

Date: September 12, 2023  
 To: City of Margate

Project: Oriole Park  
 Margate, FL

**Clay County RFP 18/19-2**

**Quotation Price – Materials Delivered to Job Site & Installation**

**Baseball Field, MuscoVision, Batting Cages, Staging Area, & Playground Lighting**

.....**\$416,750.00**

*All purchase orders should note the following:*

*Clay County RFP 18/19-2*

*Sales tax, permitting fees, and bonding are not included.*

*Pricing furnished is effective for 90 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Baseball Field – 350’ Radius– 50 / 30 Footcandles	1	\$172,500.00	\$172,500.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pole locations – Batting Cage, Staging Area, & Playground	18	\$3,500.00	\$63,000.00
(Section III A) Installation of Pole – 40’	1	\$4,150.00	\$4,150.00
(Section III G) Installation of Fixtures on Existing Poles	12	\$6,000.00	\$72,000.00
(Section III J) Site Inspection	1	\$2,500.00	\$2,500.00
(Section IV A) Option B – 400 Amp Service	1	\$21,300.00	\$21,300.00
(Section IV B 3 c) Cooper Conductors	3,500’	\$11.50	\$40,250.00
(Section IV C a) Installation of Contactor Cabinet	1	\$5,750.00	\$8,650.00
(Section IV C b) Installation of Contactor Cabinet	1	\$8,650.00	\$8,650.00
(Section IV D 1) Lightning Protection	12	\$1,200.00	\$14,400.00
(Section IV E 1) Pole Grounding	12	\$900.00	\$10,800.00
(Section V A 2) Electrical Engineering	1	\$9,950.00	\$9,950.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$17,400.00</b>
<b>Total</b>			<b>\$416,750.00</b>



### ***SportsCluster™ System with Total Light Control – TLC for LED® technology***

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#### **Guaranteed Lighting Performance**

- Guaranteed light levels and uniformity
- BallTracker™ technology – targeted light, optimizing visibility of the ball in play with no glare in the players typical line-of-sight

#### **System Description**

- Factory wired poletop luminaire assemblies
- Factory aimed and assembled luminaires, including BallTracker™ luminaires
- Factory wired and tested remote electrical component enclosures
- Pole length, factory assembled wire harnesses
- Mounting hardware for poletop luminaire assemblies and electrical components enclosures
- Disconnects
- UL Listed assemblies

#### **Environmental Light Control**

- Spill light minimized
- Off-site glare light minimized

#### **Control Systems and Services**

- Control-Link® control and monitoring system to provide remote on/off and dimming (high/medium/low) control and performance monitoring with 24/7 customer support

#### **Operation and Warranty Services**

- Reduction of energy and maintenance costs by 40% to 85% over typical 1500W metal halide equipment
- Product assurance and warranty program that covers materials and onsite labor, eliminating 100% of your maintenance costs for 10 years
- Support from Musco's Lighting Services Team – over 170 Team members dedicated to operating and maintaining your lighting system – plus a network of 1800+ contractors

## **SPORTS LIGHTING**

### ***Installation Services Provided***

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#### **Customer Responsibilities:**

1. Complete access to the site for construction using standard 2-wheel drive rubber tire equipment.
2. Locate existing underground utilities not covered by your local utilities. (i.e. water lines, electrical lines, irrigation systems, and sprinkler heads). Musco or Subcontractor will not be responsible for repairs to unmarked utilities.
3. Locate and mark field reference points per Musco supplied layout. (i.e. home plate, center of FB field).
4. Ensure usability of existing underground wiring.
5. Pay any necessary power company fees and requirements.
6. Pay all permitting fees.
7. Provide any existing as-built documents or drawings.

### **Musco Responsibilities:**

1. Provide required fixtures, electrical enclosures, mounts, hardware, wire harnesses, and control cabinets.
2. Provide fixture layout and aiming diagram.
3. Provide Project Management as required.
4. Assist our installing subcontractor and ensure our responsibilities are satisfied.

### **Musco Subcontractor Responsibilities**

#### **General:**

1. Obtain any required permitting.
2. Contact local utilities for locating public utilities and confirm they have been clearly marked.
3. Contact the facility owner/manager to confirm the existing private underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any such damage during construction.
4. Provide labor, equipment, and materials to offload equipment at jobsite per scheduled delivery.
5. Provide storage containers for material, (including electrical components enclosures), as needed.
6. Provide necessary waste disposal and daily cleanup.
7. Provide security to protect Musco products from theft, vandalism, or damage during the installation.
8. Keep all heavy equipment off playing fields when possible. Repair damage to grounds which exceeds that which would be expected. Indentations caused by heavy equipment traveling over dry ground would be an example of expected damage. Ruts and sod damage caused by equipment traveling over wet grounds would be an example of damage requiring repair.
9. Provide startup and aiming as required to provide complete and operating sports lighting system.
10. Installation to commence upon delivery and proceed without interruption until complete. Musco to be immediately notified of any breaks in schedule or delays.

#### **Demolition:**

1. Remove and dispose of the existing fixtures, and electrical enclosures. This will include the recycling of lamps, aluminum reflectors, ballast, and steel, as necessary.
2. Leave existing ground wires and power feed in place for connection to new lighting equipment.

#### **Retrofit Musco Equipment to Existing Poles:**

1. Provide labor, materials, and equipment to assemble and install Musco TLC for LED® equipment on existing poles and terminate grounding and power feed. Power feed may need to be reworked to adapt to the new Musco equipment.
2. Ensure grounding components meet minimum standards required by NEC and NFPA780.
3. Provide new ground rod and pole bonding conductor per NFPA Annex A.1.6.
4. Down conductor shall be converted to copper wire for any underground runs and bonded to ground rod(s).
5. Ensure all Musco components are bonded to both equipment and lightning grounds. No upward sweeps allowed for lightning down conductor or bonding jumper(s). See installation instructions for further information.
6. Test ground resistance with 3-point megger and confirm 25 ohms or less for each pole. Install additional ground rods or create grounding grid until resistance of 25 ohms or less is achieved.

### **Electrical:**

1. Provide materials and equipment to reuse existing + provide new electrical service panels as required.
2. Provide materials and equipment to reuse existing + provide new electrical wiring as permitted.
3. Provide as built drawings on completion of installation, **(if required)**.

### **Control System:**

1. Provide labor, equipment, and materials to install new Musco control and monitoring cabinet(s) and terminate all necessary wiring.
2. Provide a dedicated 120 V 20 A controls circuit or a step-down transformer for 120 V control circuit if not available.
3. Check all zones to make sure they work in both auto and manual mode.
4. Commission Control-Link® by contacting Control-Link Central™ at 877-347-3319.

## **MuscoVision**

### ***Installation Services Provided***

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#### **Customer Responsibilities:**

1. Complete access to the site for construction using standard 2-wheel drive rubber tire equipment.
2. Locate existing underground utilities not covered by your local utilities. (i.e. water lines, electrical lines, irrigation systems, and sprinkler heads). Musco or Subcontractor will not be responsible for repairs to unmarked utilities.
3. Locate and mark field reference points per Musco supplied layout. (i.e. home plate, center of FB field)
4. Pay for extra costs associated with foundation excavation in non-standard soils (rock, caliche, high water table, collapsing holes, etc.) or soils not defined in geo-technical report. Standard soils are defined as soils that can be excavated using standard earth auguring equipment.
5. Pay any necessary power company fees and requirements.
6. Provide internet service of (45) Mbps download and (45) Mbps upload.
7. Pay all permitting fees.
8. Provide area on site for dumpsters.

#### **Musco Responsibilities:**

1. Provide system design for wired and wireless video network.
2. Supply required cameras, outfield poles, electrical enclosures, pole harnesses, backstop camera brackets/hardware and network control cabinets.
3. Provide installation instructions.
4. Provide configuration and commissioning of video system and associated network.
5. Provide Project Management as required.
6. Provide training for Control-Link scheduling.
7. Assist installing subcontractor and ensure Musco's responsibilities are satisfied.

### **Musco Subcontractor Responsibilities:**

#### **General:**

1. Obtain any required permitting.
2. Contact your local utility for locating underground utilities and then confirm they have been clearly marked.
3. Contact the facility owner/manager to confirm the existing private underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any such damage during construction.
4. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
5. Provide storage containers for material, including electrical component enclosures, as needed.
6. Provide necessary waste disposal and daily clean up.
7. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
8. Keep all heavy equipment off playing fields when possible. Repair damage to grounds which exceeds that which would be expected. Indentations caused by heavy equipment traveling over dry ground would be an example of expected damage. Ruts and sod damage caused by equipment traveling over wet grounds would be an example of damage requiring repair.
9. Provide startup and aiming as required to provide complete and operating automated sports broadcasting system.
10. Immediately notify Musco of any breaks in schedule or delays. Installation to commence upon delivery and proceed without interruption until complete.

#### **Poles, Brackets and Cameras:**

1. Mark and confirm pole locations per the equipment layout diagram provided. If there are any issues, immediately notify your Musco Project Manager.
2. Provide labor, materials, and equipment to assemble MuscoVision cameras, electrical component enclosures, poles, and pole harnesses.
3. Provide labor, materials, and equipment to install outfield camera pole base and pole.
4. Provide labor, materials, and equipment to get 120V to the outfield pole location.

#### **Electrical:**

1. Provide labor, materials, and equipment to install all underground conduit, wiring, pull boxes etc. and terminate wiring as required.
2. Provide as-built drawings on completion of installation, **(if required)**.

## Quote

### Network and Automation:

1. Provide labor, equipment, and materials to install MuscoVision automation cabinet(s), and MuscoVision network cabinet(s) near customers Internet point of presence and terminate all necessary wiring. Cabinets need to be within 300' of internet point of presence and 300' of the backstop camera.
2. Supply, install and terminate Cat5 cable between the customers internet point of presence and MuscoVision Network cabinet.
3. Supply, install and termination of (2) Cat5 cables between the camera and MuscoVision Network Cabinet.
4. Provide a dedicated 120V 15A power circuit or a step-down transformer for 120V power circuit to power MuscoVision automation and network cabinets if not available.
5. Provide all labor and material to connect ethernet and wireless network equipment.
6. Check all cameras for aiming and functionality.
7. Commission Control-Link® by contacting Control-Link Central™ at 877-347-3319.

### Payment Terms

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Net 30 days for materials and progressive payments for labor.

### Delivery Timing

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12 - 14 weeks for delivery of materials to the job site from the time of order, submittal approval, and confirmation of order details including voltage, phase, and pole locations.

Due to the built-in custom light control per luminaire, pole locations need to be confirmed prior to production. Changes to pole locations after the product is sent to production could result in additional charges.

### Notes

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Quote is based on:

- Shipment of entire project together to one location.
- Structural code and wind speed = 2020 FBC HVHZ, 170 mi/h, Exposure C, Importance Factor II.
- Owner is responsible for getting electrical power to the site, coordination with the utility, and any power company fees.
- Confirmation of pole locations prior to production.

Thank you for considering Musco for your lighting needs. Please contact me with any questions or if you need additional details.



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