

Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Sunset Park  
Fort Lauderdale, FL

## Clay County RFP 18/19-2

### Quotation Price – Materials Delivered to Job Site and Installation

**Multipurpose Field & Covered Basketball - ..... \$ 300,000**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Soccer 330' by 200' – 30' Setback – 30 FC – SportCluster	2	90,600.00	\$181,200.00
(Section I A) Basketball – Indoor	2	\$25,500.00	\$51,000.00
(Section III G) Installation of Fixtures on Existing Poles	17	\$6,000.00	\$102,000.00
(Section III I) Retrofit existing Gymnasium w/ LED	24	\$750.00	\$18,000.00
(Section IV C b) Installation of Contactor Cabinet -72"	1	\$8,650.00	\$8,650.00
(Section IV E 1) Pole Grounding – 70' and Below	17	\$900.00	\$15,300.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$88,750.00</b>
<b>Total</b>			<b>\$300,000.00</b>

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

#### Guaranteed Lighting Performance

- Guaranteed light levels and uniformity

#### 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

### ***Supplemental Lighting***

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- Covered Basketball - KBL high-bay luminaires
- 10-year materials and onsite labor warranty on supplemental 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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide area on site for storage containers and laydown.
7. Pay any necessary power company fees and requirements.
8. Pay all permitting fees.
9. 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: All Parks**

##### **General:**

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.



6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on 17 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
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 sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.

### **Control System:**

1. Provide labor, equipment, and materials to install Musco Control and Monitoring cabinets 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.



### **Retrofit Musco Equipment in Covered Basketball Courts:**

1. Provide labor, materials, and equipment to assemble and install new LED lighting equipment to existing mounts and terminate grounding and power feed. Power feed may need to be reworked to adapt to the new Musco equipment.

### ***Payment Terms***

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Net 30 days for materials and progressive payments for labor.

### ***Delivery Timing***

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6 - 8 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.
- Existing Voltage and Phase electrical system requirement.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Bayview Park  
Fort Lauderdale, FL

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

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

**Baseball, Softball, Tennis 1-2, Basketball, & Batting Cages ..... \$ 350,000**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Baseball / Softball – SportsCluster – 60' Base Paths – 200' Radius – 50 / 30 Footcandles	1	\$78,800.00	\$78,800.00
(Section I A) Baseball / Softball – SportsCluster – 90' Base Paths – 300' Radius - 50 / 30 Footcandles	1	\$147,400.00	\$147,400.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pole locations – Batting Cage Lighting	2	\$3,500.00	\$7,000.00
(Section I A) Tennis - SportsCluster – 50 Footcandles – 2 Courts	1	\$49,400.00	\$49,400.00
(Section I A) Basketball Courts 50 Footcandles – 2 Courts	1	\$44,300.00	\$44,300.00
(Section III G) Installation of Fixtures on Existing Poles	16	\$6,000.00	\$96,000.00
(Section IV C a) Installation of Contactor Cabinet – 48"	3	\$5,750.00	\$17,250.00
(Section IV E 1) Pole Grounding – 70' and Below	16	\$900.00	\$14,400.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$117,150.00</b>
<b>Total</b>			<b>\$350,000</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

### ***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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide area on site for storage containers and laydown.
7. Pay all permitting fees.
8. 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: All Parks**

#### **General:**

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.
6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on 16 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
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 sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.

**Control System:**

1. Provide labor, equipment, and materials to install (3) Musco Control and Monitoring cabinets 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.

**Payment Terms**

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Net 30 days for materials and progressive payments for labor.

**Delivery Timing**

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6 - 8 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.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Croissant Park  
Fort Lauderdale, FL

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

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

**Softball/ Soccer / Football Field, & Gym .....\$ 295,000.00**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Football 360' by 160' – 50' Setback – 30 FC – SportsCluster	1	\$106,100.00	\$106,100.00
(Section I A ) Baseball / Softball 60' Base Path – 200' Radius – 50 / 30 FC– SportsCluster	1	\$78,800.00	\$78,800.00
(Section I A) Basketball – Indoor	1	\$25,500.00	\$25,500.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pole locations – Security Lighting	4	\$3,500.00	\$14,000.00
(Section III G) Installation of Fixtures on Existing Poles	9	\$6,000.00	\$54,000.00
(Section III I) Retrofit existing Gymnasium w/ LED	16	\$750.00	\$12,000.00
(Section IV C b) Installation of Contactor Cabinet – 72"	2	\$5,750.00	\$11,500.00
(Section IV E 1) Pole Grounding -70' and Below	9	\$900.00	\$8,100.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$27,600.00</b>
<b>Total</b>			<b>\$295,000.00</b>

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

**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** [SportsCluster System] [Light-Structure System Retrofit]

- 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



### **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

## ***Supplemental Lighting***

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- KBL high-bay luminaires
- 10-year materials and onsite labor warranty on supplemental 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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide area on site for storage containers and laydown.
7. Pay any necessary power company fees and requirements.
8. Pay all permitting fees.
9. 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: All Parks**

#### **General:**

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.



4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.
6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
4. Down conductor shall be converter 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.

### **Retrofit Musco Equipment in Rec Center:**

1. Provide labor, materials, and equipment to assemble and install new LED lighting equipment to existing mounts and terminate grounding and power feed. Power feed may need to be reworked to adapt to the new Musco equipment.

### **Electrical:**

1. Provide sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.



**Control System:**

1. Provide labor, equipment, and materials to install Musco Control and Monitoring cabinet 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.

**Payment Terms**

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Net 30 days for materials and progressive payments for labor.

**Delivery Timing**

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6 - 8 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.
- Existing Voltage / Phase electrical system requirement.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Floranada Park  
Fort Lauderdale, FL

### Clay County RFP 18/19-2

#### Quotation Price – Materials Delivered to Job Site and Installation

**Baseball / Softball Fields .....\$ 227,700**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Baseball / Softball – SportsCluster – 60' Base Paths – 200' Radius – 50 / 30 Footcandle	1	\$78,800.00	\$78,800.00
(Section I A) Baseball / Softball – SportsCluster – 60' Base Paths – 220' Radius – 50 / 30 Footcandle	1	\$92,100.00	\$92,100.00
(Section III G) Installation of Fixtures on Existing Poles	8	\$6,000.00	\$48,000.00
(Section IV C b) Installation of Contactor Cabinet - 72"	1	\$8,650.00	\$8,650.00
(Section IV E 1) Pole Grounding – 70' and Below	8	\$900.00	\$7,200.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$19,650.00</b>
<b>Total</b>			<b>\$227,700</b>

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

##### **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

##### **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

## 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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide area on site for storage containers and laydown.
7. Pay all permitting fees.
8. 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: All Parks

#### General:

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.
6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on 8 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
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 sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.

### **Control System:**

1. Provide labor, equipment, and materials to install 1 Musco Control and Monitoring cabinet 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.



### ***Payment Terms***

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Net 30 days for materials and progressive payments for labor.

### ***Delivery Timing***

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6 - 8 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.
- 480 Volt, 3 Phase electrical system requirement.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Hardy Park  
Fort Lauderdale, FL

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

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

**Tennis Courts, Multipurpose Field, & Playground .....\$ 350,000.00**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Soccer Fields – 330' by 200' 30' Setback – 30 Footcandles – SportsCluster	1	\$90,600.00	\$90,600.00
(Section I A) Soccer Fields – 330' by 200' 30' Setback – 30 Footcandles – Light Structure	1	\$166,000.00	\$166,000.00
(Section I A) Tennis – 2 Courts – 50 Footcandles SportsCluster	2	\$49,400.00	\$98,800.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pole locations – Playground Lighting	2	\$3,500.00	\$7,000.00
(Section III A) Pole Installation – 60'	4	\$4,600.00	\$18,400.00
(Section III G) Installation of Fixtures on Existing Poles	8	\$6,000.00	\$48,000.00
(Section IV C a) Installation of Contactor Cabinet – 48"	2	\$5,750.00	\$11,500.00
(Section IV E 1) Pole Grounding – 70' and Below	8	\$900.00	\$7,200.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$110,100.00</b>
<b>Total</b>			<b>\$350,000.00</b>



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

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#### **Guaranteed Lighting Performance**

- Guaranteed light levels and uniformity

#### **System Description (Multipurpose Poles P9, P10, P11, P12)**

- Pre-cast concrete bases with integrated lightning grounding
- Galvanized steel poles
- Factory wired and tested remote electrical component enclosures
- Pole length, factory assembled wire harnesses
- Factory wired poletop luminaire assemblies
- Factory aimed and assembled luminaires

#### **System Description (Multipurpose Poles P7, P8, Tennis 1-2, 3-4)**

- Factory wired poletop luminaire assemblies
- Factory aimed and assembled 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
- UL Listed assemblies

#### **Environmental Light Control**

- Spill light minimized
- Off-site glare light minimized

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

#### **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 (Tennis) and 25 years (Multipurpose/Playground)
- 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

### ***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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide a source of water such as a fire hydrant or 2" water line for foundation excavation. Pay for all fees associated with the water access and usage.
7. Provide area on site for disposal of spoils from foundation excavation.
8. Provide area on site for storage containers and laydown.
9. Pay any necessary power company fees and requirements.
10. Pay all permitting fees.
11. 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: All Parks**

#### **General:**

1. Obtain any required permitting.
2. Contact your local utility for locating underground 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 damage made 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 components 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. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
9. 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.
10. Provide startup and aiming as required to provide complete and operating sports lighting system.
11. 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 (6) existing multipurpose field lighting poles, luminaires, and electrical component enclosures. This will include the recycling of lamps, aluminum reflectors, ballast and steel as necessary.
2. Remove and dispose of the existing lighting fixtures and electrical enclosures on 8 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
3. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.



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.

### **Foundations, Poles, and Luminaires:**

1. Mark and confirm pole locations per the aiming diagram provided. If there are any issues, immediately notify your Musco Project Manager.
2. Provide labor, materials, and equipment to install 4 LSS foundations as specified on Layout and per the stamped foundation drawings, if applicable.
3. Remove spoils to owner designated location at jobsite.
4. Provide labor, materials, and equipment to assemble Musco TLC-LED luminaires, electrical component enclosures, poles, and pole harnesses.
5. Provide labor, equipment, and materials to erect 4 dressed LSS Poles and aim utilizing the pole alignment beam.

### **Electrical:**

1. Provide sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted. Where necessary, extend circuits, install all underground conduit, wiring, pull boxes, etc. and terminate wiring per electrical design.
4. Provide as built drawings on completion of installation.

### **Control System:**

1. Provide labor, equipment, and materials to install 2 Musco Control and Monitoring cabinet 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.

## ***Payment Terms***

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Net 30 days for materials and progressive payments for labor.

## ***Delivery Timing***

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6 - 8 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.
- Existing voltage / phase electrical system requirement.
- Owner is responsible for getting electrical power to the site, coordination with the utility, and any power company fees.
- Standard soil conditions – rock, bottomless, wet or unsuitable soil may require additional engineering, special installation methods and additional cost.
- Confirmation of pole locations prior to production.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Holiday Park  
Fort Lauderdale, FL

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

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

**(2) Soccer / Football Fields, (1) Multipurpose Area, (5) Baseball Fields, Batting Cages, Bullpens, Security Area**

..... **\$ 1,245,000.00**

*Sales tax, bonding, and permitting fees are not included.  
Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Football Field – 360' by 160' – 50' Setback – 30 Footcandles	2	\$106,100.00	\$212,200.00
(Section I A) Soccer Field – 360' by 210' – 30' Setback – 30 Footcandles	2	\$90,600.00	\$181,200.00
(Section I A) Baseball / Softball Field – 60' Base Path - 200' Radius – 50 / 30 Footcandles	5	\$78,800	\$394,000.00
(Section I A) Baseball / Softball Field – 90' Base Path - 325 Radius – 50 / 30 Footcandles	1	\$159,500.00	\$159,500.00
(Section I C) Additional Lighting for security, special areas, Replacing fixtures on existing poles or non-standard field sizes & pole locations – Security Lighting	8	\$3,500.00	\$28,000.00
(Section III G) Installation of Fixtures on Existing Poles	46	\$6,000.00	\$276,000.00
(Section IV C b) Installation of Contactor Cabinet -72"	4	\$8,650.00	\$34,600.00
(Section IV E 1) Pole Grounding – 70' and below	46	\$900.00	\$41,400.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$94,500.00</b>
<b>Total</b>			<b>\$1,245,000</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

### ***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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide a source of water such as a fire hydrant or 2" water line for foundation excavation. Pay for all fees associated with the water access and usage.
7. Provide area on site for disposal of spoils from foundation excavation.
8. Provide area on site for storage containers and laydown.
9. Pay any necessary power company fees and requirements.
10. Pay all permitting fees.
11. 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: All Parks**

#### **General:**

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.
6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on 46 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
4. Down conductor shall be converter 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 sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.

**Control System:**

1. Provide labor, equipment, and materials to install 3 Musco Control and Monitoring cabinets 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.

**Payment Terms**

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Net 30 days for materials and progressive payments for labor.

**Delivery Timing**

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6 - 8 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.
- 480 Volt, 3 Phase electrical system requirement.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Mills Pond Park Soccer  
Fort Lauderdale, FL

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

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

**3 Soccer / Football Fields & Security .....\$ 480,645**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Football Field – 70' Setback – 30 Footcandles – SportsCluster	3	\$118,400.00	\$355,200.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pol locations – Security Lighting	2	\$3,500.00	\$7,000.00
(Section III G) Installation of Fixtures on Existing Poles	12	\$6,000.00	\$72,000.00
(Section IV C b) Installation of Contactor Cabinet – 72"	2	\$8,650.00	\$17,300.00
(Section IV E 2) Pole Grounding – 80' and above	12	\$1,4500.00	\$17,400.00
(Section V A 3) Electrical Engineering	1	\$15,900.00	\$15,900.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>\$4,155.00</b>
<b>Total</b>			<b>480,645.00</b>

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

**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

## 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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide area on site for storage containers and laydown.
7. Pay any necessary power company fees and requirements.
8. Pay all permitting fees.
9. 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: All Parks

#### General:

1. Obtain any required permitting.
2. 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 damage made during construction.
3. Provide labor, equipment, and materials to off load equipment at jobsite per scheduled delivery.
4. Provide storage containers for material, (including electrical components enclosures), as needed.
5. Provide necessary waste disposal and daily clean up.
6. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.



7. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
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 lighting fixtures and electrical enclosures on 12 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
4. Down conductor shall be converter 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 sealed Electrical Plans. (If required)
2. Provide materials, and equipment to upgrade existing electrical service panels as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.

### **Control System:**

1. Provide labor, equipment, and materials to install 1 Musco Control and Monitoring cabinet 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.



### ***Payment Terms***

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Net 30 days for materials and progressive payments for labor

### ***Delivery Timing***

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6 - 8 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.
- Existing voltage / phase electrical system requirement.
- 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.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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



Jason Frucht  
Sales Representative  
Musco Sports Lighting, LLC  
Phone: 954-732-5674  
E-mail: [jason.frucht@musco.com](mailto:jason.frucht@musco.com)



Date: April 20, 2021  
To: City of Fort Lauderdale

Project: Osswald Park  
Fort Lauderdale, FL

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

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

**Baseball / Soccer Fields, Tennis 1-2, Basketball Courts, & Par 3 ..... \$ 876,150.00**

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

*Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential.*

Field Description	Quantity	Pricing Per Clay County	Extended Price
(Section I A) Soccer 330' by 200' – 30' Setback – 30 FC – SportsCluster	4	\$90,600.00	\$362,400.00
(Section I A ) Baseball / Softball 60' Base Path – 200' Radius – 50 / 30 FC– SportsCluster	2	\$78,800.00	\$157,600.00
(Section I A) Tennis – 2 Courts – 50 FC – SportCluster	1	\$49,400.00	\$49,400.00
(Section I A) Basketball – Indoor	2	\$25,500.00	\$51,000.00
(Section I C) Additional Lighting for security, special areas, replacing fixtures on existing poles or non-standard field sizes & pole locations – Golf Lighting	28	\$3,500.00	\$98,000.00
(Section III A) 40' Poles	15	\$4,150.00	\$62,250.00
(Section III G) Installation of Fixtures on Existing Poles	16	\$6,000.00	\$96,000.00
(Section III I) Retrofit existing Gymnasium w/ LED	20	\$750.00	\$15,000.00
(Section IV A) Electrical Service Option A	1	\$12,650.00	\$12,650.00
(Section IV B 3 b) Cooper Conductors	1500'	\$8.65	\$12,975.00
(Section IV B 3 c) Cooper Conductors	2600'	\$11.50	\$29,900.00
(Section IV C a) Installation of Contactor Cabinet - 48"	1	\$5,750.00	\$5,750.00
(Section IV C b) Installation of Contactor Cabinet – 72"	2	\$8,650.00	\$17,300.00
(Section IV E 1) Pole Grounding – 70' and Below	31	\$900.00	\$27,900.00
(Section V A 1) Electrical Engineering	1	\$6,600.00	\$6,600.00
(Section V F) Project Management	1	\$6,000.00	\$6,000.00
<b>Deduct / Design Parameters / Labor</b>			<b>-\$134,575.00</b>
<b>Total</b>			<b>\$876,150.00</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 (Par 3 “P” poles)**

- Pre-cast concrete bases with integrated lightning grounding
- Galvanized steel poles
- Factory wired and tested remote electrical component enclosures
- Pole length, factory assembled wire harnesses
- Factory wired poletop luminaire assemblies
- Factory aimed and assembled luminaires, including BallTracker™ luminaires
- UL Listed assemblies

#### **System Description (Baseball / Soccer Fields & Tennis)**

- 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

### ***Supplemental Lighting***

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- Par 3 - OSQ area luminaires
- Basketball - KBL high-bay luminaires
- 10-year materials and onsite labor warranty on supplemental 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 existing poles are structurally adequate to handle new fixture loading.
5. Ensure usability of existing underground wiring.
6. Provide a source of water such as a fire hydrant or 2" water line for foundation excavation. Pay for all fees associated with the water access and usage.
7. Provide area on site for disposal of spoils from foundation excavation.
8. Provide area on site for storage containers and laydown.
9. Pay any necessary power company fees and requirements.
10. Pay all permitting fees.
11. 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: All Parks**

##### **General:**

1. Obtain any required permitting.
2. Contact your local udig for locating underground 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 damage made 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 components 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. Confirm the existing underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Repair any damage made during construction.
9. 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.
10. Provide startup and aiming as required to provide complete and operating sports lighting system.
11. 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 lighting fixtures and electrical enclosures on 16 poles. This will include the recycling of lamps, aluminum reflectors, ballast, and steel as necessary.
2. Leave existing grounds 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. For concrete poles provide new lightning down conductor(aluminum) and 5/8" copper ground rod. For poles 75' or less use 1/0 AWG, poles over 75' use 4/0 AWG conductor.
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.

### **Retrofit Musco Equipment in Covered Basketball Courts:**

1. Provide labor, materials, and equipment to assemble and install new LED lighting equipment to existing mounts and terminate grounding and power feed. Power feed may need to be reworked to adapt to the new Musco equipment.

### **Foundations, Poles, and Luminaires:**

1. Mark and confirm pole locations per the aiming diagram provided. If there are any issues, immediately notify your Musco Project Manager.
2. Provide labor, materials, and equipment to install 9 LSS foundations as specified on Layout and per the stamped foundation drawings, if applicable.
3. Remove spoils to owner designated location at jobsite.
4. Provide labor, materials, and equipment to assemble Musco TLC-LED luminaires, electrical component enclosures, poles, and pole harnesses.
5. Provide new 25' mounting height concrete poles with tenon mounts.
6. Provide labor, equipment, and materials to erect LSS Poles and new concrete poles. Aim utilizing the pole alignment beam.

### **Electrical:**

1. Provide sealed Electrical Plans.
2. Provide materials, and equipment to upgrade existing electrical service panels at 2 locations as required.
3. Provide materials, and equipment to reuse existing electrical wiring as permitted.
4. Provide labor, materials, and equipment to install new electrical service panels for the golf course as required.
5. Provide labor, materials, and equipment to install all underground conduit, wiring, pull boxes etc. and terminate wiring per electrical design.
6. Provide as built drawings on completion of installation.



**Control System:**

1. Provide labor, equipment, and materials to install 3 Musco Control and Monitoring cabinets 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.

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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6 - 8 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.
- Existing Voltage/ Phase electrical system requirement.
- Owner is responsible for getting electrical power to the site, coordination with the utility, and any power company fees.
- Standard soil conditions – rock, bottomless, wet or unsuitable soil may require additional engineering, special installation methods and additional cost.
- Confirmation of pole locations prior to production.
- Product assurance and warranty program is contingent upon site review and compatibility with Musco's lighting system
- The owner of the field is responsible for the structural integrity of the existing poles.

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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