

## REQUEST FOR QUALIFICATIONS:

### **COMPLETE DESIGN BUILD FOR REPLACING NATURAL TURF FIELDS 1, 2, 7 8 AT THE BUNCOMBE COUNTY SPORTS PARK WITH AN ARTIFICIAL TURFING SYSTEM, AND THE DESIGN AND BUILD OF A SEPARATE MULTI PURPOSE FIELD ON WARREN HAYNES DR.**

Buncombe County Recreation Services has initiated an Enka Recreation Destination project to replace the natural turf fields 1, 2, & 8 at the Buncombe County Sports Park with an artificial turf system. The design and installation of new multi-purpose field that will have natural turf and accommodate three other components described in the Project Scope (attached) on Warren Haynes Dr. using clean fill to level the existing surface at the site. Fill may be transported from the work performed at the Buncombe County Sports Park to the new field on Warren Haynes Dr. to level the surface. New natural turf will need to be installed on this new multi-purpose field and is part of the scope of this project.

The County is hereby soliciting responses from qualified turf field design/build teams.

The short list selection committee will consider qualifications, experience and proposed delivery method, Design/Build. A short list of at least 3 teams will be selected based upon a qualification based selection process. Follow-up questions and presentation/interviews will be coordinated with the short list respondents. Design work will begin a maximum thirty (30) days of contract award and phased construction shall begin spring 2020. Completion date for the Sports Park Field Turfing to be completed by August 1, 2020. Visitation to the sites is highly recommended to fully understand the existing conditions.

Respondents shall provide digital files of responses demonstrating qualifications, capabilities, experience, references and interest in the project. At a minimum, include the following in the RFQ response:

- (1) A cover page shall include name of the project, lead professional's contact information and RFQ date with a live web site link(s) for the digital file and any supplemental information deemed appropriate by the respondent.
- (2) A one page of letter of introduction shall describe interest in the project, and outline the team's approach to the project.
- (3) List completed projects of similar size and character within the last five years.
- (4) References with contact information.
- (5) Flow chart describing team members and responsibilities.
- (6) Certifications and membership in associations supporting qualifications to perform design and/or installation of turf fields.
- (7) Bios of key team members.
- (8) A list of the licensed contractors, licensed subcontractors, and licensed design professionals whom the design-builder proposes to use for the project's design and construction, or an outline of the strategy the design-builder plans to use for open contractor and subcontractor selection based upon the provisions of Article 8 of Chapter 143 of the General Statutes.

Proposals will be received until 4:00pm, December 2, 2019. All proposals may be submitted electronically submitted via email and properly identified with the title "RFQ Turf Response".

Proposals may emailed to:

E-mail: [geoffrey.noblitt@buncobecounty.org](mailto:geoffrey.noblitt@buncobecounty.org)

The County's capacity for email attachments is 9mb. It is the bidder's responsibility to ensure the proposal is received prior to the proposal acceptance time. Late proposals will not be accepted. The County reserves the right to accept or reject all or any part of any proposal, waive informalities and award the contract to best serve the interest of the County. It is the responsibility of the applicant that their proposal is received. Receipt of proposals can be verified by calling 828-250-4847.

The team awarded the contract shall be required to provide the following:

- Certify to the County that each licensed design professional who is a member of the design-build team, including sub-consultants, was selected based upon demonstrated competence and qualifications in the manner provided by G.S. 143-64.31.
- Provide a performance and payment bond to the governmental entity in accordance with the provisions of Article 3 of Chapter 44A of the General Statutes.

#### GENERAL TERMS AND CONDITIONS:

READ, REVIEW AND COMPLY: It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and any addenda thereto, and comply with all requirements specified herein, regardless of whether appearing in these Instructions to Vendors or elsewhere in this RFQ document.

LATE PROPOSALS: Late proposals, regardless of cause, will not be considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure the timely submission of proposals.

ACCEPTANCE AND REJECTION: Buncombe County reserves the right to reject any and all proposals, to waive any informality in proposals and, unless otherwise specified by the Vendor, to accept any item in the proposal.

INFORMATION AND DESCRIPTIVE LITERATURE: If required elsewhere in this proposal, each Vendor shall submit with its proposal any sketches, descriptive literature and/or complete specifications covering the products and Services offered. Reference to literature submitted with a previous proposal or available elsewhere will not satisfy this provision. Failure to comply with these requirements shall constitute sufficient cause to reject a proposal without further consideration.

SUSTAINABILITY: To support the sustainability efforts of the State of North Carolina we solicit your cooperation in this effort. Pursuant to Executive Order 156 (1999), it is desirable that all print responses submitted meet the following:

All copies of the proposal are printed double sided.

All submittals and copies are printed on recycled paper with a minimum post-consumer content of 30%.

Unless absolutely necessary, all proposals and copies should minimize or eliminate use of non-recyclable or non-reusable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Three-ringed binders, glued materials, paper clips, and staples are acceptable.

Materials should be submitted in a format which allows for easy removal, filing and/or recycling of paper and binder materials. Use of oversized paper is strongly discouraged unless necessary for clarity or legibility.

HISTORICALLY UNDERUTILIZED BUSINESSES: Buncombe County is committed to retaining Vendors from diverse backgrounds, and it invites and encourages participation in the procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. In particular, the County encourages participation by Vendors certified by the State Office of Historically Underutilized Businesses, as well as the use of HUB-certified vendors as subcontractors on County contracts. Buncombe County has a

current verifiable goal of twelve percent (12%) for minority participation on building construction or repair projects, ten percent (10%) each for procurement, and services

**INELIGIBLE VENDORS:** As provided in G.S. 147-86.59 and G.S. 147-86.82, the following companies are ineligible to contract with the State of North Carolina or any political subdivision of the State: a) any company identified as engaging in investment activities in Iran, as determined by appearing on the Final Divestment List created by the State Treasurer pursuant to G.S. 147-86.58, and b) any company identified as engaged in a boycott of Israel as determined by appearing on the List of restricted companies created by the State Treasurer pursuant to G.S. 147-86.81. A contract with the Buncombe County by any company identified in a) or b) above shall be void *ab initio*.

**CONFIDENTIAL INFORMATION:** County requests that no confidential information be included in the initial proposals. To the extent permitted by applicable statutes and rules, the County will maintain as confidential trade secrets in its proposal that the Vendor does not wish disclosed. As a condition to confidential treatment, each page containing trade secret information shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Vendor, with specific trade secret information enclosed in boxes, marked in a distinctive color or by similar indication. Cost information shall not be deemed confidential under any circumstances. Regardless of what a Vendor may label as a trade secret, the determination whether it is or is not entitled to protection will be determined in accordance with G.S. 132-1.2. Any material labeled as confidential constitutes a representation by the Vendor that it has made a reasonable effort in good faith to determine that such material is, in fact, a trade secret under G.S. 132-1.2. Vendors are urged and cautioned to limit the marking of information as a trade secret or as confidential so far as is possible. If a legal action is brought to require the disclosure of any material so marked as confidential, the County will notify Vendor of such action and allow Vendor to defend the confidential status of its information.

**MISCELLANEOUS:** Any gender-specific pronouns used herein, whether masculine or feminine, shall be read and construed as gender neutral, and the singular of any word or phrase shall be read to include the plural and vice versa.

**INFORMAL COMMENTS:** Buncombe County shall not be bound by informal explanations, instructions or information given at any time by anyone on behalf of the County during the competitive process or after award. The County is bound only by information provided in writing in this RFQ and in formal Addenda issued through IPS.

**COST FOR PROPOSAL PREPARATION:** Any costs incurred by Vendor in preparing or submitting offers are the Vendor's sole responsibility; Buncombe County will not reimburse any Vendor for any costs incurred or associated with the preparation of proposals.

**AVAILABILITY OF FUNDS:** Any and all payments to the Vendor shall be dependent upon and subject to the availability of funds to the agency for the purpose set forth in The Contract.

**SITUS AND GOVERNING LAWS:** This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules, and within which State all matters, whether sounding in Contract or tort or otherwise, relating to its validity, construction, interpretation and enforcement shall be determined.

**PAYMENT TERMS:** If a payment schedule is not part of The Contract then payment terms will be Net 30 days after receipt of a correct invoice or acceptance of goods, whichever is later.

**NON-DISCRIMINATION:** The Vendor will take necessary action to comply with all Federal and State requirements concerning fair employment and employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination on the basis of any prohibited grounds as defined by Federal and State law.

**ADVERTISING:** Vendor agrees not to use the existence of The Contract or the name of Buncombe County as part of any

commercial advertising or marketing of products or Services. A Vendor may inquire whether the County is willing to act as a reference by providing factual information directly to other prospective customers.

**INSURANCE:**

**COVERAGE** - During the term of the Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

Commercial General Liability insurance in an amount not less than \$1,000,000 each occurrence/\$2,000,000 annual aggregate. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations or Contractual Liability.

Business Automobile Liability insurance covering all owned, non-owned, and hired vehicles with a minimum combined single limit of \$1,000,000 each occurrence and shall include uninsured/underinsured motorist coverage per NC General Statute 20-279-21.

Workers Compensation coverage at the statutory limits in compliance with applicable State and Federal laws. Supplier shall ensure that any subcontractors also have workers compensation coverage at the statutory limits.

Employer's Liability coverage with minimum limits of \$500,000 each accident and \$500,000 each employee disease.

Vendor shall agree these General Conditions constitute an insured contract and shall name Buncombe County as an additional insured under the Commercial General Liability policy. Before commencing work and for any subsequent renewals, Vendor shall furnish the County with certificates of insurance evidencing the above coverages and amounts on an approved form. Vendor hereby grants the County a waiver of any right of subrogation which any insurer of said Vendor may acquire against the County by virtue of payment of any loss under such insurance. Vendor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. Each insurance policy required above shall state that coverage shall not be canceled, except with written notice to the County and delivered in accordance with the policy provisions. All insurance shall be procured from reputable insurers authorized and qualified to do business in North Carolina and in a form acceptable to the County. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Supplier's liability and obligations. Nothing in this section is intended to affect or abrogate Buncombe County's governmental immunity.

**GENERAL INDEMNITY:** The Vendor shall hold and save Buncombe County, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, Services, materials, or supplies in connection with the performance of The Contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of The Contract and that are attributable to the negligence or intentionally tortious acts of the Vendor provided that the Vendor is notified in writing within 30 days from the date that the County has knowledge of such claims. The Vendor represents and warrants that it shall make no claim of any kind or nature against the County's agents who are involved in the delivery or processing of Vendor deliverables or Services to the County. The representation and warranty in the preceding sentence shall survive the termination or expiration of The Contract.

**CONFIDENTIALITY:** Any County information, data, instruments, documents, studies or reports given to or prepared or assembled by or provided to the Vendor under The Contract shall be kept as confidential, used only for the purpose(s) required to perform The Contract and not divulged or made available to any individual or organization without the prior written approval by Buncombe County.

**COMPLIANCE WITH LAWS:** Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and its performance in accordance with The Contract, including those of federal, state, and local agencies having jurisdiction and/or authority.

**ENTIRE AGREEMENT:** This RFQ and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This RFQ, any addenda hereto, and the Vendor's proposal are incorporated herein by reference as though set forth verbatim.

All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.

**AMENDMENTS:** The Contract may be amended only by a written amendment duly executed by the County and the Vendor.

**NO WAIVER:** Notwithstanding any other language or provision in The Contract, nothing herein is intended nor shall be interpreted as a waiver of any right or remedy otherwise available to the County under applicable law. The waiver by the County of any right or remedy on any one occasion or instance shall not constitute or be interpreted as a waiver of that or any other right or remedy on any other occasion or instance.

**FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

**SOVEREIGN IMMUNITY:** Notwithstanding any other term or provision in The Contract, nothing herein is intended nor shall be interpreted as waiving any claim or defense based on the principle of sovereign immunity or state or federal constitutional provision or principle that otherwise would be available to the County under applicable law.

## **Project Scope:**

This project will consist of replacing fields 1, 2, & 8 with an artificial turf system at the **Buncombe County Sports Park** at 58 Apac Dr. Asheville, NC 28806. Refer to the **Buncombe County Sports Park Synthetic Turf Fields Preliminary Layout & Grading Plans** (attached) for job scope for turf fields inside the Sports Park. The new field make-up will consist of a full system with drainage and any other items required by code for this project. Any respondents must be authorized installers of the following materials. The County will provide the following materials (to be purchased by the County after contract is awarded) for the contractor to install:

### **PART 2 – PRODUCTS**

#### **2.1 MANUFACTURERS**

A. The approved Synthetic Turf products identified for the purpose of this bidding solicitation are:

1. Astroturf - 2.25" Rhino 42 (Slit Film)
2. Shaw Sports Turf - 2.25" Momentum 2.25 42oz (Slit Film)
3. Fields, Inc. - 2.25" Field 42 (42oz) (Slit Film)

Selection of these products represents the required minimum performance criteria as outlined herein. The manufacturer's performance criteria and product properties and declarations both physical and chemical are as represented by the manufacturers at the time of this solicitation. Requests for pre-approval of products must be submitted to the owner and approved prior to pre-bid meeting and bid receipt.

B. The approved shock pad products identified for the purpose of this bidding solicitation are:

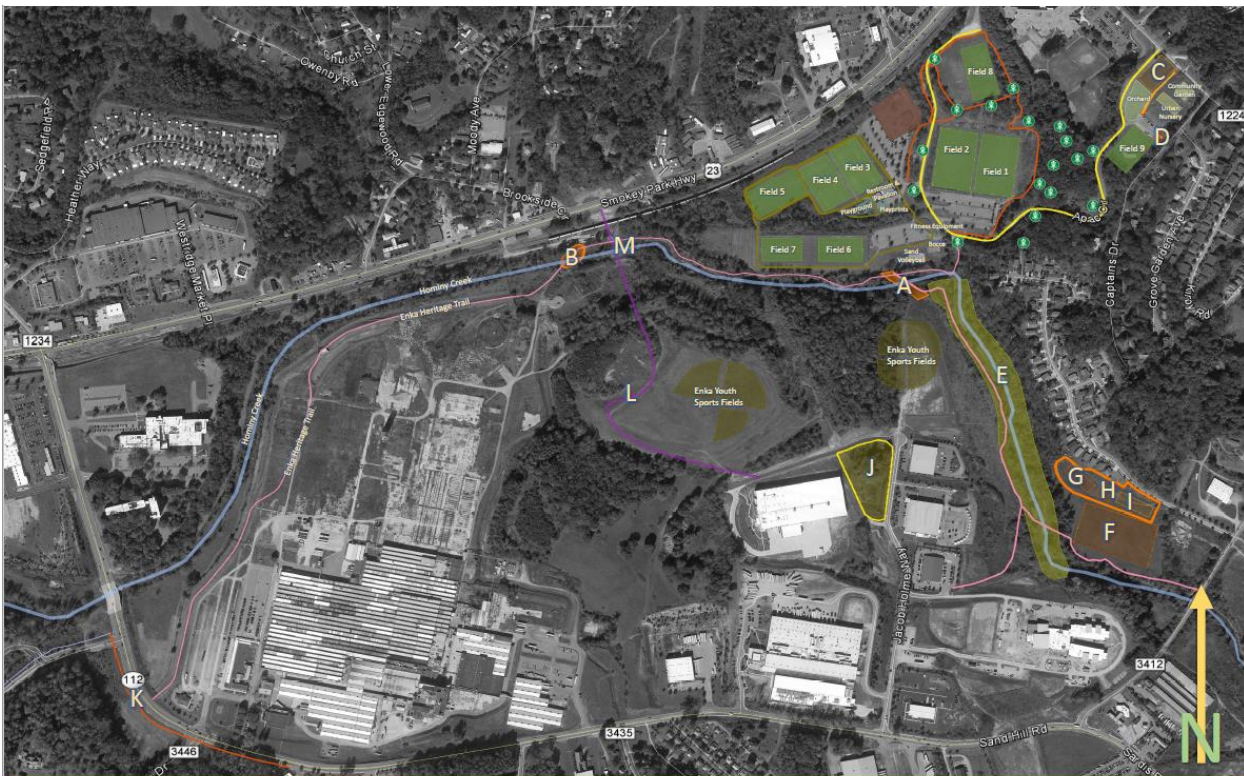
1. Brock International - Powerbase SP14 Composite Shock Pad
2. Schmitz Foam – ProPlay Sport 23D thermal bonded (closed-cell) cross-linked Polyethylene foam (PEX or XPE)

\*All field fencing must be preserved or replaced as part of the project scope. New perimeter fencing is to be added to Field 8.

\*All clean fill from this site will be transferred to the new Multi-Purpose Field on Warren Haynes Dr. This new Multi-Purpose field will need to be designed and built based on the overall Enka Recreation Destination design (attached BCSP Draft Concept Plan) and the Enka Heritage Trail Conceptual Layout (attached). The new field should be leveled and finished with natural turf. The new multi-purpose field will need to be designed and built accommodate the new Challenge Course, Yalp Toro Court, Athletic Agility Course (installed by others), and a new, level Multi-Purpose Field (included in this contract).

All other materials, installation, and design will be the bidder's responsibility. This is a turn-key design/build contract. Respondents need to be able to handle all aspects of the design and installation within one contract and will be responsible for everything except the materials listed above.

The parking lot at Field 8 requires some changes and reconfiguration, as shown on the designs in this document. The construction and reconfiguration of that parking lot should be included in all proposals.



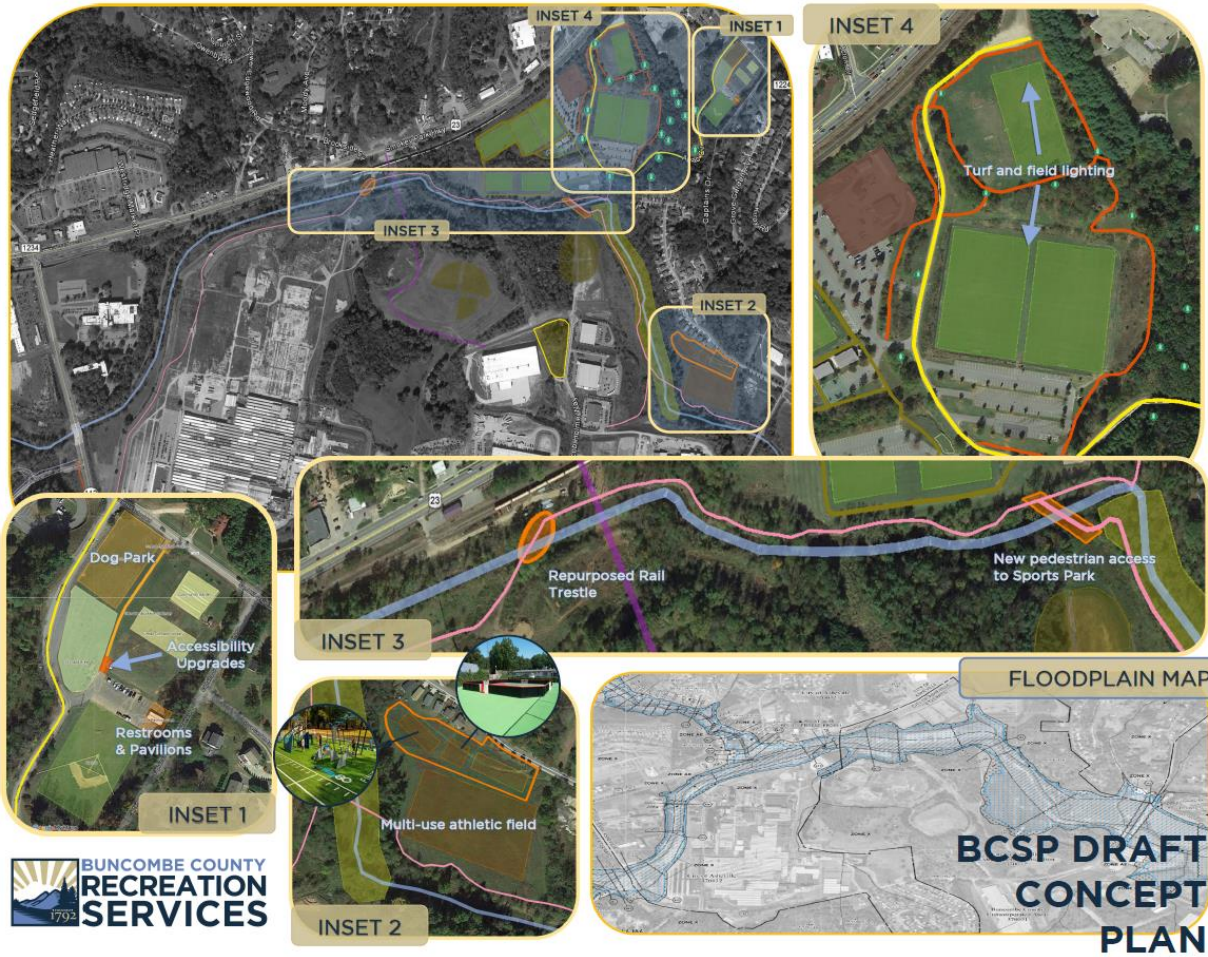
## Enka Heritage Trail Conceptual Layout

### Key Features

- A. Pedestrian Connector Bridge
- B. Repurposed Rail Road Trestle
- C. Dog Park
- D. Educational Pavilion and Restrooms
- E. Rivercane Interpretative Area

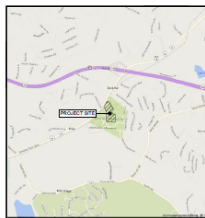
- F. Multi-Use Athletic Field
- G. Challenge Course
- H. Yalp Toro (4-way Soccer/Hockey Court)
- I. Athletic Agility Course
- J. Potential Fire Station Location

- K. New Sidewalk Connection to Biltmore Lake
- L. New Vehicular Road to Fletcher Partners
- M. New Vehicular Bridge to Fletcher Partners



# BUNCOMBE COUNTY SPORTS PARK SYNTHETIC TURF FIELDS PRELIMINARY LAYOUT & GRADING PLANS

58 APAC CIRCLE  
ASHEVILLE, NORTH CAROLINA 28806



**VICINITY MAP**  
SCALE: 1" = 2,000'

PRELIMINARY DRAWING INDEX		
DRAWING COUNTY	SHEET NUMBER	SHEET NAME
001	000	COVER SHEET
1	001	SYNTHETIC TURF FIELDS 1 & 2
2	002	SYNTHETIC TURF FIELDS 3 & 4
3	003	SYNTHETIC TURF FIELDS 5 & 6
4	004	SYNTHETIC TURF FIELDS 7 & 8
5	005	SYNTHETIC TURF FIELDS 9 & 10

**OWNER/DEVELOPER**  
ASHEVILLE BUNCOMBE YOUTH SOCCER ASSOCIATION  
593 AZALEA ROAD EAST  
ASHEVILLE, NC 28805  
CONTACT: MIKE ROTTJAKOB  
PHONE: (828) 299-7277 x 302  
EMAIL: MIKER@ABYSA.ORG

**SITE/CIVIL ENGINEER**  
LEADING DESIGN & DEVELOPMENT, LLC  
13384 BERLIN TURNPIKE  
LOVETTSVILLE, VIRGINIA 20182  
CONTACT: MATT VETTER, P.E.  
PHONE: (703) 999-9748  
EMAIL: MATT.VETTER@LDDSPORTS.COM

**DRAFT**

**LDDSPORTS**

**LEADING DESIGN AND DEVELOPMENT, LLC.**  
13384 BERLIN TURNPIKE  
LOVETTSVILLE, VA 20182  
WWW.LDDSPORTS.COM

**REVISION**

NO.	DESCRIPTION	DATE

**PROJECT NAME:**  
BUNCOMBE COUNTY SPORTS PARK - SYNTHETIC TURF FIELDS  
58 APAC CIRCLE  
ASHEVILLE, NC 28806

**DRAWN BY:** JESSIE WOOD  
**CHECKED BY:** JESSIE WOOD  
**PROJECT NO.:** 2019-08

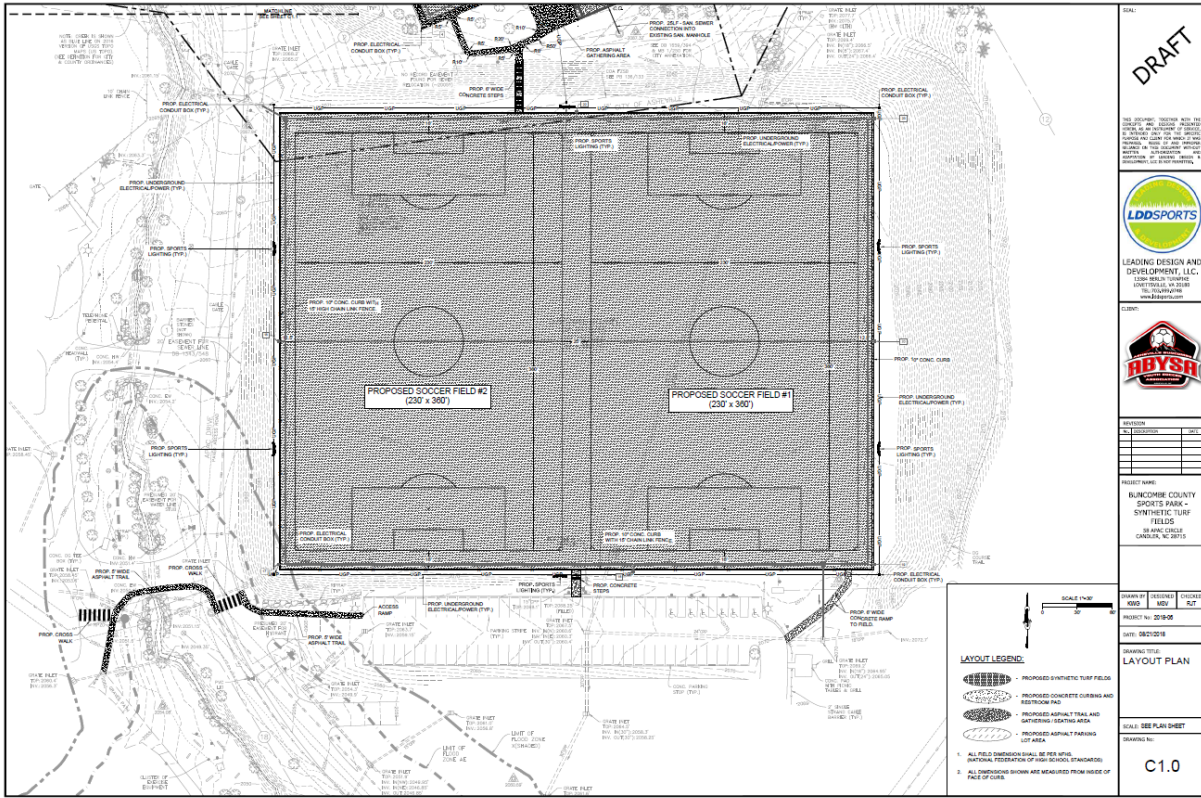
**DATE:** 08/20/19

**DRAWING TITLE:**  
COVER SHEET

**SCALE:** SEE PLAN SHEET

**DRAWING NO.:**  
C0.0





**DRAFT**

LEADING DESIGN AND DEVELOPMENT, LLC  
 1001 COUNTRY CLUB DRIVE  
 WILKINSON, NC 27689  
 WWW.LEADINGDESIGN.COM

**LDDSPORTS**

**ABYSA**

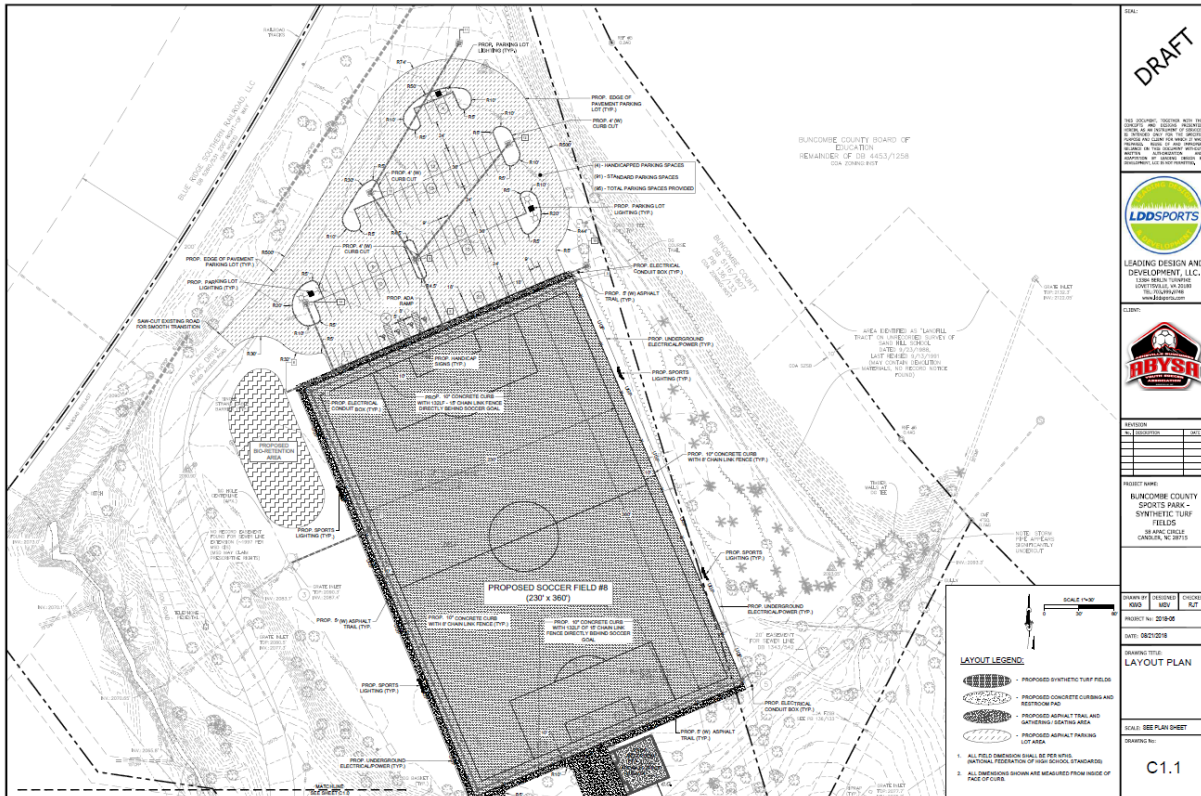
**REVISION:**

NO.	DESCRIPTION	DATE

**PROJECT NAME:** BUNCOMBE COUNTY SOCCER PARK - SYNTHETIC TURF FIELDS  
 80 ANAC CIRCLE  
 CARRERA, NC 28715

**SCALE:** SEE PLAN SHEET

**DRAWING NO.:** C1.0



**DRAFT**

LEADING DESIGN AND DEVELOPMENT, LLC  
 1001 COUNTRY CLUB DRIVE  
 WILKINSON, NC 27689  
 WWW.LEADINGDESIGN.COM

**LDDSPORTS**

**ABYSA**

**REVISION:**

NO.	DESCRIPTION	DATE

**PROJECT NAME:** BUNCOMBE COUNTY SOCCER PARK - SYNTHETIC TURF FIELDS  
 80 ANAC CIRCLE  
 CARRERA, NC 28715

**SCALE:** SEE PLAN SHEET

**DRAWING NO.:** C1.1



## Lighting:

The New turf fields inside the Sports Park will have lighting provided by MUSCO (Design Attached). All field design and construction will need to work around and accommodate the lighting design.

**Buncombe County Sports Park Soccer**  
Asheville, NC

**Lighting System**

Fixture	Pole Height	Mq Height	Fixture Qty	Luminaire Type	Load	Circuit
B1-B2	80'	80'	7	TLC-LED-1160	8.05 kW	A
B3	80'	80'	7	TLC-LED-1160	8.05 kW	A
B4-B5	80'	80'	7	TLC-LED-1160	8.05 kW	B
B6	80'	80'	2	CREE CIG2	0.26 kW	C
B7	80'	80'	7	TLC-LED-1160	8.05 kW	B
B8	80'	80'	7	TLC-LED-1160	8.05 kW	A
<b>#</b>			<b>58</b>		<b>64.66 kW</b>	

**Circuit Summary**

Circuit	Description	Load	Fixture Qty
A	Soccer 1	32.2 kW	28
B	Soccer 2	32.2 kW	28
C	Walkway Lighting	0.26 kW	2

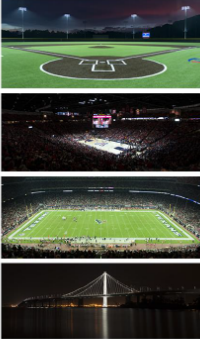
**Fixture Type Summary**


Fix	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1160	LED 5700K-75 CRI	1160W	121,000	+81,000	+81,000	+81,000	56
CREE CIG2	LED 5700K-70 CRI	130W	17,000	-	-	-	2

**Light Level Summary**

Grid Name	Calculation Method	Illuminance					Circuit	Fixture Qty
		Foot	Mt	Mm	Max/Min	Avg/Min		
Soccer 1	Horizontal Illuminance	31.8	20	44	2.21	1.59	A	28
Soccer 2	Horizontal Illuminance	31.8	20	44	2.17	1.59	B	28
Walkway Lighting	Horizontal	0.71	0	6	2629.76		C	2

From Hometown to Professional





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ENGINEERED DESIGN By: Clayton Cudworth • File #190669A 1-2 • 04-Dec-18

PROJECT SUMMARY

Buncombe County Sports Park Soccer Asheville, NC

EQUIPMENT LIST FOR AREAS SHOWN								
QTY	LOCATION	SIZE	GRADE	WARRANTY	LUMINAIRE	QTY	SIZE	GRADE
2	15,37	80'	-	8YR	TLC-LED-1150	14	0"	7'
1	38	80'	-	8YR	TLC-LED-1150	14	0"	7'
1	38	80'	-	8YR	TLC-LED-1150	14	0"	7'
4						56	36"	36"

GRID SUMMARY			
Name: Soccer 1			
Site: 360' x 130'			
Spacing: 30'0" x 30'0"			
Height: 3'0" above grade			
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOT-CANDLES			
Entire Grid			
Guaranteed Average:	36		
Spot Average:	31.61		
Maximum:	44		
Minimum:	20		
Ave / Min:	1.58		
Guaranteed Max / Min:	2.17		
Max / Min:	2.21		
UG (adjacent pts):	1.44		
CU:	0.80		
No. of Fixtures:	56		
LUMINAIRE INFORMATION			
Color / CRI:	3700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	28		
Total Load:	32.2 kW		
Lumen Maintenance			
Luminaire Type	150 hrs	180 hrs	170 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-4-13.

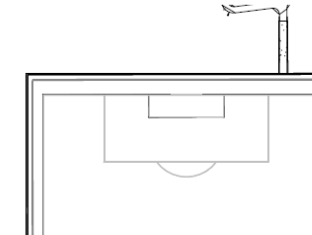
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume a 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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**ILLUMINATION SUMMARY**

EQUIPMENT LIST FOR AREAS SHOWN								
QTY	LOCATION	SIZE	GRADE	WARRANTY	LUMINAIRE	QTY	SIZE	GRADE
1	31	80'	-	8YR	TLC-LED-1150	14	0"	7'
2	34,53	80'	-	8YR	TLC-LED-1150	7	0"	7'
1	38	80'	-	8YR	TLC-LED-1150	14	0"	7'
4						56	36"	36"



GRID SUMMARY			
Name: Soccer 1			
Site: 360' x 130'			
Spacing: 30'0" x 30'0"			
Height: 3'0" above grade			
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOT-CANDLES			
Entire Grid			
Guaranteed Average:	36		
Spot Average:	31.61		
Maximum:	44		
Minimum:	20		
Ave / Min:	1.58		
Guaranteed Max / Min:	2.17		
Max / Min:	2.21		
UG (adjacent pts):	1.44		
CU:	0.80		
No. of Fixtures:	56		
LUMINAIRE INFORMATION			
Color / CRI:	3700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	28		
Total Load:	32.2 kW		
Lumen Maintenance			
Luminaire Type	150 hrs	180 hrs	170 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

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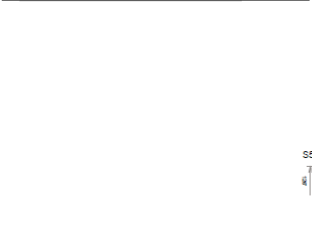
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QTY	LOCATION	SIZE	GRADE	WARRANTY	LUMINAIRE	QTY	SIZE	GRADE
1	31	80'	-	8YR	TLC-LED-1150	14	0"	7'
2	34,53	80'	-	8YR	TLC-LED-1150	7	0"	7'
1	38	80'	-	8YR	TLC-LED-1150	14	0"	7'
4						56	36"	36"



GRID SUMMARY			
Name: Soccer 2			
Site: 360' x 130'			
Spacing: 30'0" x 30'0"			
Height: 3'0" above grade			
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOT-CANDLES			
Entire Grid			
Guaranteed Average:	36		
Spot Average:	31.61		
Maximum:	44		
Minimum:	20		
Ave / Min:	1.58		
Guaranteed Max / Min:	2.17		
Max / Min:	2.17		
UG (adjacent pts):	1.39		
CU:	0.80		
No. of Fixtures:	56		
LUMINAIRE INFORMATION			
Color / CRI:	3700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	28		
Total Load:	32.2 kW		
Lumen Maintenance			
Luminaire Type	150 hrs	180 hrs	170 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-4-13.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume a 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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**ILLUMINATION SUMMARY**

EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	SIZE	GRADE	MOUNTING	WATTAGE	TYPE	QTY	TYPE	SHIELD
1	36	80'		BP	CHFF GGG	14	2	14	14
1	TOTAL					14	2	14	14

GRID SUMMARY	
Name:	Walkway Lighting
Size:	360' x 230'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

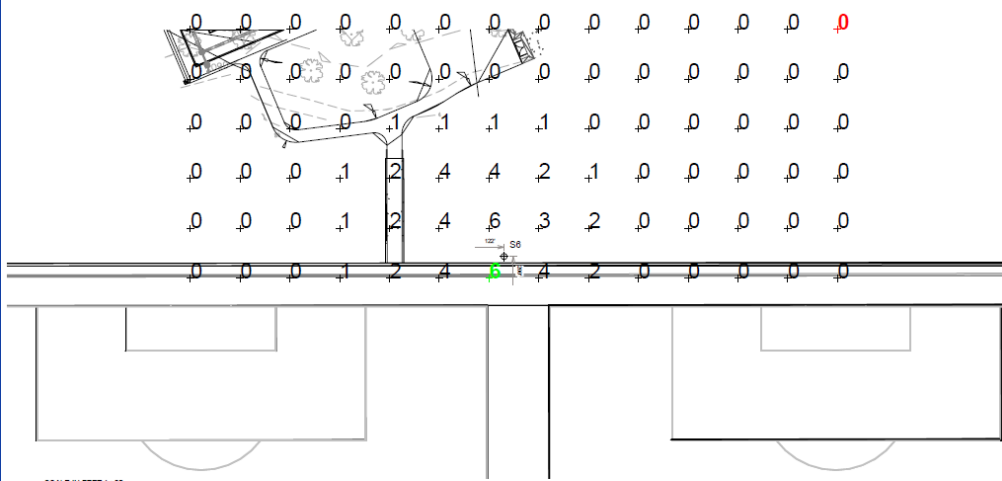
ILLUMINATION SUMMARY			
MEASURED HORIZONTAL FOOT COUNTELS			
Entire Grid			
Scan Average:	0.71		
Maximum:	6		
Minimum:	0		
Avg / Min:	392.40		
Max / Min:	2629.76		
UG (adjacent pts):	0.99		
CU:	0.72		
No. of Points:	84		
LUMINAIRE SPECIFICATIONS			
Color / CRI:	5700K - 70 CRI		
Luminaire Output:	17,000 lumens		
No. of Luminaires:	2		
Total Load:	0.26 kW		
Lumen Maintenance			
Luminaire Type:	180 hrs	180 hrs	170 hrs
CREG CSD:	--	--	--

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dim depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-4-03.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1" = 30'

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**ILLUMINATION SUMMARY**

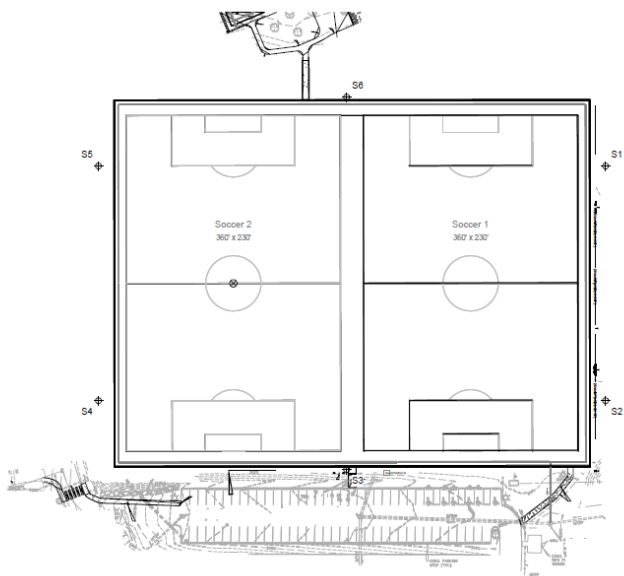
EQUIPMENT LAYOUT	
INCLUDES:	
- Soccer 1	
- Soccer 2	

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	SIZE	GRADE	MOUNTING	WATTAGE	TYPE	QTY	TYPE	SHIELD
4	15-52	80'		BP	TIC-LED-1150	18	1	18	18
1	36	80'		BP	CHFF GGG	14	2	14	14
1	36	80'		BP	TIC-LED-1150	18	1	18	18
1	TOTAL					48	4	48	48

MUSCO ILLUMINATION SPECIFICATIONS DRAW CHART	
Ballast Specifications	
Line Amperage Per Luminaire	
(All data given in feet)	
Single Phase Voltage	208 220 240 277 347 380 480
Line Voltage	208 220 240 277 347 380 480
TIC-LED-1150	0.8 1.0 1.2 1.5 1.8 2.1 2.2
Chff GGG	- - - - - - - -



SCALE IN FEET 1" = 30'

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**EQUIPMENT LAYOUT**

Buncombe County Sports Park Soccer  
Asheville, NC

Lighting System

File / Fixture Summary						
File ID	Pole Height	Max Height	Fixture Qty	Luminaire Type	Load	Circuit
SP-110	70	70	7	TLC-LED-1150	32.2 kW	A
<b>4</b>			<b>28</b>			

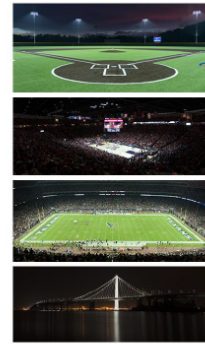
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Soccer 8	32.2 kW	28

Fixture Type Summary							
Type	Source	Voltage	Lumens	L90	L80	L70	Quantity
TLC-LED-1150	LED (700K-75 CRI)	1150V	121,000	>81,000	>61,000	>41,000	28

Light Level Summary

Calculation Grid Summary							
Grid Name	Calculation Metric	Avg	Min	Max	Max/Min	Circuit	Fixture Qty
Soccer 8	Horizontal Illuminance	32.8	27	41	1.50	A	28

From Hometown to Professional

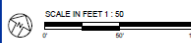
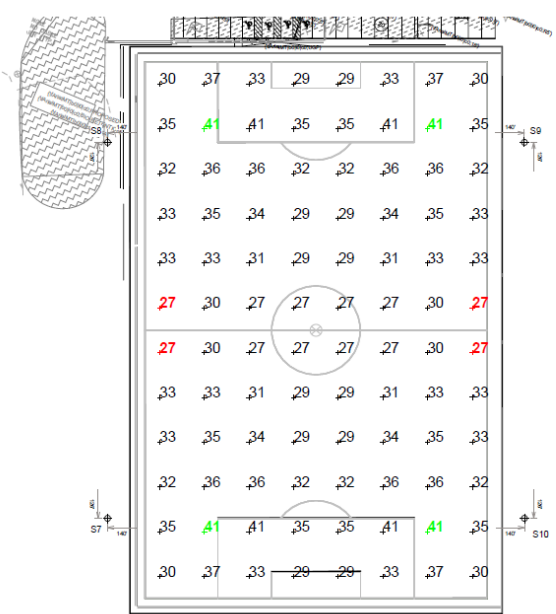


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PROJECT SUMMARY

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EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	SIZE	DATE	MO/NO	TYPE	QTY	SIZE	DATE	MO/NO
4	SP-110	70'	2018	08/15	TLC-LED-1150	28	28	0	0



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Buncombe County Sports Park Soccer  
Asheville, NC

GRID SUMMARY	
Name:	Soccer 8
Size:	300' x 200'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
Entire Grid	
Guaranteed Average:	30
Scale Average:	32.75
Maximum:	41
Minimum:	27
Ave / Min:	1.20
Guaranteed Max / Min:	1.50
Max / Min:	1.50
UG (adjacent PPS):	1.24
CU:	0.84
No. of Poles:	96

LUMINAIRE INFORMATION	
Color / CRI:	7000K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	28
Total Load:	32.2 kW

LUMEN INFORMATION			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>61,000	>41,000

Required per TM 21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 gft depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-1-13.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

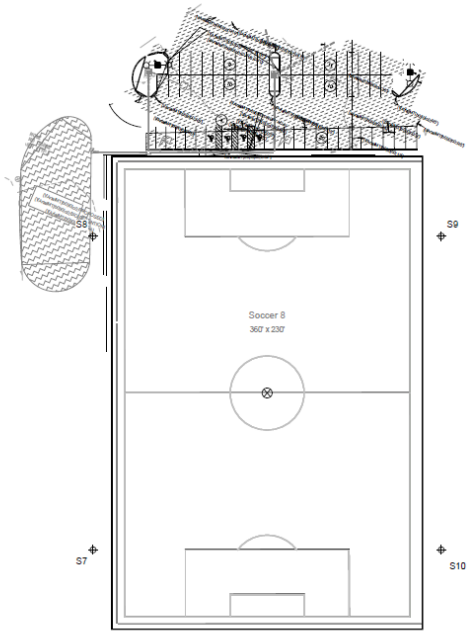
**EQUIPMENT LAYOUT**  
**INCLUDES:**  
 - Soccer 8  
**Electrical System Requirements: Refer to Amperege**  
**Draw Charts and/or the "Mass Control System Summary"**  
**For electrical sizing.**  
**Installation Requirements: Results assume 3.5%**  
**potential voltage at one side of the driver and structures**  
**located within a feet (Lm) of design locations.**

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	SIZE	WATTAGE	WATTAGE	LUMINAIRES	WATTAGE
1	S7	10' x 10'	100	100	100	100
1	S8	10' x 10'	100	100	100	100
1	S9	10' x 10'	100	100	100	100
1	S10	10' x 10'	100	100	100	100

**MINIMUM REQUIREMENTS FOR EQUIPMENT LAYOUT**

Ballast Specifications	Line Amperage Per Luminaire
Single Phase Voltage	208 220 240 277 347 380 480
Line Amperage	0.8 0.9 1.0 1.1 1.2 1.3 1.4



SCALE IN FEET 1" = 50'  
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Pole locations (⊕) dimensions are relative to 0.0 reference points (⊙)



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**EQUIPMENT LAYOUT**

**Yalp Toro Court:**

New field design on Warren Haynes Dr. needs to accommodate the new Yalp Toro Court that will be installed (installation by others). Providing a level surface on the new field is the only part in the scope of this project.

**Athletic Agility Course:**

New field design on Warren Haynes Dr. needs to accommodate the new Athletic Agility Course (installation by others). Level surface for agility course is all that is required in this scope.

**Challenge Course:**

New field design on Warren Haynes Dr. needs to accommodate the new Challenge Course (Installation by others). Level surface is all that is required in this scope.

**Miscellaneous:**

Other items might be added in the negotiation period.