

Capital Improvements Scope of Work 9.21.21 ТМ

The total amount requested for these improvements to Whataburger Field is for an amount not to exceed \$1,076,000. Funding totaling \$701,800 can be reallocated by shifting the Small Business contracts from the Type A budget to Type B budget for funding. Once the FY21 Small Business Projects contracts close out, staff anticipates another \$200,000 - \$250,000 to be available to allocate to the project and further close the remaining gap of funding.

- Field Lighting Long lead time and competitive reservation opportunity to ensure project is complete for 2022 event usage beginning in February 2022.
- Women's Personnel Clubhouse Opportunity to begin and reach completion phase is short, in a location whose usage window begins April 2022.
- Visitor's Clubhouse Opportunity to begin and reach completion phase is short, in a location whose usage window begins April 2022. If timing for presentation and approval of remaining funds does not allow for April '22 completion, this project will take place in October '22.



Field Lighting Requirement

7.7 Field Lighting - All lighting systems shall maintain the following minimum brightness requirements: Infield: 100 fc average. Outfield: 70 fc average. Bullpen: 50 fc average. All lighting systems shall operate with a maximum uniformity ratio of 1.2/1 in the infield and 2/1 in the outfield. The uniformity ratios shall be computed by comparing the highest and lowest footcandle readings in the infield and the outfield. The evaluation grid used to assess compliance with the standards above shall include 16 light measurements taken in the infield, starting at home plate on a 30'x30' grid pattern. Outfield readings shall be taken on a 60'x 60' grid pattern starting 15' in from each foul line and 45' out from each infield base line. 29 outfield readings shall be taken. All readings shall be taken 3' off the ground. The cell of the light meter shall be self-leveling and mounted on a fixed tripod. The bullpen grid shall include pitcher's mound, bullpen home plate and midpoint for each pitching location. All new field lighting systems for which construction commenced on or after October 1, 2020, including both new facilities and substantial modifications to existing lighting systems (e.g., a modification that involves the installation of new lighting poles), shall be submitted to Major League Baseball for approval in advance of construction. All new lighting systems shall utilize an LED source, follow IES RP-6-15 standards (unless specified otherwise under this provision), and meet the following minimum standards: Color temperature shall be greater than or equal to 5000°K Color Rendering Index (CRI) shall be minimum of 75 Light Loss Factor (LLF) shall be minimum of 0.88 Average footcandle readings in foul territory shall be a minimum of 70% of the standard applicable to the immediately adjacent area in fair territory.

2016 Musco Illumination Summary



| Name: Size: AA Baseball Irregular 325' / 400' / 315' 30.0' x 30.0' Height: 30' above grade ILLUMINATION SUMMARY MAINTAINED HORIZONTAL FOOTCANDLES Guaranteed Average: 100 Scan Average: 100 Maintmum: 109 Maintmum: 95 Avg / Min: 1.07 Max / Min: 1.2 Max / Min: 1.14 | | | |
|--|-----------------------|---------------|------------------|
| Size: Irregular 325' / 400' / 315' Spacing: 30.0' x 30.0' Height: 3.0' above grade ILLUMINATION SUMMARY MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 100 70 Scan Average: 100 70 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | GRID SUMMARY | | |
| Spacing: 30.0' x 30.0' Height: 3.0' above grade ILLUMINATION SUMMARY MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.14 1.63 | Name: | AA Baseball | |
| Height: 3.0' above grade ILLUMINATION SUMMARY MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Size: | Irregular 329 | 5' / 400' / 315' |
| ILLUMINATION SUMMARY MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Spacing: | 30.0' x 30.0' | |
| MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Height: | 3.0' above g | rade |
| MAINTAINED HORIZONTAL FOOTCANDLES Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | | | |
| Infield Outfield Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | ILLUMINATION S | UMMARY | |
| Guaranteed Average: 100 70 Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | MAINTAINED HORIZONTA | AL FOOTCANDL | ES |
| Scan Average: 102.41 70.68 Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | | Infield | Outfield |
| Maximum: 109 95 Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Guaranteed Average: | 100 | 70 |
| Minimum: 95 58 Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Scan Average: | 102.41 | 70.68 |
| Avg / Min: 1.07 1.21 Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Maximum: | 109 | 95 |
| Guaranteed Max / Min: 1.2 2 Max / Min: 1.14 1.63 | Minimum: | 95 | 58 |
| Max / Min: 1.14 1.63 | Avg / Min: | 1.07 | 1.21 |
| | Guaranteed Max / Min: | 1.2 | 2 |
| UC (adjacent ata): 1.11 1.10 | Max / Min: | 1.14 | 1.63 |
| 00 (adjacent pts). 1.11 1.18 | UG (adjacent pts): | 1.11 | 1.18 |
| CU: 0.59 | CU: | 0.59 | |
| No. of Points: 25 105 | No. of Points: | 25 | 105 |



Field Lighting Scope of Work

- Factory aimed and assembled LED event lighting luminaries
- Factory aimed and assembled LED ball-tracking luminaries
- Retrofit six (6) existing poles
- Infield 100fc, Outfield 70fc light level
- Remote Driver Enclosures for all fixtures
- 10-year Parts and Labor warranty including guaranteed light levels 100fc/70fc
- Gateway cabinet to interface dimming network to DMX controller
- ETC Mosaic DMX control system with two (2) touchscreens to provide dimming and theatrical effects
- Turnkey installation
- Final aiming/commissioning of the sports lighting system for approval of owner's representation
- Includes materials/equipment delivery to the jobsite, unload and full installation

| EQ | UIPMEN | T LIST | FOR AR | EAS SHO | OWN | | | |
|-----|-------------------|--------|--------------------|--------------------|-------------------|--------------|--|--|
| | P | ole | | | Luminaires | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY/ POLE | | |
| 2 | A1-A2 | 70' | 49' | 74' | TLC-BT-575 | 2 | | |
| | | | | 119' | TLC-LED-1500 | 13 | | |
| 2 | B1-B2 | 110' | - | 25' | TLC-BT-575 | 3 | | |
| | | | | 110' | TLC-LED-1500 | 22 | | |
| 2 | C1-C2 | 100' | 6' | 31' | TLC-BT-575 | 3 | | |
| | 106' TLC-LED-1500 | | | | | | | |
| 6 | TOTALS | | | | | | | |

| SINGLE LUMINAIRE AM | IPERA | GE D | RAW | CHAF | RT | | | | |
|--|---|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| Ballast Specifications (.90 min power factor) | Line Amperage Per Luminaire (max draw) | | | | | | | | |
| Single Phase Voltage | 208 (60) | 220 (60) | 240 (60) | 277 (60) | 347 (60) | 380 (60) | 480 (60) | | |
| TLC-LED-1500 | 9.0 | 8.5 | 7.8 | 6.7 | 5.4 | 4.9 | 3.9 | | |
| TLC-BT-575 | 3.4 | 3.2 | 2.9 | 2.5 | 2.0 | 1.8 | 1.5 | | |





Women's Personnel Clubhouse Requirement

5.4 Female Staff Facilities - All facilities shall provide a private dressing, shower, and toilet facility that is available only to female umpires and female staff of the home and visiting Major League organizations. Such dressing area shall be located in reasonable proximity to the home and visiting clubhouses and shall include a minimum of four lockers (each a minimum of 24" w x 72" h), two showerheads, two water closets, and two lavatories. Minimum floorspace requirements for the female staff facilities shall be 200 sq. ft. (as measured from the base of each wall). Notwithstanding the forgoing, facilities may include multiple separate dressing areas for home and visiting female staff and umpires, provided that at least two lockers, one shower, one water closet, and one lavatory are available in each location for female staff. For the avoidance of doubt, the combined requirements of such facilities remain as outlined above.





Women's Clubhouse Renovation Scope of Work

Address compliance requirement of private dressing area featuring:

- Four (4) standard lockers (min 24")
- Two (2) lavatories
- Two (2) water closets
- Two (2) shower heads









Visitor's Clubhouse Requirement

4.2 Visiting Commissary and Dining Area - All facilities shall provide an area of not less than 300 sq. ft. dedicated to food preparation and consumption. If these two areas are separate (e.g., a seating area across the hall from the food preparation space), then the combined space must be a minimum of 300 sq. ft. The commissary shall include a refrigerator, a freezer, a sink, a dishwasher, a microwave, cabinets for storage, and a seating area that can accommodate at least 8 individuals at one time. All kitchen equipment shall comply with applicable local and state standards related to sanitation and cleanliness. In all circumstances, the commissary and dining area shall be separated from the player and staff dressing areas but should be immediately accessible by players and staff and located in, or in direct proximity to, the general visiting clubhouse area. For the avoidance of doubt, the commissary equipment above shall be dedicated for the sole use of the Major League Baseball Club and will required irrespective of the existence of a separate kitchen or restaurant area located away from the visiting clubhouse area (e.g., elsewhere in the facility).



Current floorplan without dining area



Visitor's Clubhouse Renovation Scope of Work

Address compliance requirement of areas featuring:

- 32 player lockers
- Manager's office & Coaches locker room
- Stand alone dining area •
- Training room
- Meet square footage and seating guidelines ٠







Compliance Requirements

- 30 points or less by 2023
- 20 points or less by 2024
- 10 points or less by 2025 and in perpetuity

Notes to Section 7 - Most recent lighting assessment is based on 2016 Field Survey performed by Gould Evans. 2016 was noncompliant and \$28k in remedies were completed. Very likely penalties are higher if a current day lighting survey was executed for both Average and Uniformity.

| FACILITY | STANDAR | DS: GKAL | JING RU | ыс | | | | | | 42 | | |
|-----------|---|---|--------------|-----------|----|------------|------------|------------|----|--------------|---|--|
| | | | | | | | | | то | TOTAL POINTS | | |
| Section 3 | Home Club Facilities | | | | | | enalty Ran | ge | | 5 | | |
| | | | | | | Low | Med | High | | | | |
| 2 | Home Comm | issary and D | ining Are | а | | | | | | | | |
| | | Freezer | | | | 1 | 1 | 1 | | | | |
| | | Dishwasher | r | | | 1 | 1 | 1 | | | | |
| 4 | Home Trainin | ig Room | | | | | | | | | | |
| | Minimum 400 sq ft | | | | | 1 | 3 | 10 | | | | |
| | | 2 full body | whirlpool | s | | - | 2 | 5 | | | | |
| | | | | | | | | | | | | |
| Section 4 | Visiting Club | Facilities | | | | Р | enalty Ran | ge | | 22 | | |
| | | | | | | Low | Med | High | | | | |
| 1 | Visiting Club | nouse/Dress | sing Area | | | | | | | | | |
| | | Minimum # | | | rs | 1 | 3 | 10 | | | | |
| 2 | Visiting Com | | | | | | | | | | | |
| | | Minimum 3 | | | | 1 | 2 | 5 | | | | |
| | | Freezer | | | | 1 | 1 | 1 | | | | |
| | | Sink | | | | 1 | 1 | 1 | | | | |
| | | Dishwasher | r | | | 1 | 1 | 1 | | | | |
| | | Microwave | | | | 1 | 1 | 1 | | | | |
| | | Storage Cabinets | | | | 1 | 1 | 1 | | | | |
| | | Seating Area for 8 min | | | | 1 | 1 | 1 | | | | |
| 4 | Visiting Train | | | | | | | | | | | |
| | | 2 full body | whirlpool | S | | - | 2 | 5 | | | | |
| 6 | Visiting Field | | • | - | | | | | | | | |
| | | Separate M | | office | | 3 | 3 | 3 | | | | |
| | | Separate toilet, shower and dressing area | | | | 1 | 1 | 1 | | | | |
| | | Meeting space for min 4 people | | | | | 2 | 2 | | | _ | |
| Section 5 | | dditional Team Facilities | | | | | enalty Ran | | | 8 | | |
| | | | | | | Low | Med | B- Hiqh | | - | | |
| 4 | Female Staff | Facilities | | | | | | | | | | |
| | | Minimum 4 | regulatio | n lockers | | 1 | 2 | 5 | | | | |
| | | Shower hea | | | | NA | 1 | 10 | | | | |
| | | Water close | | | | NA | 1 | 10 | | | | |
| | | Lavatories: | | | | NA | 1 | 10 | | | | |
| Section 6 | High Speed Internet | | | | | enalty Ran | | 1 | 3 | | | |
| | | | | | | Low | Med | B- High | | | | |
| 2 | Secondary Int | ternet Conn | ection | | | 3 | 3 | 3 | | | | |
| | Playing Field | | | | | | enalty Ran | | | 4 | | |
| | ., | | | | | Low | Med | B- Hiqh | | | | |
| 7 | Field Lighting | Average fo | (Infield) | | | 1 | 3 | 10 | | | | |
| | Field Lighting Average fc (Outfield) | | | | 1 | 3 | 10 | | | | | |
| | Field Lighting Uniformity Ratio (Infield) | | | | 1 | 3 | 5 | | | | | |
| | Field Lighting | g Uniformity | ' Ratio (Ini | rield) | | I | 1 1 | 5 | | | | |