipment, the school was forced to keep the lights off due to problems with spill light and glare affecting the neighbors. Musco replaced the lights with a TLC for LED® system upgrade, which provided neighbor-friendly light control while meeting required light levels on the field.

"If we went back and replayed our decision on what company to go with, there's no doubt we would've gone with Musco from the very beginning."

Jerry Zander, Principal, Notre Dame Preparatory High School

**Learn more about the
Notre Dame Preparatory
High School project here.**



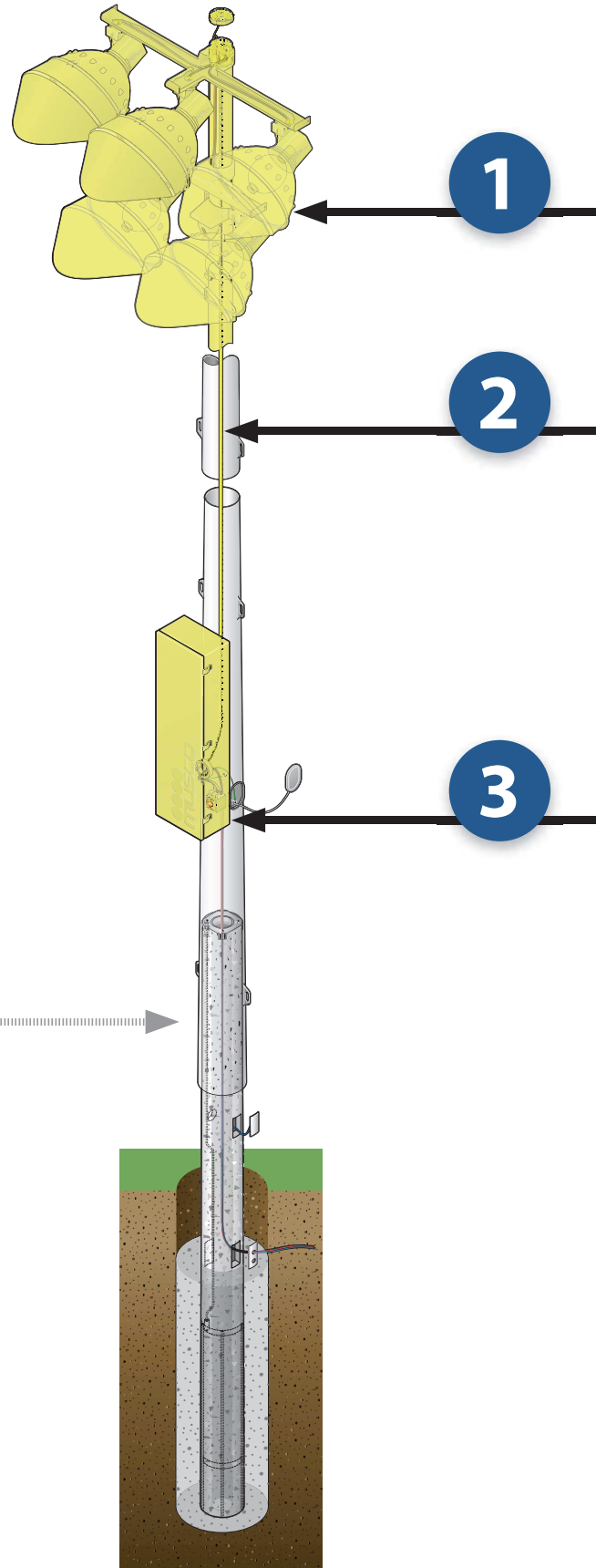
Musco's TLC for LED® Retrofit System Upgrade

Our solutions are designed as a system with lighting, electrical, and structural components engineered to work together. We'll conduct a structural assessment of your current lighting and our system upgrade solution will include a new wire harness, a new electrical components enclosure, and a new poletop luminaire assembly to help ensure structural integrity and long-term reliability.

Structural Inspection

- To assess integrity of existing support structure

Existing Light-Structure System™

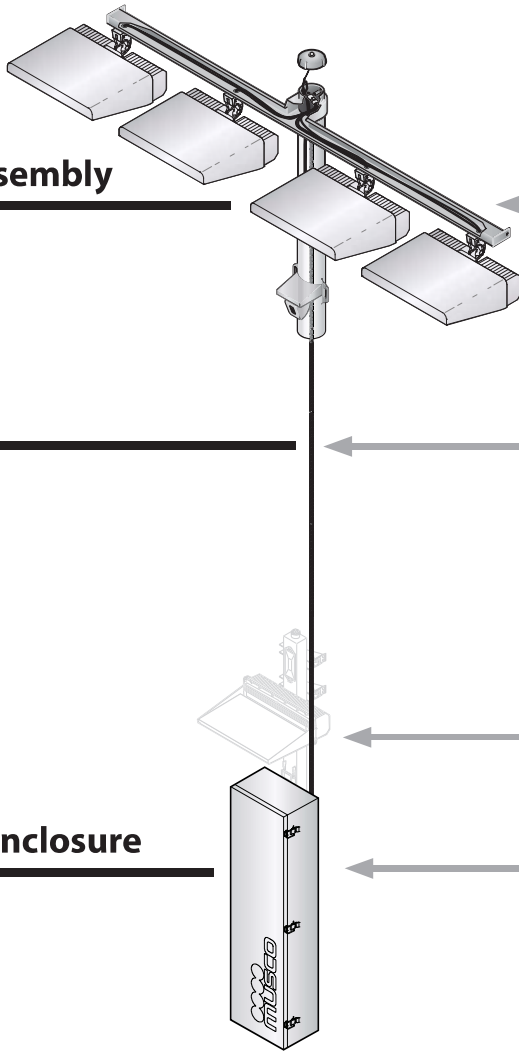


System Upgrade to TLC for LED® Technology

Poletop Luminaire Assembly

Wire Harness

Electrical Component Enclosure



- Patented optics and glare control for better on-field lighting and precise control
- New crossarms to replace existing support structure
- Factory wired, aimed, and tested
- Single aiming point for fast, reliable installation
- New factory-built wire harness
- Custom made per pole length and luminaire configuration
- Ensures no exposed wiring and solid connections with quick connect plug-ins
- Optional BallTracker® technology for aerial sports
- Located remotely for easy access
- Houses major electrical components
- Factory wired and tested, with surge protection and fusing for sensitive electronic components

"Musco's support is superb. They provided information on design, photometrics, and structural calculations. Any questions were quickly answered. They provided the most efficient design in terms of power usage with fixtures that weighed the least. I highly recommend them to anyone thinking of a retrofit upgrade."

– Patricia J. Hayes
P.E. Electrical Engineering



- ✗ Failed to meet KHSAA standards
- ✗ Negatively impacted player visibility



- ✓ Meets KHSAA standards and improves playability
- ✓ Nearly tripled on-field light levels

Better On-Field Lighting

TLC for LED®, along with our innovative BallTracker® technology, delivers a whiter and more uniform light, and allows players and fans to track the entire flight of the ball.

Paintsville High School

Paintsville, Kentucky, USA

At Paintsville High School in Kentucky, district leaders opted for non-Musco LED fixtures for a retrofit at their baseball stadium.

The recently-installed LED lights were removed and replaced with Musco's TLC for LED® system, which nearly tripled on-field light levels, satisfying KHSAA's standards.

Patented BallTracker® technology targets controlled light upward to allow players and fans to easily track the flight of the aerial ball at night.

"The deficiencies created by our previous lighting system created an extremely unsafe playing field for all of our baseball programs. Our Board of Education selected Musco to solve our problems based on Musco's long history of being the standard bearer for field lighting. The new lighting is top of the line and resolves any safety issues we had previously."

– David Gibson
Superintendent, Paintsville Independent Schools

Learn more about the
Paintsville project here.



Reduced Energy Consumption

Musco's TLC for LED® system upgrade can reduce energy consumption by as much as 80 percent compared to HID.

Everly-Montgomery Field

St. Vrain Valley School District
Longmont, Colorado, USA

St. Vrain Valley School District in Longmont, Colorado, needed an LED retrofit at its Everly-Montgomery Field that would reduce energy consumption and qualify for an energy efficiency rebate.

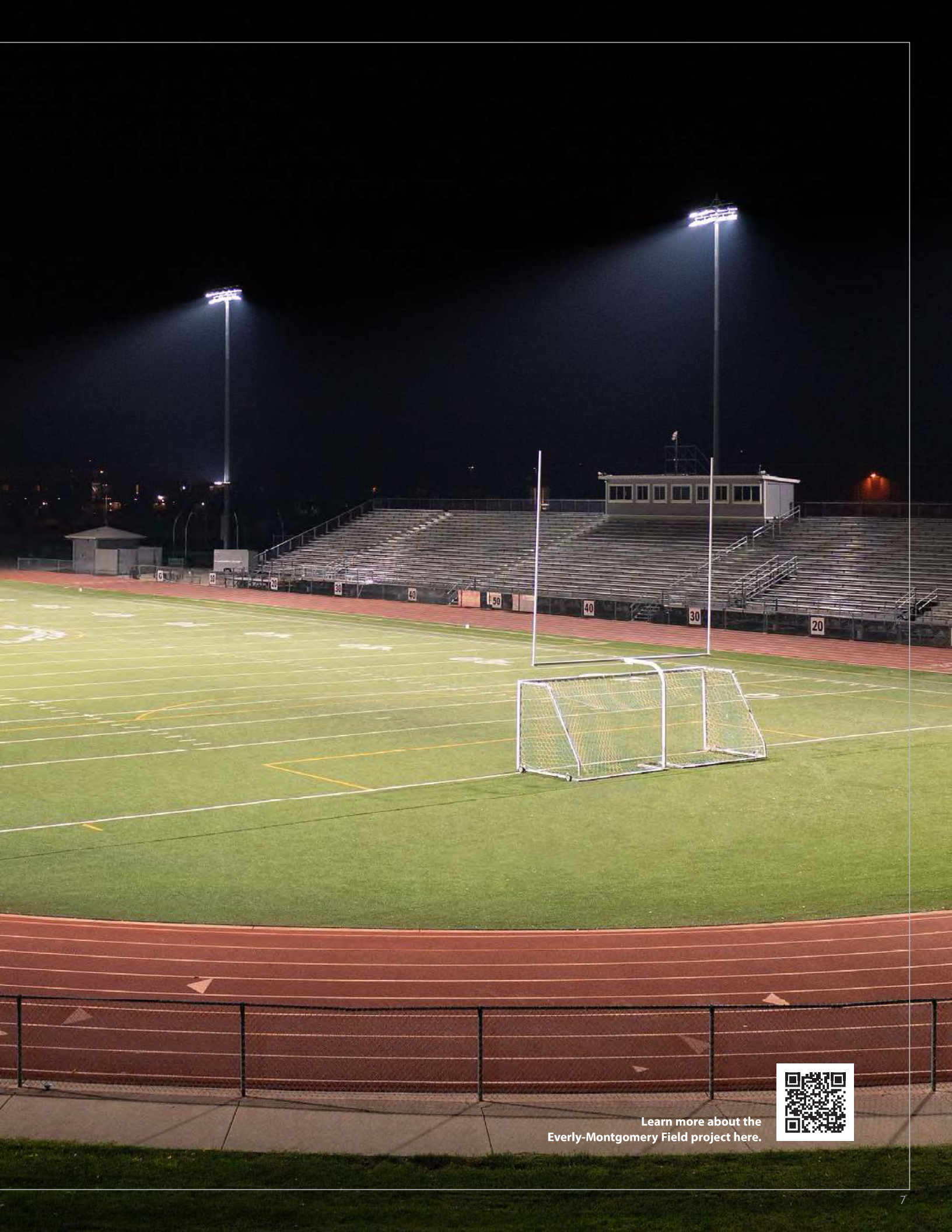
Project leaders opted for a TLC for LED® retrofit system upgrade from Musco.

In addition to improving light levels, the new system cut energy consumption by 60 percent compared to the previous HID lights, earning the district a \$30,000 rebate through the local Efficiency Works program.

"Musco's system was very easy to install and went together quickly. All of the fixtures were numbered, pre-aimed, and bolted to the crossarms; and the wire harnesses were numbered and easily plugged together. The tech and site support from Musco was excellent and very accessible."

– James Wakefield
Project Superintendent, Duro Electric





Learn more about the
Everly-Montgomery Field project here.



Minimized Glare and Spill

The patented light control technology of TLC for LED® delivers a level of precision never before possible, re-directing previously wasted light onto the field and minimizing glare and spill.

Ravsten Stadium

Idaho Falls, Idaho, USA

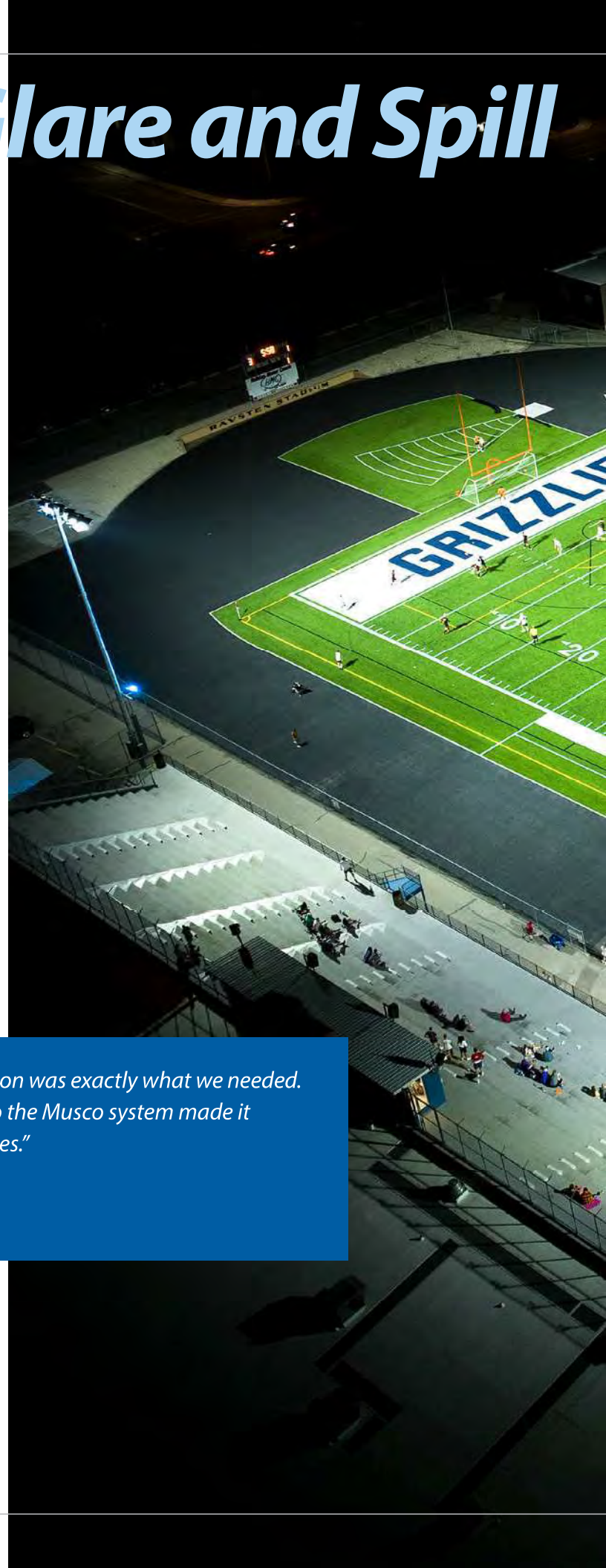
In Idaho Falls, Idaho, protecting dark nighttime skies from light pollution was a key consideration for school leaders when they wanted to update lighting at the district's Ravsten Stadium.

The district's electrical engineer on the project, Musgrove Engineering, knew of Musco's capabilities and opted for a TLC for LED® retrofit system upgrade.

With the new system in place, Ravsten Stadium received a Community Friendly Outdoor Sports Lighting Program designation from the International Dark-Sky Association. The system also includes Musco's Show-Light® special effects technology, enhancing game nights at the stadium with exciting light shows.

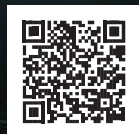
"Musco has been great to work with, and the turnkey solution was exactly what we needed. Having all the Dark Sky and light control options built into the Musco system made it simple for the school district to meet state and local statutes."

– Matthew Bradley
Principal, Musgrove Engineering





Learn more about the
Ravsten Stadium project here.





Before – other manufacturer's LED



- ✗ Failed to perform reliably when needed
- ✗ Spilled excessive light onto the Severn River

After – Musco TLC for LED® technology



- ✓ Delivered reliable, trouble-free operation
- ✓ Minimized spill light and glare

Complete System Design

Musco's complete system design, parts and labor warranty backed by regional technicians, and 24/7 support of Control-Link® control system ensure your field is always ready for play.

U.S. Naval Academy

Annapolis, Maryland, USA

The U.S. Naval Academy in Annapolis, Maryland, originally retrofitted 10 recreational and athletic fields with another manufacturer's LED lights, but started experiencing reliability issues after only a few years of operation.

The Academy called in Musco to replace the previously retrofitted LED lights with Musco's TLC for LED® system, featuring lighting, electrical, and new structural crossarms designed to work together.

The new system upgrade from Musco provided trouble-free operation. Musco's long-term parts and labor warranty eliminates maintenance costs for the Academy well into the future.

"Our Musco systems not only provide fantastic performance, but are robust and reliable. In terms of product quality, Musco's system is in a class of its own. Pole top fixtures are manufactured to a high standard and substantial. They are built to last a lifetime and it shows. Control systems are located at a serviceable height (not requiring a lift) and the components are industrial grade. We have experience with a number of sports field lighting products at the United States Naval Academy, Musco is the only sports field lighting provider that has delivered the performance and service required to accomplish our mission."

– Jabe H. Nekula, PE
NAVFAC Washington, Public Works Department, Annapolis

Learn more about the
U.S. Naval Academy project here.



All LED Retrofits Are Not Created Equal

At sports fields and stadiums of all shapes and sizes, poorly planned and designed LED retrofits have created problems with light levels, spill and glare, and reliability.

At many, those recently installed LED fixtures have had to be removed and replaced with our TLC for LED® system to resolve the issues.

St. Mary's Stadium – Southampton FC • Southampton, UK

Before – other manufacturer's LED



After – Musco TLC for LED® technology



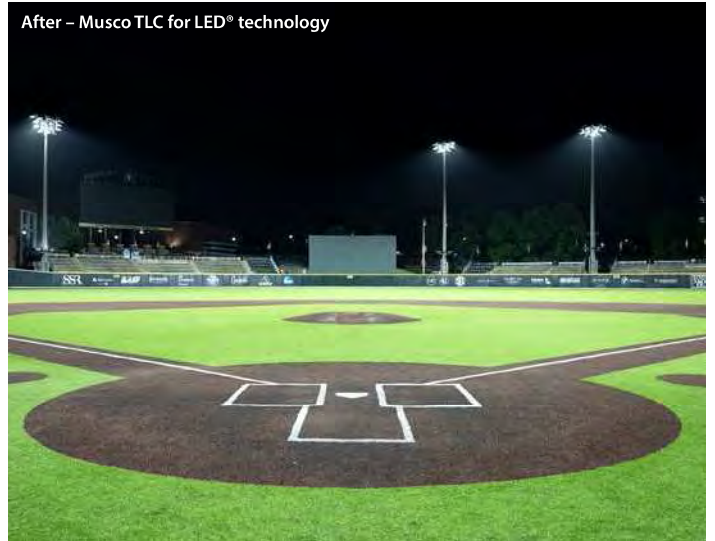
The original LED retrofit at St. Mary's Stadium from another manufacturer created reliability issues and glare. It was replaced with Musco's TLC for LED® system upgrade, improving reliability and creating a better playing and viewing experience.

Hawkins Field – Vanderbilt University • Nashville, Tennessee, USA

Before – other manufacturer's LED



After – Musco TLC for LED® technology



The recently-installed LED fixtures at Vanderbilt University's baseball stadium were a source of glare for players and produced uneven light levels, making it difficult to see the ball. Musco's TLC for LED® system upgrade with BallTracker® technology resolved the issues with glare and enabled players to see the ball better.

Watsco Center – University of Miami • Miami, Florida, USA

Before – other manufacturer's LED



After – Musco TLC for LED® technology



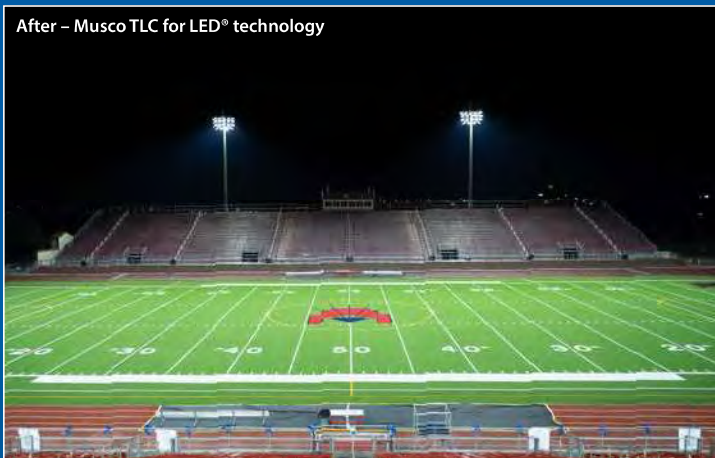
The University of Miami's Watsco Center experienced problems with reliability and frequent maintenance on its recently installed LED fixtures. They were replaced with Musco's TLC for LED® system upgrade, improving reliability and maintenance concerns while creating a more stage-like atmosphere for television broadcasts.

La Joya High School • La Joya, Texas, USA

Before – other manufacturer's LED



After – Musco TLC for LED® technology



When La Joya's LED fixtures from another manufacturer were damaged from heavy rain storms, the school was told its warranty wouldn't cover repairs or replacement lighting. Musco's TLC for LED® retrofit system upgrade was installed, improving light quality and glare control, while also being backed by a long-term warranty covering every part and all labor.

New Albany High School • New Albany, Ohio, USA

Before – other manufacturer's LED



After – Musco TLC for LED® technology



After another manufacturer retrofitted LED fixtures at New Albany High School's football stadium, on-field light levels were significantly lower than was needed for optimal visibility and playability. The school had them removed and replaced with Musco's TLC for LED® retrofit system upgrade, increasing light levels and improving uniformity across the field.

Ed Radice Park • Tampa, Florida, USA

Before – other manufacturer's LED



After – Musco TLC for LED® technology



The recently-installed LED retrofit at Ed Radice Park in Tampa, Florida, created disturbing glare for players and produced inadequate light levels. With Musco's TLC for LED® system upgrade, the facility gained much improved light levels and uniformity while also minimizing glare from the LED fixtures.



Vanderbilt Baseball Hawkins Field
Nashville, Tennessee, USA



Bakersfield College Memorial Stadium
Bakersfield, California, USA

Musco's TLC for LED® Retrofit System Upgrade

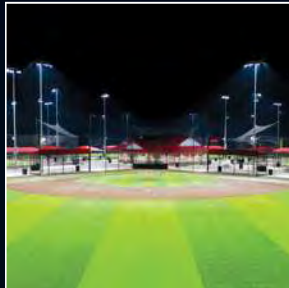
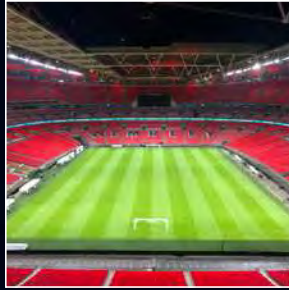
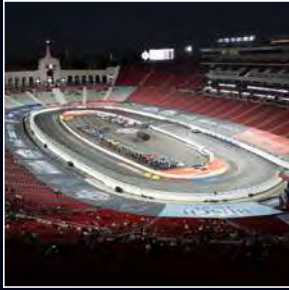
Unequaled performance . . .
for your budget, for the environment.

UCCS Alpine Field
Colorado Springs, Colorado, USA



We Make It Happen®

www.musco.com
e-mail: lighting@musco.com



We Make It Happen.®



Musco Makes it Happen

Since 1976, Musco has been designing and manufacturing the highest quality sports and large area lighting systems. Our global Team, innovations, and superior light control technology offers practical, cost-effective, trouble-free solutions backed by a long-term warranty.

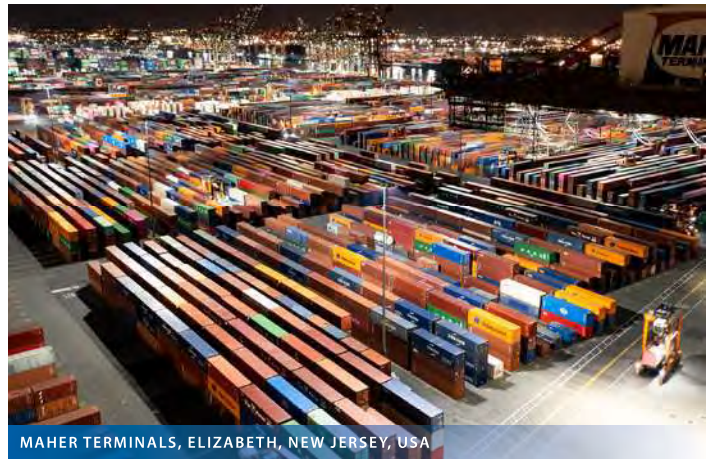
- Raising the standard for lighting at hometown fields and the biggest venues in the world.
- Bringing unmatched experience to provide the most value for your lighting budget.
- Offering expert guidance from system design through installation, support, service, and operation.
- Solving real customer problems and providing solutions that meet your facility's unique needs.

Pictured on the cover (clockwise from top left): LA Coliseum, Los Angeles, California, USA; Wembley Stadium, London, UK; TD Garden, Boston, Massachusetts, USA; Ellsworth Air Force Base, Rapid City, South Dakota, USA; Cedar Stone Community Park, Smyrna, Tennessee, USA; GPA Appalachian Regional Port, Crandall, Georgia, USA. Background photo: Daphne Park Drive Complex, Daphne, Alabama, USA.



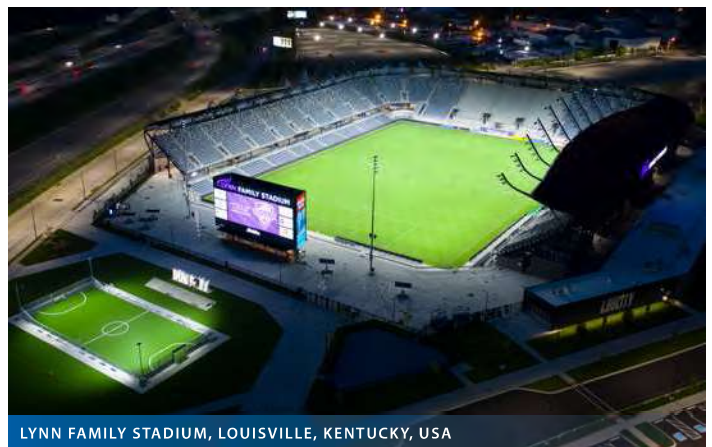
ORANGE COUNTY GREAT PARK, IRVINE, CALIFORNIA, USA

Lighted over 70 fields and courts without creating off-site spill or on-field and cross-field glare.



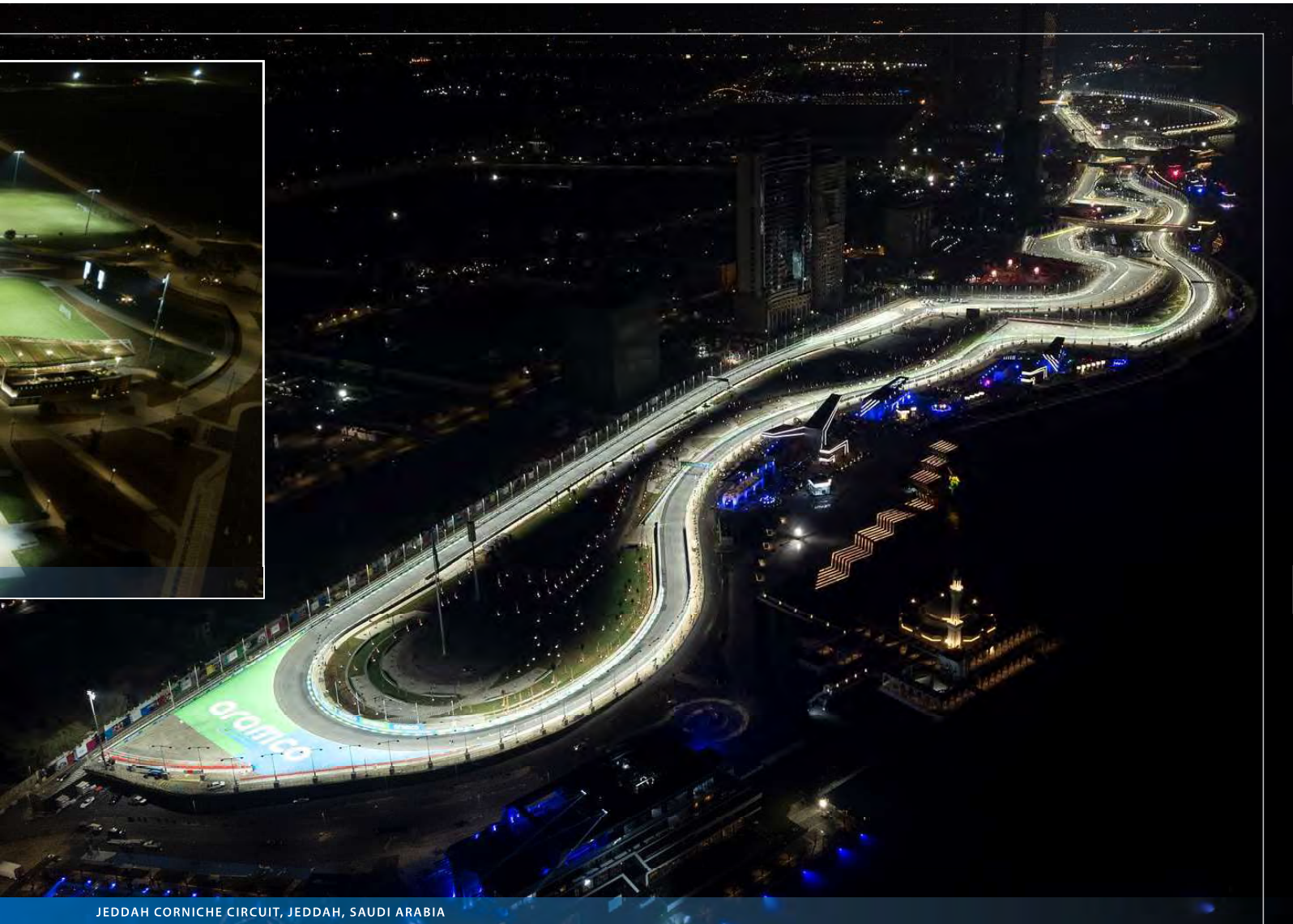
MAHER TERMINALS, ELIZABETH, NEW JERSEY, USA

Helped the United States' second-largest container terminal provide a safer, more efficient work environment.



LYNN FAMILY STADIUM, LOUISVILLE, KENTUCKY, USA

Helped create a more exciting and engaging fan experience with new TLC for LED® lighting and a Mini-Pitch System™.



JEDDAH CORNICHE CIRCUIT, JEDDAH, SAUDI ARABIA

Created an unprecedented racing experience at the world's longest Formula 1™ street circuit to feature LED lighting.



STATUE OF LIBERTY, NEW YORK, NEW YORK, USA

Lighted the Statue of Liberty as a symbol of recovery in the aftermath of Hurricane Sandy.



FIELD OF DREAMS, DYERSVILLE, IOWA, USA

Returned to the Field of Dreams site to create an unforgettable environment for the historic MLB at Field of Dreams™ event.

45+ Years of Innovations

Since our founding in 1976, our Team has been committed to system development advancing light quality and control capabilities that have created new possibilities in sports and large area lighting.

1977



Production begins on the SportsCluster®, simplifying installation, guaranteeing alignment, and improving durability.



1979

Remote ballast is introduced, placing electrical components in an enclosure near the base of the pole for easy maintenance.

1987

SportsCluster®2 is introduced, offering major advancements in efficiency and spill and glare control.



1988

The Multi-Watt™ option is introduced to reduce system operating costs and increase programming flexibility.



1989

Level-8™ and Total Light Control™ options are introduced as a way to provide practical solutions for extreme lighting needs.



1979

Factory aiming is introduced, increasing light quality on the field and streamlining installation.

1982



Mobile Lighting debuts, making television history with the first-ever night game at Notre Dame Stadium.

1981

An unprecedented parts and labor warranty is introduced, demonstrating the reliability of our system approach.



1988

Enhancements to SportsCluster®2 achieve up to 25% more light on the field and up to 95% reduction in spill light.

1991

Light-Structure System™ is introduced engineered as **5 Easy Pieces™** backed by a hassle-free seven-year warranty on all parts and labor.

1996



The ShowLight® system is introduced, bringing special effects lighting to pre-game, halftime, and post-game celebrations at professional arenas.

1999

Control-Link® is introduced, providing customers with an affordable system for controlling, monitoring, and scheduling their lights remotely.



1999

Our **10 Club Service™** warranty and performance guarantee is introduced, **eliminating customers' maintenance costs on parts and labor for 10 years.**

1992



Mirtran™ technology is introduced at **Charlotte Motor Speedway**, overcoming the challenge of no poles being allowed on the track's infield, ushering in a new era of night racing at major NASCAR speedways.

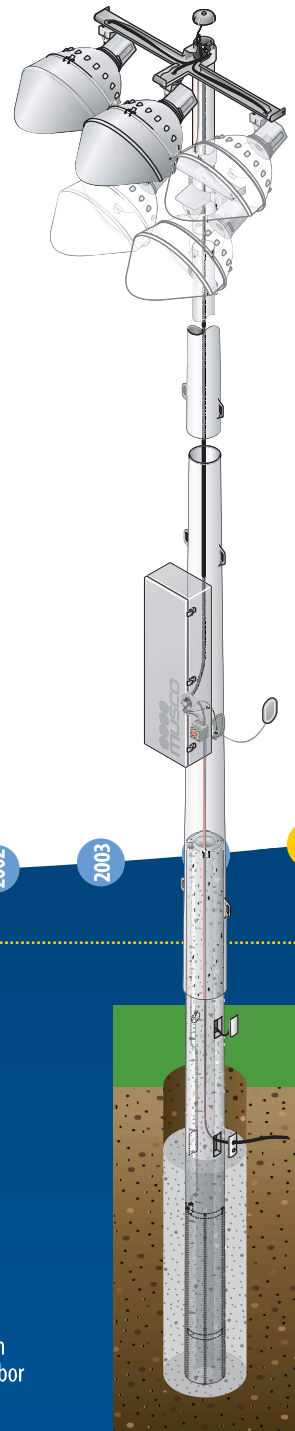


2005

Our unprecedented **Constant 25™** warranty and maintenance program is launched, covering all parts and labor for 25 years.

2005

Light-Structure Green™ system is introduced as an energy efficient solution, maintaining constant light levels and cutting spill and operating costs in half. For your budget, for the environment.



45+ Years of Innovations

2008



Our Team completes the first LED installation at the White House, lighting the external façade and cutting energy consumption by 87%.

2014



Our Team designs a **state-of-the-art LED system** for installation at the **East Span of the San Francisco-Oakland Bay Bridge**, improving driver safety and energy efficiency.

2006

2007

2008

2009

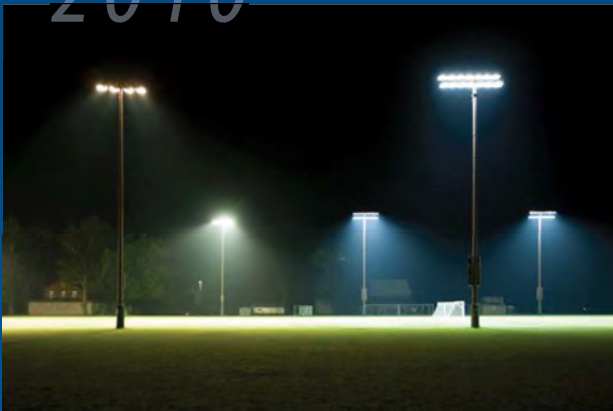
2010

2011

2012

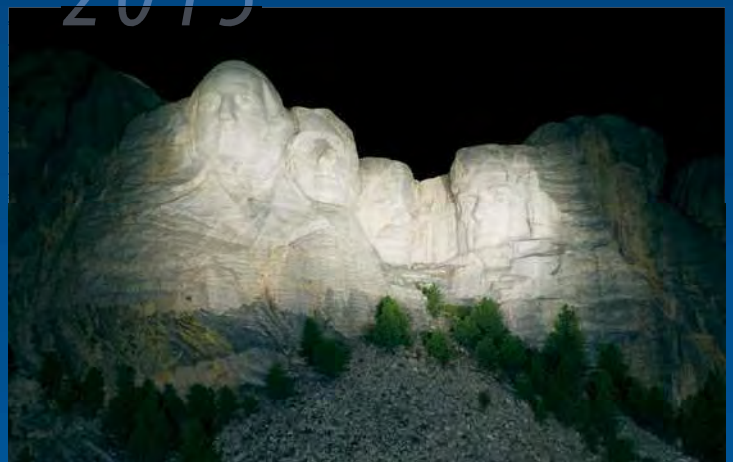
2013

2010



A test field is constructed at Oskaloosa's Lacey Sports Complex for continued testing on the **efficiency and cost effectiveness of LED** compared to HID light source.

2015



A **custom LED system** is installed at **Mount Rushmore**, precisely projecting light from 1,000 feet away onto the façade while protecting the surrounding area from spill and glare.



2019

Show-Light® special effects technology is re-introduced providing new, cutting-edge light shows and color-changing capabilities at venues of all sizes.

2021

The Communication-Structure System™ is launched, a monopole solution built using our proven 5 Easy Pieces™ approach that offers faster deployment, safer installation, and a simplified acquisition process.

2016

Total Light Control—TLC for LED™ technology is introduced, creating new possibilities for sports and large area lighting in terms of light control, spill light and glare reduction, energy efficiency, and reliability.



2019



We introduce the Mini-Pitch System™ in partnership with the U.S. Soccer Foundation, a modular sports solution complete with TLC for LED® lighting, fencing, goals, benches, lockable storage, and ADA-compliant access.

2020

MuscoVision® automated sports broadcasting is launched, allowing hometown fields to provide professional livestreams of its games to fans watching from anywhere.

2014

2015

2016

2017

2018

2019

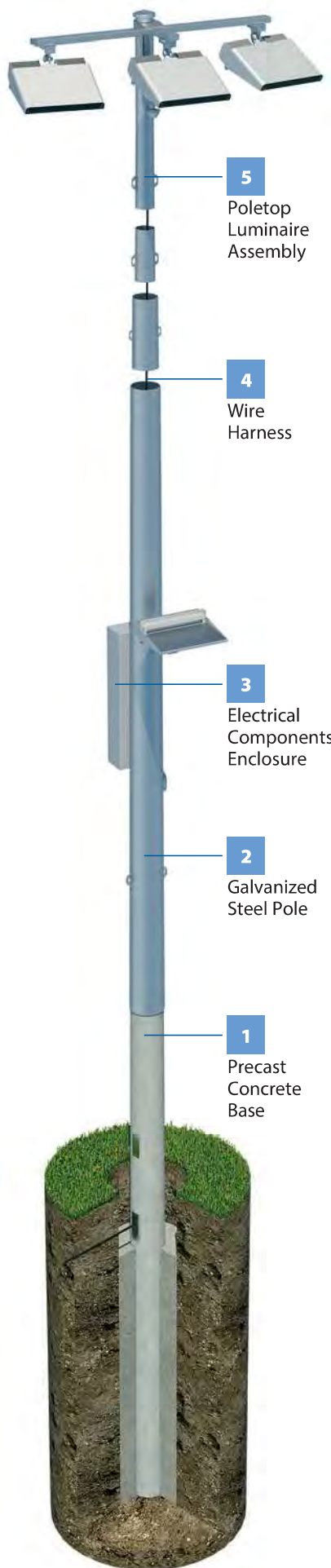
2020

2021

Musco's Systems

Our unique complete system approach—with lighting, electrical, and structural components designed to work together—delivers benefits that can't be matched by parts and pieces from various manufacturers.

- Durable, corrosion resistant, and able to withstand high winds.
- Streamlined installation and trouble-free operation.
- Patented spill and glare control to minimize impact on neighbors.
- Superior on-field visibility with reduced energy consumption.
- UL Listed and CSA Approved for a safer playing environment.



TLC for LED®

Total Light Control™ Technology

Patented visoring minimizes spill light and glare, while custom optics and factory aiming achieve more uniform light distribution.

New Applications—Light-Structure System™

Complete System from Foundation to Poletop

Engineered in **5 Easy Pieces™** with all components designed to work together.

Retrofit Applications—SportsCluster® Retrofit Lighting System

Designed to perform from your choice of structures, includes lighting, electrical components, and new crossarms.

Indoor Lighting Applications

High-quality lighting and minimized glare for everything from NBA and NHL arenas to high school and recreational gyms.



Mobile and Temporary Lighting

Superior quality and versatility for supplemental broadcast lighting and settings without permanent systems.



Mirtran™ Racetrack Lighting System

Designed specifically for racing, delivering a precise ribbon of light onto the track while eliminating glare for spectators and drivers.



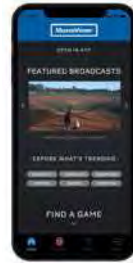
Custom Applications

Unmatched experience with special build systems for venues with distinctive architectural environments and settings.



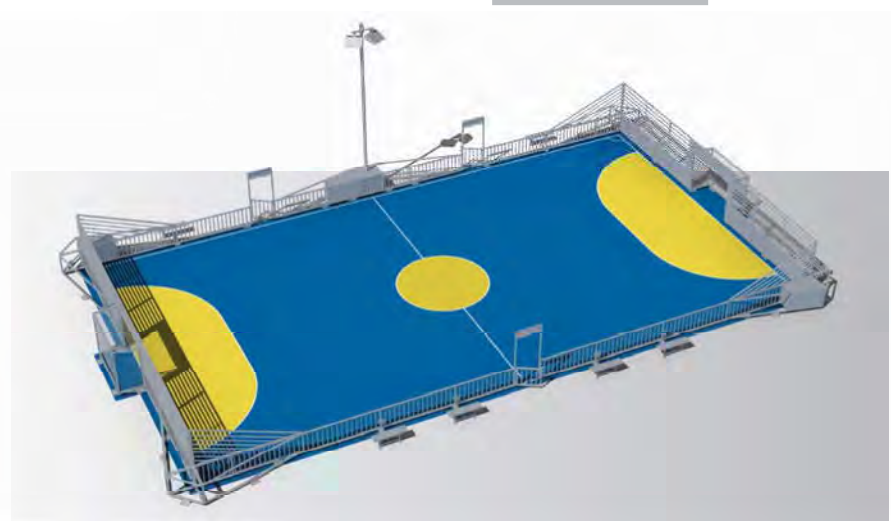
MuscoVision® Automated Sports Broadcasting

A complete solution for hometown facilities that includes cameras, structural, electrical, networking, and production components, as well as web- and app-based viewing portal.



Communication- Structure System™ Complete System from Foundation to Poletop

A monopole utilizing our 5 Easy Pieces™ structural system adapted to allow Internet Service Providers to deploy wireless faster with a smaller physical footprint and safer installation process.



Mini-Pitch System™ Modular Sports Solution

Transforms underused areas into a high-quality sports pitch, including lights, fencing, goals, benches, lockable storage, and ADA-compliant access.

From System Development Through Installation

Our services—from system development through installation—are guided by nearly a half-century's worth of experience listening to customers and understanding their needs every step of the way.

- Millions of hours devoted to system research, development, and testing.
- Decades of experience designing systems that meet each customer's unique needs.
- Production and project management expertise to help overcome any challenge.
- Unmatched installation capabilities that streamline the process regardless of setting.
- Timely support and service from regionally-based technicians.

We've been researching and developing sports and large area lighting applications that utilize LED since 2008.





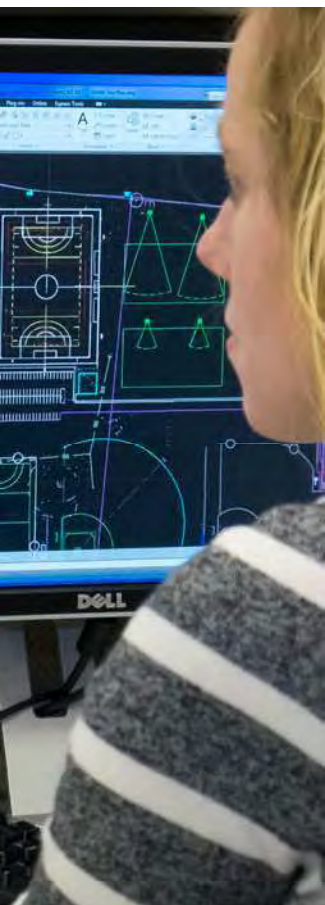
Our on-field light level testing verifies the precision of your factory-aimed system so you're getting the results you need.



We create custom-designed optics for placement around the LEDs at our state-of-the-art manufacturing facilities.



Every Musco lighting system undergoes the same rigorous quality assurance testing that includes nearly 150 quality checks.



We build computer models and photometric designs based on your facility's specific layout to provide optimal light quality and uniformity.

Our unique complete system approach streamlines and simplifies the installation process.



System Management and Operations

We're committed to providing support, software, networking, and controls that are trouble-free and help customers ensure the best possible experience to players and fans.

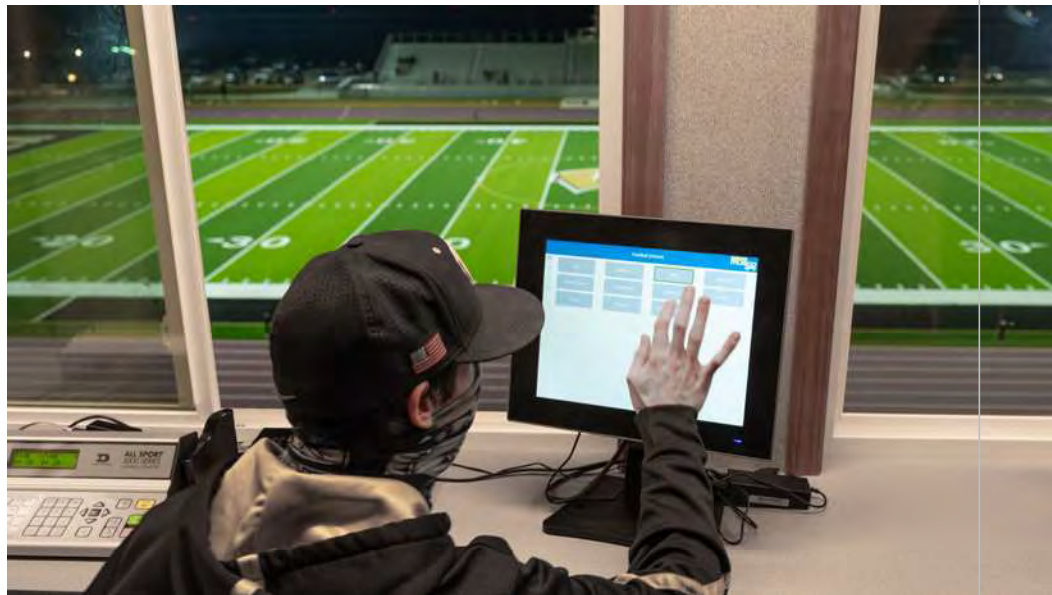
- Control-Link® Controls and Monitoring—proactive monitoring, scheduling, and call center support 24/7/365.
- Show-Light® Entertainment Packages—cutting-edge light shows with light-to-music synchronization and color-changing RGBW technology.
- MuscoVision® Automated Sports Broadcasting—professional livestream productions from hometown fields and facilities.
- Warranty and Performance Guarantee—hassle-free, covering every part and all labor well into the future.



With Control-Link you can control your lights instantly, from anywhere, with the touch of a button and have the support of a fully-staffed Control-Link Central™.



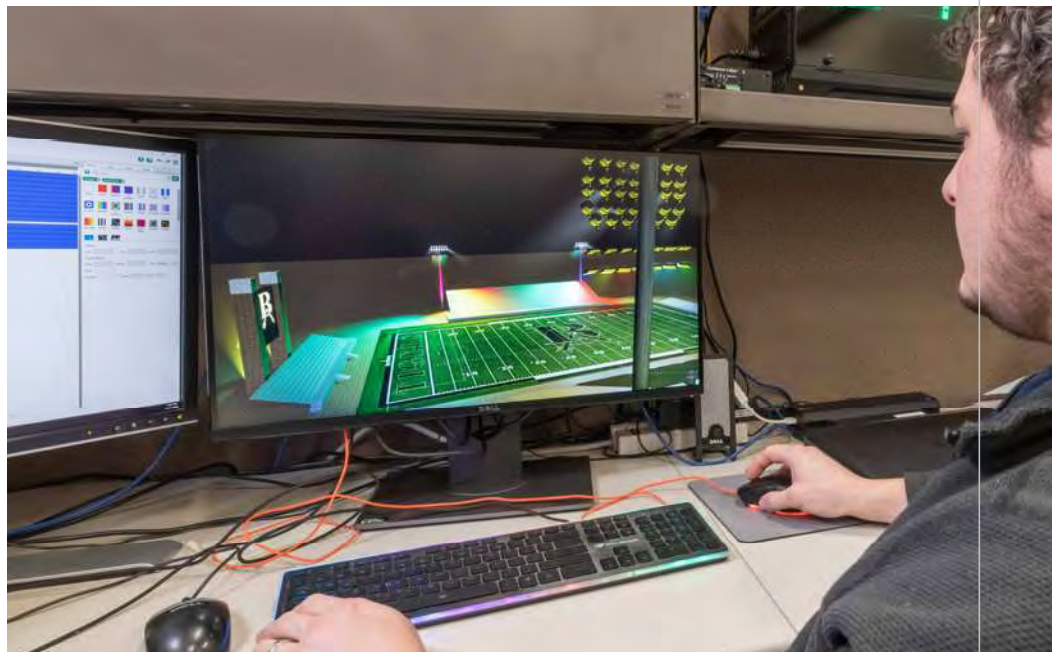
MuscoVision's easy-to-navigate portal allows games to be streamed and watched on any smart device.



Show-Light® is an ideal solution for taking your game night experience to the next level with exciting light shows to celebrate players, halftime shows, and team wins.



Our solutions are backed by long-term parts and labor warranties, along with regionally-based technicians and 170 support staff dedicated to the performance of your system.



Our design engineers create an array of custom light shows and color-changing scenes for customers to choose from with their Show-Light® entertainment package.

Many communities have utilized our Show-Light® color-changing technology to highlight unique structures, celebrate their history, and commemorate events.



Musco's Experience

Our system approach, superior technology, depth of experience, and supportive Team continue to set Musco apart in the industry.

- From hometown fields to county-wide complexes to world-class stadiums to international airports.
- Projects of all types in more than 100 countries around the globe.
- Creating new possibilities for lighting in the most challenging environments and settings.



Tottenham Hotspur Stadium

London, United Kingdom

Created a one-of-a-kind TLC for LED® system for one of the most innovative new stadiums in the world. Minimized glare for better visibility and integrated custom controls with other feature lighting for cutting-edge special effects and light shows.



Charlotte Douglas International Airport

Charlotte, North Carolina, USA

Designed a TLC for LED® system that reduces energy consumption and provides clear, uniform lighting—creating a safer overall work environment for staff.



Xi'an Olympic Sports Center

Xi'an, Shaanxi, China

Installed state-of-the-art TLC for LED® system at Xi'an Olympic Sports Center, which served as a brilliant global stage and main venue for China's 14th National Games.



Cedar Stone Park

Cedar Stone Community Park, Smyrna, Tennessee, USA

Helped the City of Smyrna, Tennessee, expand recreational opportunities by installing custom TLC for LED® systems at Cedar Stone Park, the first newly-built youth baseball fields the city had constructed in 20 years.



Island Country Club

Ansan, GG, Korea

Helped Island Country Club take advantage of the many benefits of night golf with a TLC for LED® system with BallTracker® technology that prevents spill and glare while creating exceptional visibility allowing players to track the entire flight of the golf ball.



Yas Marina F1™ Circuit

Abu Dhabi, UAE

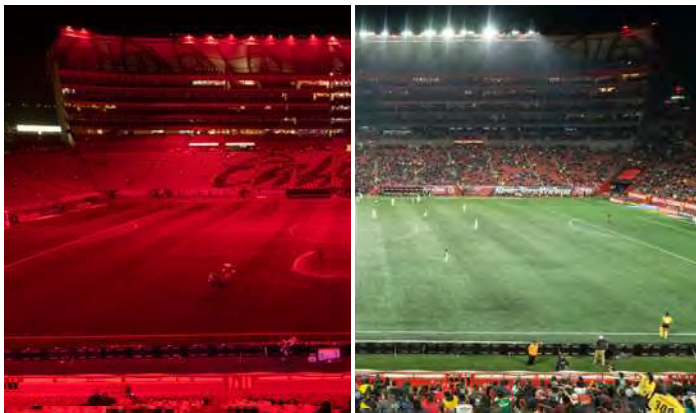
Overcame challenging rocky environment to install a highly-customized system with nearly 4,700 luminaires, and helped stage the first ever twilight run of a Formula 1™ event.



Rogers Place, Home of the Edmonton Oilers

Edmonton, Alberta, Canada

Designed a TLC for LED® system that adapted to the arena's unique, innovative architectural design and achieved the ultimate spectator experience for everything from professional hockey to major concerts.



Estadio Caliente LMX

Tijuana, Mexico

Included Show-Light® entertainment package as part of this custom TLC for LED® system, allowing Club Tijuana to wash the stadium Xolos red during pre- and post-game light shows.



TD Garden, Home of the Boston Bruins and Celtics

Boston, Massachusetts, USA

Worked around the arena's busy concert schedule to install a TLC for LED® system that would meet lighting standards for the NBA and NHL.

Partnerships

Our Team is proud to partner with leaders in sports and recreation to support quality facilities and programs for youth and community development.



American Academy for Park and Recreation Administration



Babe Ruth League®



European Football for Development Network



Heart of America Athletic Conference



International Dark-Sky Association®



Little League® Baseball and Softball



Major League Baseball™



MLB-MLBPA Youth Development Foundation



Minor League Baseball™



National Collegiate Athletic Association



National Interscholastic Athletic Administrators Association



National Junior College Athletic Association



National Recreation and Park Association



U.S. Soccer Foundation®



United Soccer League



We Make It Happen®

www.musco.com

e-mail: lighting@musco.com

Phone: 800.825.6030

Musco Control Solutions

24/7/365 monitoring and support

Control-Link® control and monitoring system

Show-Light™ control package



Making Facility Management Easy Since 1999

The most innovative solutions are developed in response to real-world problems. In 1999 Musco introduced Control-Link® as a first-of-its-kind light management system to help customers cut energy costs and save staff time.

Since that first introduction, Musco has installed thousands of control systems from fully automated unmanned sites to complex automation solutions for many facilities around the world.

Anytime, Anywhere ...Control-Link management tools allow you to access and manage your lights instantly, from anywhere via a cellular internet connection.

A Real, Live Voice ...Control-Link Central™ team will monitor, schedule, and help manage your lights 24/7/365, and a real live voice will be on the other end of the phone when you call.

Factory Wired, Programmed, and Tested ...our unique system approach streamlines installation and assures that your controls, from basic on/off to color changing architectural displays, will be ready to work on day one.



5.8 million

schedules managed
and monitored by our
Control-Link Central™
Team last year



360,000

calls fielded to assist
customers last year

How can controls enhance your facility?

Control-Link

- ☐ **Remote on/off scheduling**
for easy control from anywhere
- ☐ **Dimming** (3 levels)
save energy by matching light level to activity or schedule
- ☐ **System monitoring**
alerts Musco of any issues

Custom

- ☐ **Programmed lighting scenes**
use only the lights you need when you need them
- ☐ **Push button dimming**
instant dimming control on-site

Color

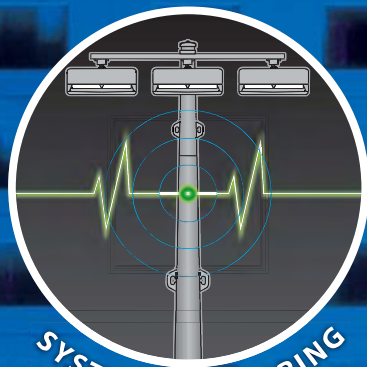
- ☐ **Color accent option**
highlight structures or wash areas with color



REMOTE ON/OFF SCHEDULING



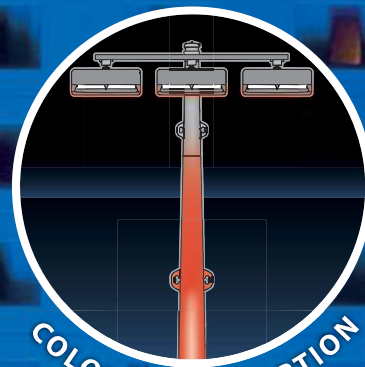
DIMMING



SYSTEM MONITORING



CONVENIENT CONTROL OPTIONS



COLOR ACCENT OPTION

Flexible Control, Solid Management

Your Control-Link® control and monitoring system offers efficient, cost-effective tools that are both cutting-edge and simple to use.

Musco will have your back 24/7/365 to ensure your lights are only on when needed, keeping neighbors happy and reducing environmental impact. Because more than anything, it's about your peace of mind.

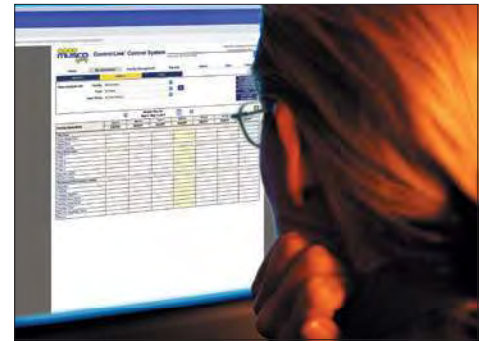
The Control-Link system provides comprehensive scheduling assistance, system monitoring, secure password-protected access, automated equipment controls, and valuable usage data.

Flexible and Reliable . . . remote scheduling and controls mean no more staffing headaches, tracking multiple sets of keys, or late-night hours being on-site to turn your lights off.

24/7/365 Monitoring . . . our Team will monitor your system's performance at the luminaire level, so if an issue arises we'll likely know about it before you do.

Better for Your Budget . . . automated operation of your lights, as well as three levels of dimming that come standard, will reduce energy consumption and cut staffing costs.

Data You Can Use . . . we'll help create usage reports and analytics for your facilities from the extensive data we store, which will help improve operational efficiencies and future planning.



Enter schedules up to 10 years in advance.

Control-Link dashboard displays the operation and service status of your facility.

Musco Control-Link Usage Report (Auto Only)				
By Facility, Field				
Usage Type of Light Usage				
November, 2020				
Owner: Sample Ports Authority				
Summary by Facility				
Facility	Total Auto Hours Usage		Total Hours Saved from Early Offs	
Sample Regional Port	453:55		0:00	
Sample Ports Authority	453:55		0:00	
Summary by Facility, Field				
Facility	Field	Total Auto Hours Usage		Total Hours Saved from Early Offs
Sample Regional Port	Dimming - Low Level	453:55		0:00
Sample Ports Authority		453:55		0:00
Detail For Facility: Sample Regional Port				
Dimming - Low Level				
Start	End	Scheduler		
Sat 10/31/2020 6:16p	Sun 11/01/2020 7:31a	John Doe		
Sun 11/01/2020 5:15p	Mon 11/02/2020 7:32a	John Doe		
Mon 11/02/2020 5:14p	Tue 11/03/2020 7:33a	John Doe		

Control-Link Central database stores usage data by facility and user group.

"The Georgia Ports Authority values our partnership with Musco Lighting and rely on their expertise in providing reliable and cost-effective solutions to our lighting needs."

— Christopher Novack PE
Senior Director of Engineering & Facilities Maintenance
Georgia Ports Authority



Control-Link® Control and Monitoring System

- ✓ **Remote on/off scheduling**
for easy control from anywhere
- ✓ **Dimming** (3 levels)
save energy by matching light level to activity or schedule
- ✓ **System monitoring**
alerts Musco of any issues

Includes Musco's management tools — user securities, usage tracking, facility status dashboard, and reports

Includes Control-Link Central™ support team — available 24/7/365

Advanced Controls and Custom Solutions

Our advanced control options provide a cost-effective way for you to reduce energy usage at your facility. These solutions allow you to select the amount of light you need from each luminaire based on activity.

Musco's technology utilizes the advanced control capabilities of LED, is easy to use, and integrates with other systems at your facility.

Set the Scene . . . our engineers will work with you to provide preprogrammed lighting scenes that fit the unique needs of your facility.

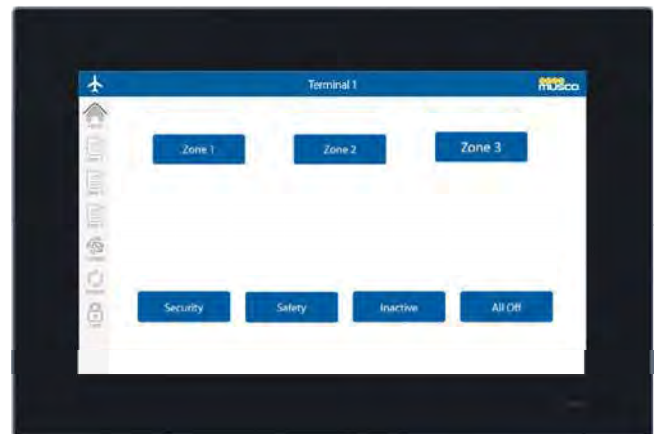
Flexible Control . . . you can schedule operation, manually select options, or automate control through integration with sensors or existing systems.

As Easy as a Touchscreen . . . you'll be provided an industrial grade smart device with touchscreen to turn zones on and off, select lighting scenes, and set dimming levels. We will help you locate touchscreen devices as necessary and control screens are accessible through network connected computers.

Reliable and Versatile . . . your settings will be stored on site and backed up at the Control-Link Central™ data center.



South Terminal Vancouver International Airport
Richmond, BC, Canada



Touchscreens provide on-site control. You can also access control screens through network connected computers.

"We saw the opportunity to marry up this technology with our existing gate scheduling software. We are able to reduce light levels when the gate is not in use and bring them up to full power when the gate is active."

– Bryce Baxter, Project Engineer
Airport Terminal Projects - Electrical
Vancouver Airport Authority



Show-Light™ Control Package

- ✓ **Remote on/off scheduling**
for easy control from anywhere
- ✓ **Dimming (3 levels)**
save energy by matching light level to activity or schedule
- ✓ **System monitoring**
alerts Musco of any issues
- ✓ **Programmed lighting scenes**
use only the lights you need when you need them
- ✓ **Push button dimming**
instant dimming control on-site

Includes industrial grade touchscreen tablet for easy control

Includes Control-Link Central™ support team — available 24/7/365



See how YVR utilized this technology to reduce costs and their carbon footprint.

Take Your Architectural Lighting to the Next Level

Make your facility or structure stand out with one of our advanced control packages and color changing luminaires. Our technology, used by many customers around the world, has the flexibility to provide everything from static color wash to complex light shows synchronized with music.

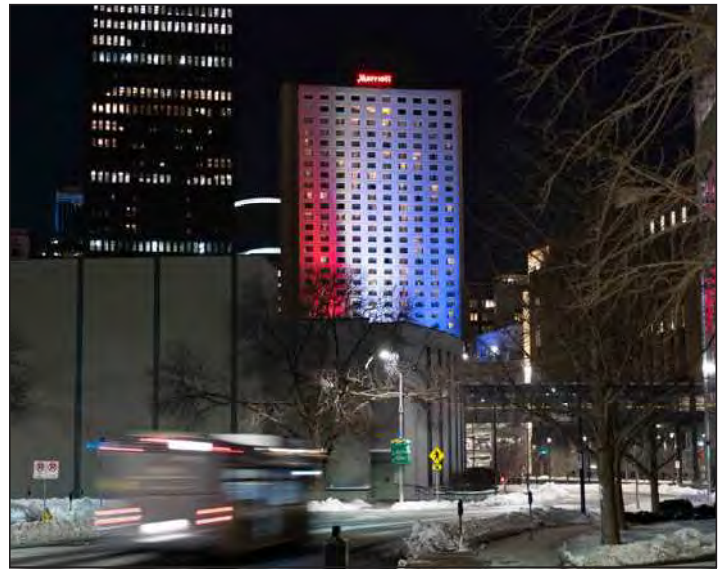
Light and Sound . . . Musco's design engineers align lighting cues with audio files played through an on-site server to create light shows synchronized to your music for an amazing visual and audio experience.

Easy to Use . . . start and stop shows, select colors, or create custom colors with an easy-to-use touchscreen device. We will help you locate touchscreen devices as necessary and control screens are accessible through network connected computers.

Streamlined Solution . . . if you already have a DMX system, our equipment will act as a fully integrated extension of that system.

"As impressive as the new LED system is both in its performance and its efficiency, I was more impressed with Musco's customer service and attention to detail—especially for a small community organization like ours. To keep our costs down, the Musco team overcame several logistical challenges to make the new, color-changing LEDs work within the same footprint as the 20-year-old metal halide lamps they replaced."

— Bradley J. Grefe
Board President of Main
Street Ottumwa



Des Moines Marriott Downtown
Red, white, and blue for the 2020 Iowa Caucuses



Norbert F. Beckey Bridge
Muscatine, Iowa, USA



6 of the 24 color-changing luminaires lighting the Jefferson Street Viaduct.

Show-Light™ with Color Luminaires

- ✓ **Remote on/off scheduling**
for easy control from anywhere
- ✓ **Dimming** (3 levels)
save energy by matching light level to activity or schedule
- ✓ **System monitoring**
alerts Musco of any issues
- ✓ **Programmed lighting scenes**
use only the lights you need when you need them
- ✓ **Push button dimming**
instant dimming control on-site
- ✓ **Color accent option**
highlight structures or wash areas with color

Includes Control-Link Central™ support team — available 24/7/365



See Jefferson Street Viaduct light shows in action.



Jefferson Street Viaduct
Ottumwa, Iowa, USA

Innovative, Streamlined Communications Managed by Our Team 24/7/365

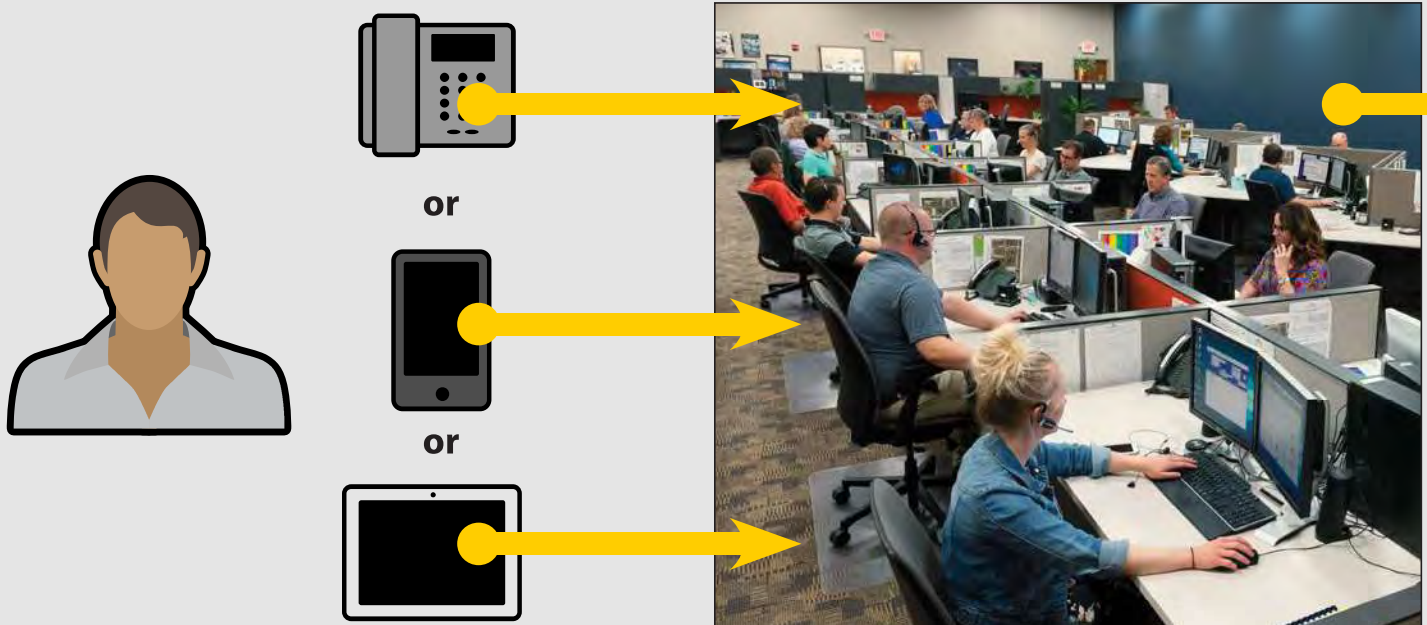
Each component of the Control-Link® system is designed, factory-built and tested for seamless operation and integration with your lighting system.

Proven Technology, Innovated . . . Musco's advanced powerline communication technology provides robust control and monitoring for the system.

Reliable Installation and Operation . . . no added communication cable installation costs. Lights may be scheduled remotely or operated manually on site with a key switch.

Safety Features . . . electricity is only on when the system is in use, with built-in fusing and surge protection.

Monitoring and Support . . . our Control-Link Central™ Team monitors your system 24/7/365 to ensure schedules execute and to provide assistance.



1) Enter schedules at your convenience

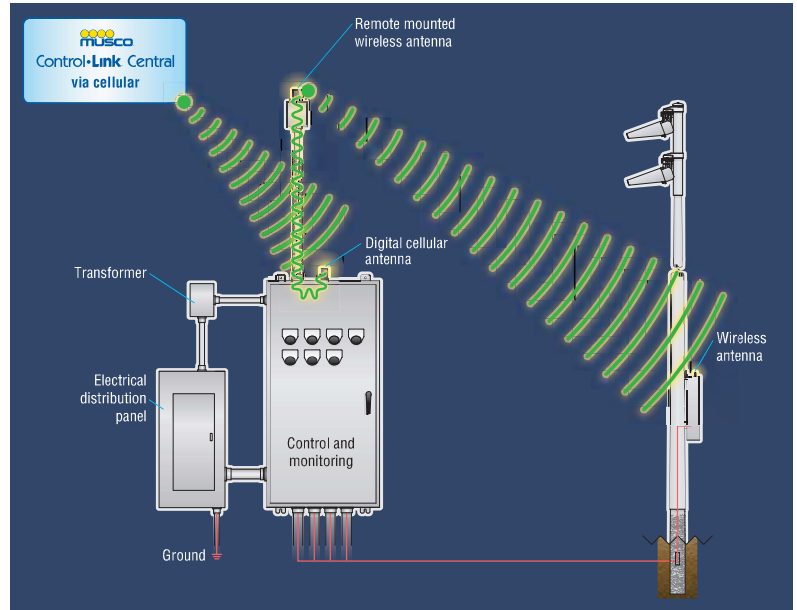
Based on security levels, users schedule facility lighting and other equipment such as door locks, remote equipment, and security lights from any location via website, smartphone app, or phone call.

2) Control-Link Central™ data center routes schedules, with 24/7/365 team member monitoring support

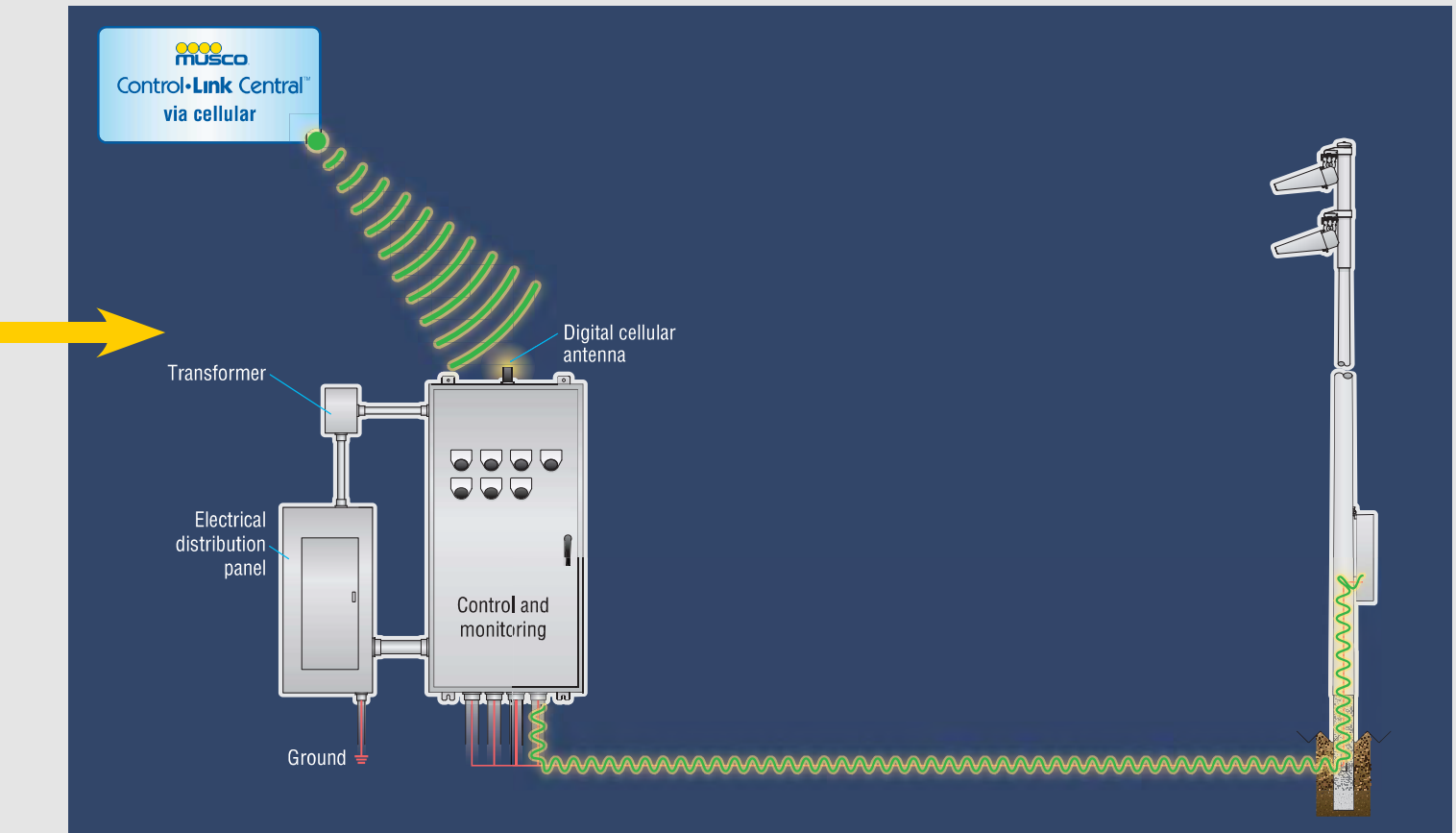
Schedules are received, routed to your site, and backed up at the Control-Link Central data center, where our staff provides scheduling support and verification, and monitors your lighting system operation.

Wireless Communication

An optional wireless mesh network is available depending on your project requirements



Powerline Communication System™ Uses supply wiring for control commands and monitoring feedback



3) Schedules are stored on-site

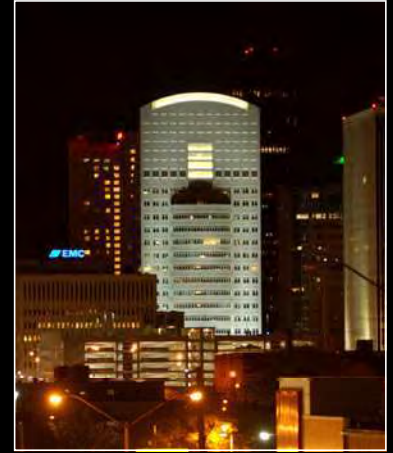
Schedules are transmitted to your facility via cellular technology and stored in the on-site equipment controller.

4) Equipment is controlled automatically with on-site show controls

Lights are operated per your schedules via Musco's Powerline Communication System technology. You can control optional Show-Light™ features with the on-site tablet.

5) Continuous monitoring

Entire system is monitored during operation and the Control-Link Central team is notified of any issues.



Unequaled performance . . .
for your budget, for the environment.



We Make It Happen®

www.musco.com
 e-mail: lighting@musco.com

©2020 Musco Sports Lighting LLC · M-4276-en04-1
 All trademarks are property of Musco Corporation, U.S. and foreign patents issued and pending.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/24/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, LLC 4201 Westown Parkway, Suite 120 West Des Moines IA 50266	CONTACT NAME: Francisco Honzura PHONE (A/C, No, Ext): 515-309-6220 E-MAIL ADDRESS: Francisco_Honzura@ajg.com	FAX (A/C, No): 515-457-8849
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Sentry Insurance Company		24988
INSURER B: Travelers Casualty Company of CT		36170
INSURER C: Indian Harbor Insurance Company		36940
INSURER D:		
INSURER E:		
INSURER F:		

COVERAGES**CERTIFICATE NUMBER:** 1326143256**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:	Y		9016877004	7/1/2024	7/1/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			9016877003	7/1/2024	7/1/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			CUP9X03061124NF	7/1/2024	7/1/2025	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	9016877001 9016877002	7/1/2024 7/1/2024	7/1/2025 7/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Architects & Engineers Professional Liability & Pollution Liability			CEO742113904	7/1/2024	7/1/2025	Each Claim Aggregate Retention 5,000,000 5,000,000 250,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Cooperative Agreement - #COG-2166

Equalis Group, LLC, Cooperative Council of Governments, Inc and their respective officers, directors, employees and agents are shown as additional insured solely with respect to General Liability policy as required by written contract. 30 Days' Notice of Cancellation applies in favor of Certificate Holder as required by written contract.

CERTIFICATE HOLDER**CANCELLATION**

Equalis Group, LLC
5540 Granite Pkwy
Suite 200
Plano TX 75024

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

As required by written contract

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. Section II - Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or
- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: As required by written contract
Location And Description of Completed Operations: As required by written contract
Additional Premium:

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Section II - Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED, PRIMARY & NONCONTRIBUTORY, WAIVER OF SUBROGATION

This endorsement modifies the coverage provided under the following Coverage Form(s):

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Coverage enhancements are listed below. For details of each coverage, please read the corresponding policy provisions in the body of this endorsement.

1. Additional Insureds - Automatic Status for 12 Additional Insured Types

- A.** Automatic Status When Required In Written Contract Or Agreement (for Acts or Omissions In The Performance of Your Operations)
- B.** Lessor of Leased Equipment
- C.** Owners or Other Interests From Whom Land Has Been Leased
- D.** Manager or Lessor of Premise
- E.** Mortgagee, Assignee, or Receiver
- F.** Controlling Interest
- G.** Co-owner Of Insured Premises
- H.** Executors, Administrators, Trustees Or Beneficiaries
- I.** State Or Governmental Agency Or Subdivision Or Political Subdivision - Permits Or Authorizations Relating To Premises
- J.** Any Person Or Organization You Are Performing Work For
- K.** Vendors
- L.** Grantor of Franchise

2. Primary and Noncontributory - Other Insurance Condition

3. Waiver Of Transfer Of Rights Of Recovery Against Others To Us (Waiver Of Subrogation) - Automatic

With respect to the coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

1. Additional Insureds - Automatic Status for 12 Additional Insured Types

Section II - Who Is An Insured is amended to include the following as additional insureds when you have agreed to add that person or organization as an Additional Insured on your policy in a written contract or written agreement with that person or organization, or because of a permit issued by a state or political subdivision; provided the injury or damage occurs subsequent to the execution of the contract or agreement or issuance of the permit and while the contract, agreement or permit remains in effect.

A. Automatic Status When Required In Written Contract Or Agreement (for Acts or Omissions In The Performance of Your Operations)

- 1)** A person or organization with respect to liability for:
 - a.** "Bodily injury" or "property damage" not included in the "products-completed operations hazard"; or
 - b.** "Personal and advertising injury"; caused by, in whole or in part, your acts or omissions or the acts or omissions of those acting on your behalf in the performance of your operations.

- 2) With respect to insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" due to rendering of or failure to render any professional service. This includes but is not limited to:

- a. Legal, accounting or advertising services;
- b. Preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings or specifications;
- c. Inspection, supervision, quality control, architectural or engineering activities done by or for you on a project on which you serve as construction manager;
- d. Engineering services, including related supervisory or inspection services;
- e. Medical, surgical, dental, X-ray or nursing services treatment, advice or instruction;
- f. Any health or therapeutic service treatment, advice or instruction;
- g. Any service, treatment, advice or instruction for the purpose of appearance or skin enhancement, hair removal or replacement, or personal grooming or therapy;
- h. Any service, treatment, advice or instruction relating to physical fitness, including service, treatment, advice or instruction in connection with diet, cardiovascular fitness, bodybuilding or physical training programs;
- i. Optometry or optical or hearing aid services including the prescribing, preparation, fitting, demonstration or distribution of ophthalmic lenses and similar products or hearing aid devices;
- j. Body piercing services;
- k. Services in the practice of pharmacy;
- l. Law enforcement or firefighting services; and
- m. Handling, embalming, disposal, burial, cremation or disinterment of dead bodies.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional service.

B. Lessor of Leased Equipment

- 1) Any person(s) or organization(s) with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person(s) or organization(s).
- 2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

C. Owners or Other Interests From Whom Land Has Been Leased

- 1) Any person(s) or organization(s) with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by you or those acting on your behalf in connection with the ownership, maintenance or use of that part of the land leased to you by the additional insured person(s) or organization(s).
- 2) With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

 - a. Any "occurrence" which takes place after you cease to lease that land;
 - b. Structural alterations, new construction or demolition operations performed by or on behalf of the additional insured person(s) or organization(s).

D. Manager or Lessor of Premise

Any person(s) or organization(s) with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by you or those acting on your behalf in connection with the ownership, maintenance or use of that part of the premises leased to you by the additional insured person(s) or organization(s), subject to the following additional exclusions:

This insurance does not apply to:

- 1) Any "occurrence" which takes place after you cease to be a tenant in that premises.
- 2) Structural alterations, new construction or demolition operations performed by or on behalf of the person(s) or organization(s) shown in the Schedule.

E. Mortgagee, Assignee, or Receiver

Any person(s) or organization(s) with respect to their liability as mortgagee, assignee or receiver and arising out of the ownership, maintenance or use of a premises by you.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or for such additional insured person(s) or organization(s).

F. Controlling Interest

- 1) Any person(s) or organization(s) with respect to their liability arising out of:
 - a. Their financial control of you; or
 - b. Premises they own, maintain or control while you lease or occupy these premises.
- 2) This insurance does not apply to structural alterations, new construction and demolition operations performed by or for that person or organization.

G. Co-owner Of Insured Premises

Any person(s) or organization(s) with respect to their liability as co-owner of a premises coowned by you and covered under this insurance.

H. Executors, Administrators, Trustees Or Beneficiaries

Any executor, administrator, trustee or beneficiary of your estate or living trust while acting within the scope of their duties as such.

I. State Or Governmental Agency Or Subdivision Or Political Subdivision - Permits Or Authorizations Relating To Premises

Any state or governmental agency or subdivision or political subdivision, subject to the following additional provision:

This insurance applies only with respect to the following hazards for which the state or governmental agency or subdivision or political subdivision has issued a permit or authorization in connection with premises you own, rent or control and to which this insurance applies:

- 1) The existence, maintenance, repair, construction, erection or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners or decorations and similar exposures; or
- 2) The construction, erection or removal of elevators; or
- 3) The ownership, maintenance or use of any elevators covered by this insurance.

J. Any Person Or Organization You Are Performing Work For

Any person(s) or organization(s) with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- 1) In the performance of your ongoing operations; or
- 2) In connection with your premises owned by or rented to you.

K. Vendors

- 1) Any person(s) or organization(s) (referred to throughout this endorsement as vendor), but only with respect to liability for "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business.

However:

- a. The insurance afforded to such vendor only applies to the extent permitted by law; and

- b. If coverage provided to the vendor is required by a contract or agreement, the insurance afforded to such vendor will not be broader than that which you are required by the contract or agreement to provide for such vendor.
- 2) With respect to the insurance afforded to these vendors, the following additional exclusions apply:
- a. The insurance afforded the vendor does not apply to:
 - 1) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
 - 2) Any express warranty unauthorized by you;
 - 3) Any physical or chemical change in the product made intentionally by the vendor;
 - 4) Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;
 - 5) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;
 - 6) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;
 - 7) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or
 - 8) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:
 - (1) The exceptions contained in Subparagraphs d. or f.; or
 - (2) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.
 - b. This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

L. Grantor of Franchise

Any person(s) or organization(s) with respect to their liability as grantor of a franchise to you.

However:

- 1. The insurance afforded to such additional insureds only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

With respect to the insurance afforded to these additional insureds, the following is added to **Section III - Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement; or
- 2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

If there is any difference in coverage afforded to an additional insured in this endorsement and

that provided under another additional insured endorsement attached to this policy, the broader coverage will apply to that additional insured.

2. Primary And Noncontributory Insurance

The following is added to the Other Insurance Condition and supersedes any provision to the contrary:

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1)** The additional insured is a Named Insured under such other insurance; and
- (2)** You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from

any other insurance available to the additional insured.

3. Waiver Of Transfer Of Rights Of Recovery Against Others To Us (Waiver Of Subrogation) - Automatic

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV - Conditions**:

We waive any right of recovery against any person or organization, because of any payment we make under this Coverage Part, to whom the insured has waived its right of recovery in a written contract or agreement. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person or organization prior to loss.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION - CERTIFICATE HOLDERS

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS COVERAGE FORM
COMMERCIAL AUTOMOBILE COVERAGE PARTS
COMMERCIAL PROPERTY COVERAGE PART
CRIME AND FIDELITY COVERAGE PART
COMMERCIAL INLAND MARINE COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PARTS
COMMERCIAL EXCESS/UMBRELLA LIABILITY COVERAGE FORM
EMPLOYMENT RELATED PRACTICES LIABILITY
POLLUTION LIABILITY COVERAGE
ERRORS AND OMISSIONS COVERAGE FORM

In the event we cancel this policy, we shall endeavor to also mail to the person(s) or organization(s) listed in the Schedule for this endorsement advance written notice of cancellation.

This notification of cancellation of the policy is intended as a courtesy only. Our failure to provide such notification to the person(s) or organization(s) shown in the Schedule will not extend any policy cancellation date nor impact or negate any cancellation of the policy. This endorsement does not entitle the person(s) or organization(s) listed or described in the Schedule below to any benefit, rights or protection under this policy.

Failure by us to provide this notice of cancellation to the person(s) or organization(s) listed or described in the Schedule below will not impose liability of any kind upon us.

Any of these provisions that conflict with a law that controls the notice of cancellation of the insurance in this endorsement is changed by this statement to comply with the law.

Schedule

Person(s) or Organization(s) including mailing address:

Per the listing of certificate holders provided by the Broker upon our request. 30 day notice of cancellation applies.

All other terms and conditions of this policy remain unchanged.

