



# Department of Property & Procurement

Government of the United States Virgin Islands

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September 29, 2021

## **AMENDMENT ONE (1) IFB097SPRC21(C)—Rudy Kriger Ballpark Repairs, St. Croix, U.S. Virgin Islands**

**INSERT**

**Revised Bid Sheet**

**DELETE**

Old Bid Sheet included with original solicitation.



**GOVERNMENT OF  
THE VIRGIN ISLANDS OF THE UNITED STATES**

PUBLIC WORKS DEPARTMENT  
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DIVISION OF ENGINEERING

<b>PROJECT:</b>	Scope of Work for Repairs at Rudy Krigger Ball Park on the Island of St. Croix	<b>PAGE 1 OF 1</b>
<b>DATE:</b>	Wednesday, September 29, 2021	
<b>PREPARED BY:</b>	Eran Flemming	

**REVISED**

ITEM	DESCRIPTION OF ITEMS	UNITS	QTY.	UNIT PRICE	COST
1	Remove and replace; 9-gauge galvanized chain link fence, 447 LF x 8 FT high.	LF	447		
2	Remove and replace; 50 Ea. Galvanized fence posts 10 FT on center, 14FT long x 2.5 IN diameter	each	50		
3	Remove and Replace 1 Ea.; Galvanized chain link fence top rail, 20 FT long x 1.5 IN diameter.	each	1		
4	Remove and Replace 1 Ea. Galvanized chain link gate, 10 FT X 8 ft high.	each	1		
5	Remove and Replace Ea.; Galvanized chain link fence gates and hardware 3 IN diameter posts, 5 FT wide x 8 FT high.	each	2		
6	Remove and Replace 2 Ea.; 9-gauge galvanized dugout fencing, 27 FT long x 8 FT high x 2.5 IN diameter posts.	each	2		
7	Remove and Replace 4 Ea.; 9-gauge galvanized chain link fence gates associated hardware; 4 FT wide x 7.5 FT high.	each	4		
<b>BASKET BALL COURT</b>					
8	Remove and replace 1 EA.; 3rd base foul line post set in concrete base, 24 LF high (above ground) x 3 IN diameter	each	1		
9	Remove and replace 1 EA of MUSCO aluminum light pole and concrete base foundation, 32 FT high (above ground) x 10 IN diameter.	each	1		

10	Remove and replace 9 EA of MUSCO pole mounted stadium light fixtures and bulbs, 1500 watt. With LED fixtures	each	9		
11	Replace electrical wiring for basket- ball court lighting 3c #6, 253 FT per conductor.	EA	1		
12	Replace electrical wiring for basketball court lighting 6c #8 253 FT per conductor.	EA	1		
13	Replace electrical wiring for basketball court lighting 3c #8 40 FT per conductor	EA	1		
14	Replace 1 section of PVC electrical underground conduit and fittings, 253 FT long x 1.25 IN diameter.	LF	253		
15	Replace electrical wiring for basketball court lighting 3c #12, 253 FT long per conductor underground.	LF	253		
LIFE WALKING					
16	Replace 1 section of PVC electrical underground conduit and fittings, 780 FT long x 1.25 IN diameter.	LF	780		
17	Remove and replace 13 EA of 200 watt LED light fixtures	EA	13		
18	Replace electrical wiring 3c #10 2,340 long conductors total, underground	LF	7,020		
PARK AREA					
19	Remove and replace CMU foundation wall supporting concrete sidewalk, exposed foundation wall 24 IN high x 6 FT wide x 6 IN thick	LF	2		
20	Remove and replace; concrete sidewalk, 75 FT long x 6 FT wide X 4 IN thick	S.Y	50		
21	Remove and replace 8.3333 CY of compacted aggregate fill, minimum 60/40 Sand/Clay, 75 FT long x 6 FT wide x 6 IN thick.	YD	8.333		
22	Remove and replace CMU foundation wall supporting concrete sidewalk, exposed foundation wall 24 IN high x 6 FT wide x 6 IN thick.	LF	10		
23	Remove and replace concrete sidewalk, 75 FT long wide x 6 fFT wide x 4 IN thick.	S.Y	50		
24	Remove and replace 8.3333 CY of compacted aggregate fill, minimum 60/40 Sand/Clay, 75 FT long x 6 FT wide x 6 IN thick.	YD	8.333		
PERIMETER FENCE					
25	Remove and replace vinyl coated 9 - gauge galvanized chain link , 186 FT long x 12 FT high (above ground).	LF	186		

26	Remove and replace concrete sidewalk, 75 FT long x 6 FT wide x 4 IN thick.	S.Y	50		
27	Remove and replace 8.3333 CY of compacted aggregate fill, minimum 60/40 Sand/Clay, 75 FT long x 6 FT wide x 6 IN thick.	C.Y	8.33		
PLAYGROUND AREA					
28	Remove and replace 2 Ea. Spring loader playground equipment riders, including in-ground support system.	each	2		
RACQUETBALL COURT					
29	Remove and replace 9 -gauge galvanized chain link , 324 FT long x 12 FT high (above ground).	LF	304		
30	Remove and replace galvanized 22 Ea. chain link posts , 14 FT high (above ground) x 2.5 IN in diameter.	EA	2		
31	Remove and replace 1 Ea. Of treated bench seat board, primed and painted, 2 coats. 16 FT long x 6 IN wide x 2 IN thick.	EA	1		
32	Remove and replace 2 Ea. Of treated bench seat boards, primed and painted, 2 coats. 14 FT long x 6 IN wide x 2 IN thick.	EA	2		
SPECTATOR AREA					
33	Remove and replace 1 Ea. Section of spectator protective fencing, 2 IN x IN grid mesh with vinyl coating, 82 LF wide x 18 FT high.	LF	82		
34	Remove and replace 6 Ea. Of , 150-watt LED wall-pack lighting fixtures, 12 IN high x 12 IN wide.	EA	6		
35	Repair 10.5 SF of CMU textured wall surface (surface cracking/ re-coating), ½ IN thick, paint exterior wall to match existing.	SF	10.5		
36	Remove and replace galvanized metal gutter, painted, 135 FT long x 5 IN wide.	LF	135		
37	Remove and replace 1 Ea. Flagpole with rope pulley assembly 30 FT high.	EA	1		
38	Remove and replace 186 SF section of galvalume corrugated metal roof, 24-gauge, 31 FT long x 6 FT wide.	SF	186		
39	Remove and replace 7 Ea. treated bench seat boards, primed and painted, 2 coats. 72 IN long x 4 IN wide x 2 IN thick.	EA	7		
40	Remove and replace 1 Ea. section 9 -gauge galvanized chain link , 12 LF x 4 FT high (above ground).	EA	1		

41	Replace electrical wiring, 3C # 12 Wiring conductors, 405 LF long per conductor.	LF	1215		
42	Replace electrical wiring, 3C # 12 Wiring conductors, 405 LF long per conductor.	LF	1215		
43	Repair 1 Ea., section of CMU structural cracking 24 IN long x 1.25 IN wide, paint exterior wall to match existing.	LF	2		
TENNIS COURT					
44	Remove and replace 8 Ea. Of MUSCO pole mounted stadium light fixtures and bulbs, 1500-watt (3 missing and 5 not working/broken.	EA	8		
45	Remove and replace 1 Ea. Of MUSCO 40 FT high x 8 IN diameter lighting pole and concrete support base.	EA	1		
46	Replace electrical wiring, 3C # 6 wiring (underground), 180 FT long conductor.	LF	180		
47	Replace electrical wiring, 1C # 12 wiring (underground), 60 FT long conductor.	LF	60		
48	Replace electrical wiring, 3C # 6 wiring (underground), 120 FT long conductor.	LF	1800		
49	Replace electrical wiring, 1C # 12 (conductor), (pole) wire) 600V, 40 FT long per conductor.	LF	40		
50	Replace, 1 EA section of PVC conduit and fittings 60 FT long x 1.25 IN diameter	LF	60		
51	Remove and replace, 9-gauge galvanized chain link fencing, 453 FT long x 12 FT high (above ground).	LF	453		
52	Remove and replace 5 Ea. Of 9-gauge galvanized chain link fence gates, w/ latches and brackets, 3 IN diameter posts.	EA	5		
Baseball Field LED Light Refit					
53	Remove & dispose of existing 1500 W metal halide light fixtures, electrical enclosures on seven poles and brackets on poles. Including the recycling of lamps, aluminum reflectors, ballast and steel as necessary. Existing grounds & power feed shall remain in place for the connection of new lighting equipment.	each	7		
54	Replacement of 5 MUSCO 50 feet long light poles,	each	5		
55	Purchase & installation of MUSCO LED light fixtures Cluster system to refit existing Musco poles, including brackets, luminaires, visors, driver and cross arm assemblies.	each	7		
56	Removal of existing panel box and installation of new panel with breakers	Lump Sum	1		

57	Removal and replacement of shut-off switches for the lights - controller, enclosed, 200A, NEMA1, lighting control relay panel, 4 relays, with time clock.	each	4		
Total =====>					

Total Cost of Project is \_\_\_\_\_

Licensed Contractor \_\_\_\_\_

**Project Duration - 90 calendar days**

**Note: The undersigned Contractor acknowledges that the quantities included on the Bid Sheet are estimated values. It is the Contractor's responsibility to ascertain that the required material and quantities are included in the Bid Sheet in the event that there is a discrepancy between what the Contractor estimates is required to complete said project. Any discrepancies in values or material required must be identified at the time of the Pre-Bid meeting. Once the contract is executed, the Contractor will be required to complete the project based on selected bidder's contractual agreement cost.**

*L. Fleming*  
PUBLIC WORKS DEPARTMENT  
ST. CROIX  
VIRGIN ISLANDS  
9/29/21

**Appendix 1**  
**PART 1 – GENERAL**

**Rudy Krieger Sports Complex – Lighting Performance Requirements**

**September 2021 Update**

**1.1 SUMMARY**

- A. The present document specifies the lighting requirements that contractor must take into account while quoting LED lighting for fields of play.
- B. The general scope of work will require that the contractor mount 5 new poles on the softball field to replace rusted poles (leaving the newer pole in left field installed), and 2 new poles on the smaller courts to replace fallen poles. All poles should be fitted with new LED lighting systems.

**1.2 LIGHTING PERFORMANCE**

- C. Illumination Levels and Design Factors: Playing surfaces shall be lit to an average target illumination level and uniformity as specified in the chart below.

<b>Softball – Light League Baseball Standard</b>		
<b>Area of Lighting</b>	<b>Average Target Illumination Levels</b>	<b>Maximum to Minimum Uniformity Ratio</b>
Infield	50 footcandles	2:1
Outfield	30 footcandles	2.5:1

<b>2 courts - Basketball &amp; Practice Court IESNA Class IV Lighting</b>		
<b>Area of Lighting</b>	<b>Average Target Illumination Levels</b>	<b>Maximum to Minimum Uniformity Ratio</b>
Basketball & Practice Court	20 footcandles	4:1

<b>2 courts – Tennis IESNA Class IV Lighting</b>		
<b>Area of Lighting</b>	<b>Average Target Illumination Levels</b>	<b>Maximum to Minimum Uniformity Ratio</b>
2 Tennis Courts	30 footcandles	2.5:1



## **PART 2 – PRODUCT**

### **2.1 SPORTS LIGHTING SYSTEM CONSTRUCTION**

1. All luminaires, visors, and cross-arm assemblies shall withstand 150 mi/h winds and maintain luminaire aiming alignment.
2. Enhanced corrosion protection package: Due to the potentially corrosive environment for this project, manufacturers must provide documentation that their products meet the following enhanced requirements in addition to the standard durability protection specified above:
  - a) Exposed carbon steel horizontal surfaces on the crossarm assembly shall be galvanized to no less than a five (5) mil average thickness.
  - b) Exposed die cast aluminum components and exposed extruded aluminum components shall be Type II anodized per MIL-STD-8625 and coated with high performance polyester.
- B. Safety: All system components shall be UL listed for the appropriate application. System Description: Lighting system shall consist of the following:
  1. All structural designs should be designed to 2018 IBC 165mph per ATC Hazard Council (<https://hazards.atcouncil.org/#/wind?lat=17.734909677009878&lng=-64.74530532189942&address=>)
  2. Galvanized steel poles (for 5 softball poles and 2 other poles). Alternate: Concrete pole with a minimum of 8,000 psi and installed with concrete backfill will be an acceptable alternative provided building code, wind speed and foundation designs per specifications are adhered to.
  3. Non-approved pole technology:
    - a. Square static cast concrete poles will not be accepted.
    - b. Direct bury steel poles which utilize the extended portion of the steel shaft for their foundation will not be accepted due to potential for internal and external corrosive reaction to the soils and long term performance concerns.
  4. Lighting systems shall use concrete foundations. See Section 2.4 for details.
    - a. For a foundation using a pre-stressed concrete base embedded in concrete backfill the concrete shall be air-entrained and have a minimum compressive design strength at 28 days of 3,000 PSI. 3,000 PSI concrete specified for early pole erection, actual required minimum allowable concrete strength is 1,000 PSI. All piers and concrete backfill must bear on and against firm undisturbed soil.
    - b. For anchor bolt foundations or foundations using a pre-stressed concrete base in a suspended pier or re-inforced pier design pole erection may occur after 7 days. Or after a concrete sample from the same batch achieves a certain strength.
  5. Manufacturer will supply all drivers and supporting electrical equipment
    - a. Remote drivers and supporting electrical equipment shall be mounted approximately 10 feet above grade in aluminum enclosures. The enclosures shall be touch-safe and include drivers and fusing with indicator lights on fuses to notify when a fuse is to be replaced for each luminaire. Disconnect per circuit for each pole structure will be located in the enclosure. Integral drivers are not allowed.
  6. Manufacturer shall provide lightning grounding as defined by NFPA 780 and be UL Listed per UL 96 and UL 96A.
  7. Integrated grounding via concrete encased electrode grounding system.
  8. If grounding is not integrated into the structure, the manufacturer shall supply grounding electrodes, copper down conductors, and exothermic weld kits. Electrodes and conductors shall be sized as required by NFPA 780. The grounding electrode shall be minimum size of 5/8 inch diameter and 8 feet long, with a minimum of 10 feet embedment. Grounding electrode shall be connected to the structure by a grounding electrode conductor with a minimum size of 2 AWG for poles with 75 feet mounting height or less, and 2/0 AWG for poles with more than 75



feet mounting height.

### **2.3 CONTROL**

- A. Instant On/Off Capabilities: System shall provide for instant on/off of luminaires.
- B. Lighting contactor cabinet(s) constructed of NEMA Type 4 aluminum, designed for easy installation with contactors, labeled to match field diagrams and electrical design. Manual off-on-auto selector switches shall be provided.
- C. Remote Lighting Control System: System shall allow owner and users with a security code to schedule on/off system operation via a web site, phone, fax or email up to ten years in advance.
- D. Communication Costs: Manufacturer shall include communication costs and internet connection for operating the control and monitoring system for a period of 10 years.

## **PART 3 – EXECUTION**

### **3.1 SITE DATA**

- A. Upon award of contract, contractor will be responsible to provide lighting supplier with as-built drawing of both baseball and 4 other courts. This drawing will show existing pole locations, field dimensions, existing pole heights, etc.

### **3.2 DELIVERY TIMING**

- B. Delivery Timing Equipment On-Site: The equipment must be on island 8-12 weeks from receipt of approved submittals and receipt of complete order information.
- C. Installation Timeframe: Contractor must complete installation of equipment within 4 weeks of equipment arriving in USVI.

### **3.3 FIELD QUALITY CONTROL**

- A. Illumination Measurements: Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, Owner's Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA LM-5-04.
- B. Field Light Level Accountability
  - 1. Light levels are guaranteed not to fall below the target maintained light levels for the entire warranty period of 10 years. These levels will be specifically stated as "guaranteed" on the illumination summary provided by the manufacturer.
- C. Correcting Non-Conformance: If, in the opinion of the Owner or his appointed Representative, the actual performance levels including footcandles and uniformity ratios are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer/Contractor shall be required to make adjustments to meet specifications and satisfy Owner.

### **3.4 PARTS AND MAINTENANCE GUARANTEED FOR 10 YEARS**

- A. 10-year Warranty: Each manufacturer shall supply a signed warranty covering the entire system for 10 years from the date of shipment. Warranty shall guarantee specified light levels for 10 years.
- B. Maintenance: Manufacturer shall monitor the performance of the lighting system, including on/off status, hours of usage and luminaire outage for 10 years from the date of equipment shipment. Parts and labor shall be covered such that individual luminaire outages will be repaired when the usage of any field is materially impacted. Manufacturer is responsible for removal and replacement of failed luminaires, including all parts, labor, shipping, and equipment rental associated with maintenance.

Owner agrees to check fuses in the event of a luminaire outage.

**PART 4 – DESIGN APPROVAL**

Musco's SportsCluster System™ with TLC for LED™ is the approved product. Any other lighting product must be of equal or superior quality while meeting the performance requirements in this specification document. Musco Lighting's Caribbean sales representative can be contacted at:

christopher.hansen@musco.com – 641-670-0270