



# City of Gainesville

Department of Financial Services  
Procurement Division

## ADDENDUM NO. 1

**Addendum Publish Date:** November 17, 2022  
**Bid Questions Due Date:** November 15, 2022, 3:00pm EST  
**Bid Due Date:** November 22, 2022, 3:00pm EST  
**Bid Name:** FOREST PARK IMPROVEMENTS  
**Bid Number:** WSPP-230023-GD

**NOTE:** The original Specifications remain in full force and effect except as revised by the following changes which shall take precedence over anything to the contrary.

### 1. Please find attached:

- a. A copy of the Cone of Silence period information (Financial Procedures Manual Section 41-424 Prohibition of lobbying in procurement matters) that was discussed.
- b. A copy of the Pre-Bid Discussion/Information Checklist
- c. A copy of the Pre-Bid Sign-in Sheet
- d. Forest Park-Photometric Plan 10-26-22
- e. Forest Park-Sheet P1 11-16-22
- f. Forest Park-Sheet P2 11-16-22
- g. Forest Park-Sheet P3 11-16-22
- h. Forest Park-Sheet P4 11-16-22
- i. Forest Park-Sheet P5 11-16-22
- j. Forest Park-Sheet P6 11-16-22
- k. Forest Park-Sheet Vulcan Materials Company Goldhead Sand Plant – Granularmetric Report

### 2. Following is a review of the Non-Mandatory Pre-Bid Meeting that was held at 4501 SW 20<sup>th</sup> Ave, Gainesville, FL 32607:

- a. City of Gainesville Staff represented by Gayle Dykeman, City of Gainesville Procurement Specialist III and Peter McNiece, Project Manager.
- b. Gayle Dykeman started the meeting by reviewing important Procurement areas of the solicitation, including the solicitation schedule and submittal due date.
  1. All communication must go through Gayle Dykeman throughout the duration of the solicitation.
  2. All submittals must be entered in DemandStar.com by the due date and time – DemandStar is programmed to reject any bids that are entered after that time. DemandStar is a free tool for vendors to submit bids. DemandStar will automatically close the solicitation at the specified date and time, and the City will not accept any late proposals, regardless of the format presented.
  3. Provided guidance regarding the Cone of Silence.
  4. All other areas covered by Procurement are listed in the Pre-Bid Discussion/Information Checklist, Attachment A



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- c. Peter McNiece, Wild Spaces & Public Places Project Manager provided an overview of the project. He indicated that the lighting for Forest Park would be handled by another vendor, and when an award is issued for this project, he would make appropriate introductions for coordination of work. He mentioned that the restrooms will not be renovated and will not be closed to the public. He discussed the major components of the project, including:
  - 1. Reconstruction of the soccer fields – adding tons of fill to the area for proper drainage
  - 2. Reconstruction of the dog park – to be expanded and include a dog wash area
  - 3. Reconstruction of the volleyball court
  - 4. Resurfacing of the basketball court
  - 5. Additional information can be found in the solicitation – ARTICLE 2 – THE PROJECT

### 3. The following are questions and answers that were discussed in the meeting:

- a. Question: What is the estimated or set budget for ITB # WSPP-230023-GD, Forest Park Improvements?  
Answer: The City of Gainesville has budgeted \$2.1 million for this project with the option to commit additional funds if necessary.
- b. Question: Who is responsible for making sure the lighting is installed properly? Who will do the trenching for the lighting installation?  
Answer: NGU Sports Lighting, Inc. will provide and install all products associated with the field and court lighting. They are also responsible for any survey work associated with their scope of work. The general contractor's responsibility for field and court lighting will end at electrical Panels H1/L1 & H2/L2.  

Gainesville Regional Utilities will provide and install the parking lot lighting. The general contractor is responsible for running all conduit and conductors to the GRU-approved 10" round Buried Wire Enclosures at the base of each pole.
- c. Question: Is the basketball court to be ground and resurfaced? Or just resurfaced? Specifically, what surface preparation, if any, is required on the basketball/pickleball court prior to resurfacing? There is cracking, cuts, and evidence of ponding.  
Answer: Courts to be resurfaced with Plexipave should be free of dust, dirt, oily materials, and debris. Pressure wash the surfaces to remove any loose material or contaminants. Flood the entire area in full sunlight. After one hour, mark any puddled areas that exceed 1/8<sup>th</sup> inch in depth for repair using **Court Patch Binder** as per the Plexipave instructions (attached). **California Crack Filler** shall be applied by hand trowel or small broad knife to force crack filler into cracks. Fill any gaps in the concrete greater than 1/4" with high strength grout prior to resurfacing.
- d. Question: If we are removing the existing basketball goals, please provide more information on the removal and how to treat the existing spaces. Are we to cut the poles at grade and infill with concrete? Cut the concrete, remove poles and patch? Please clarify.  
Answer: Remove the existing basketball poles by cutting the pole below grade and filling the depression with high strength grout prior to resurfacing the courts.



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- e. Question: What is the material that will be used to resurface the basketball court?  
Answer: See Symbol V in the Finish Schedule on Sheet L-208. Plexipave (or approved equal) shall be used on the basketball/pickleball courts.
- f. Question: Is there plastic sheeting underneath the basketball court concrete?  
Answer: There does not appear to be any Visqueen plastic under the concrete.
- g. Question: Sheet L209 at the volleyball court - detail 2. What type of sand will be used in the volleyball court?  
Answer: See Symbol Q in the Finish Schedule on Sheet L-208. Play Sand (or approved equal) shall be used at the sand volleyball courts. The proposed substitution from the Vulcan Materials Company Goldhead Sand Plant appears to be equivalent but the contractor will have to submit a sample for review prior to final approval.
- h. Question: How will the City protect the work site from public access?  
Answer: Security of the jobsite will be the responsibility of the general contractor.
- i. Question: Is the parking lot going to be resurfaced?  
Answer: The parking lot will be seal coated and restriped.
- j. Question: Are the existing sidewalks going to be rebuilt/resurfaced?  
Answer: The general contractor will be responsible for replacing a total of 75 LF of 5' wide sidewalk at two locations where it has fallen into disrepair. Owner will identify sections to replace. Where roots are encountered, they must be cut flush.
- k. Question: How does the DemandStar deadline work?  
Answer: DemandStar blocks all bids received after the deadline. There is no flexibility, even one second late - is too late. Procurement will not accept bids in any other format. Be sure to build time into your schedule to submit before the deadline.

**4. The following are questions that have been received via email to Procurement before the Questions deadline:**

- a. Question: Verify that the striping will go back in as shown on C1.00. City is aware that the existing lot has traffic arrows and stop signs which typically require stop bars. Verify none of this will be required. Just sealcoat & stripe as shown on the drawing. If required provide updated drawing so we can get out to our striping contractors to show what is going to be required.  
Answer: Restripe the parking lot exactly as shown on C1.11.
- b. Question: Verify that sports lighting contractor will handle their own survey work.  
Answer: Confirmed.
- c. Question: Sheet L209 at the volleyball court Sports court detail #1 - states to see detail 4/L-208 there is not a detail 4 on that page provide detail referenced.  
Answer: Delete reference to Detail #4 on Sheet L-208 from Detail #1 on Sheet L-209.
- d. Question: Please clarify that the City of Gainesville will be contracting directly with NGU Sports Lighting, Inc. for the field and court lighting. Are we to include any panels, breakers or conductors for this lighting? Please clarify the extent of this scope.  
Answer: The City of Gainesville will be contracting directly with NGU Sports Lighting, Inc. for the field and court lighting. The general contractor is responsible for all electrical work to, and including, Panels H1/L1 & H2/L2. NGU Sports Lighting, Inc. will provide and install the light poles and lamps and run all conduits and



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conductors from the electrical panels to their lights. The general contractor is responsible for coordinating the work with NGU Sports Lighting, Inc.

- e. Question: Sheet L209 at the volleyball court - detail 2: Calls for a foot of gravel under the sand/fabric - are you going to require the DOT gravel as noted on civil detail or are you going to allow recycled especially since it is buried and not seen. Is recycled #57 stone going to be acceptable or is granite going to be required. Note on C2.30 states for it to be FDOT certified and recycled materials are not certified -but they are half the cost of granite materials & what is typically used in the parks.
- Answer: Use recycled #57 stone under the sand volleyball courts.
- f. Question: Sheet L201 - Verify that the volleyball / basketball / pickle ball detail note for layout is supposed to be as shown on L209 and not as noted L-208.
- Answer: Use details on Sheet L-209 for the volleyball/basketball/pickleball courts.
- g. Question: What is your intention for the electrical conduit going through the parking lot? Per civil drawings we are to seal coat only except at the entrance. However per the P drawings it shows the conduits running through the parking lot in multiple locations. Verify if conduit is to be installed by open cut or directional bore.
- Answer: Contractor may directional bore or open trench. If the asphalt is cut, however, use flowable fill as backfill and patch the asphalt prior to sealcoating.
- h. Question: Verify all concrete is to have fiber per notes on C0.10 or do we go by the concrete detail on C2.30 with no fiber.
- Answer: All concrete shall have FiberMesh.
- i. Question: Was there any particular style you would like to have Forest Park enmeshed on the bench?
- Answer: The park name enmeshed in the black metal backs of the Ultra Play benches is laser-cut at the manufacturer and only available in a single font.
- j. Question: How is the city handling escalations?
- Answer: All materials should be ordered as soon as possible. The City of Gainesville will pay for all materials that are delivered to the site. Any price escalations will be handled on a case-by-case basis but few, if any, are expected on this project.
- k. Question: How is the city handling the long lead items that will impact time frames?
- Answer: The only long-lead item we are currently aware of is the sports and field lighting equipment. NGU Sports Lighting, Inc. has already started the procurement process so those materials will be onsite in early 2023. The general contractor is responsible for identifying and ordering all materials that could have a schedule impact as early as possible in the project. Immediately inform the City of Gainesville if any suppliers expect materials to arrive later than needed to complete the project on time. Electrical panels and the GRU-approved 10" round Buried Wire Enclosures have been problematic on recent projects.
- l. Question: The \$100,000 contingency per bid documents is that to be carried in our bid or is city just informing us - how do you want us to carry?
- Answer: For informational purposes only. The City of Gainesville intends to use these funds in the event there are Owner-directed changes to the scope of work.



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- m. Question: Please provide more detail on the sub-base for the new sports grass.  
Answer: All fill must comply with Paragraph 2.1 DEEP FILL in the Landscape Specifications, Sheet L-310.
- n. Question: Are there any plans to use synthetic turf?  
Answer: No.
- o. Question: Will any additional specifications be provided?  
Answer: No.
- p. Question: Confirm contractor is responsible for ROW permit work at rehabilitated entrance.  
Answer: Confirmed.
- q. Question: Section A-A on C2.11 is not shown on the plan. Appears to be across the rehabilitated entrance. Please clarify.  
Answer: Section A-A is a cut mid-way through the rehabilitated entrance.
- r. Question: Who stripes the soccer fields? If Contractor, how are the soccer fields to be striped and with what product?  
Answer: The general contractor is responsible for the initial striping of the soccer fields. The Gainesville Regional Soccer League will then assume this responsibility. Please coordinate with GRSL member John Malanchuk at (352) 359-1051. He uses a local vendor qualified to perform this work at a cost of \$300 per field.
- s. Question: L-211 indicates concrete is 5" thick. Civil shows 4". Please clarify.  
Answer: Sidewalks shall be 4" thick.
- t. Question: Are mortar joints on 10' Kick Wall per L-212 to be tooled or struck flush? Confirm top course is KO course. Confirm top of footer of Kick Wall is flush with finish grade, not covered. If confirmed, what is the finish of the exposed concrete at top of footer? Clarify paint system, i.e. how many coats, all exposed surfaces? (Note the CMU is 12" block, not standard 8" block). Please clarify.  
Answer: Mortar joints shall be struck flush and the top course a knock-out bond beam. The top of light broom finished concrete footer shall be flush with grade with a slight pitch away from the wall to prevent standing water. Use 12"x 8"x 16" concrete block. All surfaces shall be painted with Sherwin Williams Anti-Graffiti Coating.



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u. Question: We are going to bid on the sports equipment, site furnishings and shade structures for Forest Park. I have the plans but don't see anything with quantities?

Answer: Note that one of the benches in the pavilion is an ADA bench.

Item No.	Item	Qty	Unit
A	Table	14	EA
B	Bench	12	EA
C	Player Bench	22	EA
D	Bleachers	30	EA
E	Grill	1	EA
F	Trash Receptacle	8	EA
H	Water Fountain	7	EA
I	Dog Washing Station	1	EA
J	Shade Structure	13	EA
K	Pavilion	1	EA
Y	Bollard	130	EA
Z	Removable Bollard	9	EA
AA	Storage Bin	1	EA

### Additional Changes:

Please incorporate the attached photometric plan and six power sheets (P-1, P-2, P-3, P-4, P-5, and P-6) dated 11-16-22 into the bid set of drawings. There has been a substantial redesign of the electrical system to accommodate the increased lighting requirements. The system was converted to 480V.

The fencing on the west side of the basketball/pickleball courts will be 10' tall with windscreens instead of the 4' tall fencing called for on the plans.

**ACKNOWLEDGMENT:** Each Proposer shall acknowledge receipt of this Addendum No. 1 by his or her signature below, **and a copy of this Addendum to be returned with proposal.**

### **CERTIFICATION BY PROPOSER**

The undersigned acknowledges receipt of this Addendum No. 1 and the Proposal submitted is in accordance with information, instructions, and stipulations set forth herein.

PROPOSER COMPANY NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

LEGIBLY PRINT NAME: \_\_\_\_\_

DATE: \_\_\_\_\_



# **City of Gainesville**

Department of Financial Services  
Procurement Division

## **CITY OF GAINESVILLE FINANCIAL SERVICES PROCEDURES MANUAL**

### **41-424 Prohibition of lobbying in procurement matters**

Except as expressly set forth in Resolution 170116, Section 9, during the Cone of Silence as defined herein no person may lobby, on behalf of a competing party in a particular procurement process, City Officials or employees, except the Procurement Division or the procurement designated staff contact person. Violation of this provision shall result in disqualification of the party on whose behalf the lobbying occurred.

Cone of Silence period means the period between the issue date which allows for immediate submittals to the City of Gainesville Procurement Division in response to an invitation to bid, or a request for proposal, or qualifications, or information, or an invitation to negotiate, as applicable, and the time that City Officials or the Procurement Division, or City Department awards the contract.

Lobbying means when a person seeks to influence or attempt to influence City Officials or employees with respect to a decision of the City, except as authorized by procurement procedures.



City of Gainesville  
Procurement Division  
200 E University Avenue, Rm 339  
Gainesville, FL 32601  
(352) 334-5021(main)

**ATTACHMENT A**  
**PRE-BID DISCUSSION/INFORMATION CHECKLIST**

**BID NAME:** Forest Park Improvements

**BID NUMBER:** WSPP-230023-GD

**PRE-BID MEETING DATE:** 11/9/22, 1:30pm EST

\_\_\_\_\_ Introduce staff attending meeting – Gayle Dykeman, Procurement Specialist, Peter McNiece, Project Manager

\_\_\_\_\_ Questions/Answers and topics of discussion addressed at the pre-bid will be available through <https://www.demandstar.com/> in future Addendums. There is no cost to the vendor to use all vendor capabilities when bidding on a City of Gainesville solicitation.

\_\_\_\_\_ Any questions must be in writing

- Email to [dykemangb@gainesvillefl.gov](mailto:dykemangb@gainesvillefl.gov)
- Questions Deadline: November 15, 2022, 3:00pm EST

\_\_\_\_\_ All communication, contact and/or correspondence must be with [dykemangb@gainnsvillefl.gov](mailto:dykemangb@gainnsvillefl.gov) or CITY Purchasing Division staff. CONE OF SILENCE

- Bidders who have contact with anyone other than Gayle Dykeman or CITY Purchasing Division staff, (examples of “anyone other than”: Department Staff, City Manager, City elected officials, etc.) will be disqualified.

\_\_\_\_\_ Bid Due Date: November 22, 2022 at 3:00PM local time

\_\_\_\_\_ Location to receive bids: Demandstar.com.

\_\_\_\_\_ Deviations – Article 13.12

\_\_\_\_\_ Local Preference - Article 23

\_\_\_\_\_ Small and Service Disabled Veteran Business Participation – Article 1, C.

\_\_\_\_\_ Living wage – Article 25

\_\_\_\_\_ Addenda

- Sign and return each addendum with bid



CITY OF GAINESVILLE  
GENERAL GOVERNMENT PROCUREMENT DIVISION  
NON-MANDATORY PRE-BID CONFERENCE

Forest Park Improvements

DATE: November 9, 2022, 1:30pm EST

BID #WSPP-230023-GD

BID DUE DATE: November 22, 2022 @ 3:00PM EDT

YOUR COMPANY'S NAME, ADDRESS &  
PHONE NUMBER

YOUR SIGNATURE, PRINTED NAME,  
EMAIL ADDRESS & FAX NUMBER

1) Pro Sealed Asphalt inc  
Matthew Cox  
4221 South Point Blvd Jax FL 32216  
PHONE # (904) 451-8616

[Signature]  
SIGNATURE  
Matthew Cox  
PRINTED NAME  
E-MAIL: matt.cox@prosealedasphalt.com  
FAX # ( )

2) Pro Sealed Asphalt inc.  
Jeremy Holcombe  
4221 Southpoint Blvd Jax, FL 32216  
PHONE # (904) 315-6356

[Signature]  
SIGNATURE  
Jeremy Holcombe  
PRINTED NAME  
E-MAIL: Jeremyh@prosealedasphalt.com  
FAX # ( )

3) Joyner Construction Partners  
7545 W. University Ave, Suite B  
Gainesville, FL 32607  
PHONE # (352) 332-8171

[Signature]  
SIGNATURE  
Ryland Wagner  
PRINTED NAME  
E-MAIL: info@joyner-construction.net  
FAX # (352) 332-9777

4) AKEA, Inc  
3603 NW 98th St. - Suite B  
GAINESVILLE, FL 32606  
PHONE # (352) 284-9271

[Signature]  
SIGNATURE  
Dennis Ramsay  
PRINTED NAME  
E-MAIL: dramsay@akea-inc.com  
FAX # ( )

5) Hellas Construction  
12000 West Parmer Lane  
Austin, TX 78613  
PHONE # (512) 250 2910

[Signature]  
SIGNATURE  
Mark Molzer  
PRINTED NAME  
E-MAIL: mmolzer@hellasconstruction.com  
FAX # (512) 250-1960

Cell # (904) 465-2306

CITY OF GAINESVILLE  
GENERAL GOVERNMENT PROCUREMENT DIVISION  
NON-MANDATORY PRE-BID CONFERENCE

Forest Park Improvements

DATE: November 9, 2022, 1:30pm EST


BID #WSPP-230023-GD

BID DUE DATE: November 22, 2022 @ 3:00PM EDT


YOUR COMPANY'S NAME, ADDRESS &  
PHONE NUMBER

YOUR SIGNATURE, PRINTED NAME,  
EMAIL ADDRESS & FAX NUMBER

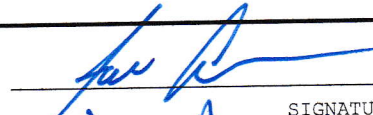
6) Oelrich Construction Inc  
275 NW 137th Dr, Unit A  
Newberry, FL 32669  
PHONE # (941) 780-2700

  
\_\_\_\_\_  
SIGNATURE  
Steve Arrington  
\_\_\_\_\_  
PRINTED NAME  
E-MAIL: sarrington@oelrichconstruction.com  
FAX # ( ) \_\_\_\_\_

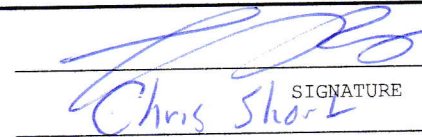
7) Oelrich Construction  
275 NW 137th Dr, Unit A  
Newberry, FL 32669  
PHONE # (352) 472-1334

  
\_\_\_\_\_  
SIGNATURE  
Brent Overturf  
\_\_\_\_\_  
PRINTED NAME  
E-MAIL: boverturf@oelrichconstruction.com  
FAX # ( ) \_\_\_\_\_

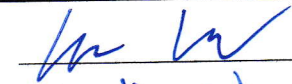
8) Andrews Paving Inc  
6327 NW 123rd Pl  
Gainesville FL 32653  
PHONE # (386) 462-1115

  
\_\_\_\_\_  
SIGNATURE  
JON ANDERSON  
\_\_\_\_\_  
PRINTED NAME  
E-MAIL: jon@andrewspavinginc.com  
FAX # (386) 462-4681

9) Florida Green Keepers LLC  
1401 NW 53rd Ave  
Gainesville FL 32609  
PHONE # ( ) \_\_\_\_\_

  
\_\_\_\_\_  
SIGNATURE  
Chris Shark  
\_\_\_\_\_  
PRINTED NAME  
E-MAIL: Chris@floridagreenkeepers.com  
FAX # ( ) \_\_\_\_\_

10) Decker Construction  
1503 NW 16th Ave  
Gainesville  
PHONE # (352) 448 1428  
352 318 9149

  
\_\_\_\_\_  
SIGNATURE  
Karlin Warrentin  
\_\_\_\_\_  
PRINTED NAME  
E-MAIL: Karlin@deckercm.com  
FAX # ( ) \_\_\_\_\_

CITY OF GAINESVILLE  
GENERAL GOVERNMENT PROCUREMENT DIVISION  
NON-MANDATORY PRE-BID CONFERENCE

Forest Park Improvements

DATE: November 9, 2022, 1:30pm EST

BID #WSPP-230023-GD

BID DUE DATE: November 22, 2022 @ 3:00PM EDT

YOUR COMPANY'S NAME, ADDRESS &  
PHONE NUMBER

YOUR SIGNATURE, PRINTED NAME,  
EMAIL ADDRESS & FAX NUMBER

11) Thomas Cases  
KCE Engineering Solutions  
6400 St Mary, Ft 32040  
PHONE # (504) 275-2500

Thomas Cases  
SIGNATURE  
PRINTED NAME  
E-MAIL: TCASEY@KCEENGINEERING.COM  
FAX # ( )

12) \_\_\_\_\_  
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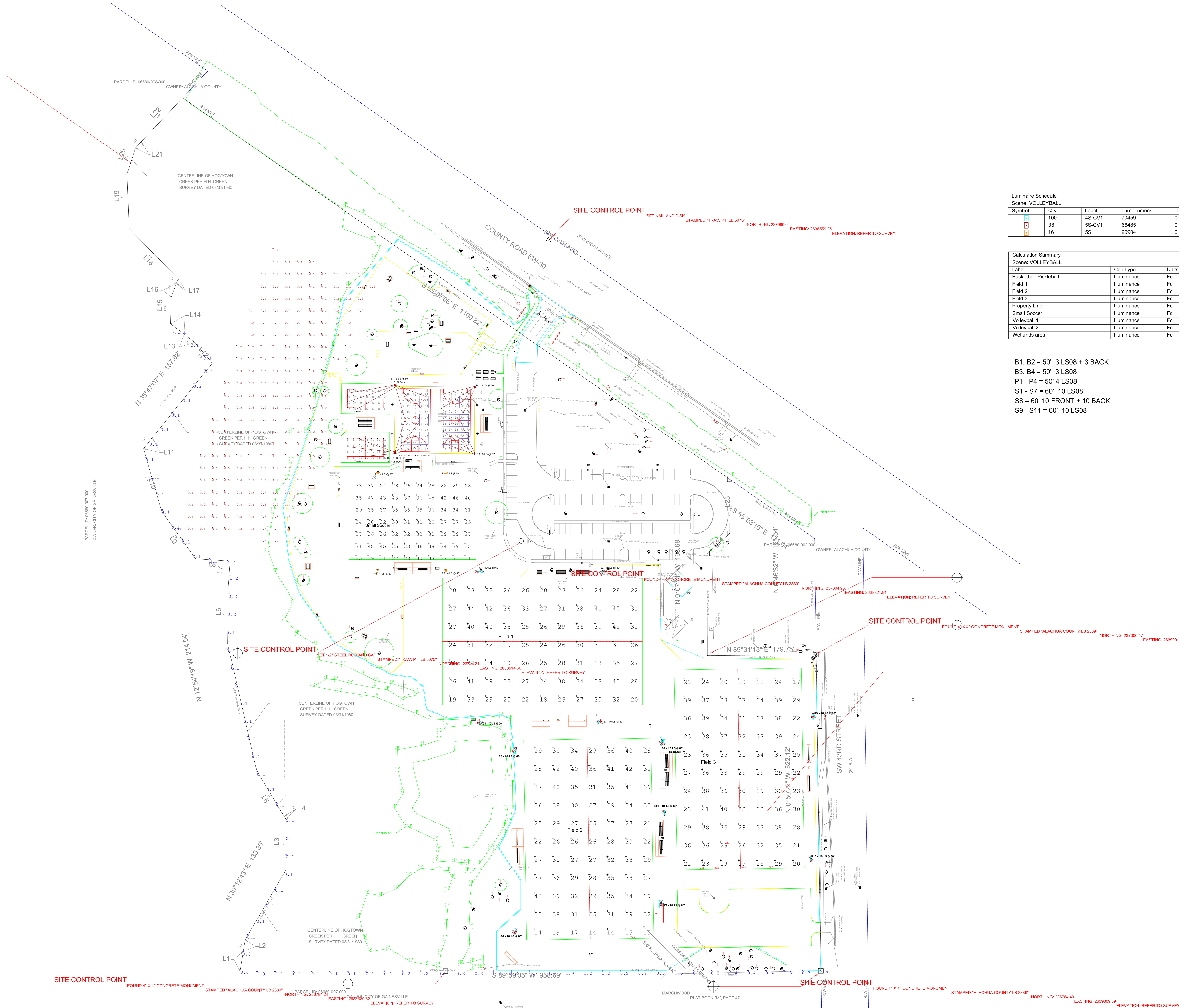
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Luminaire Schedule							
Scene: VOLLEYBALL							
Symbol	Qty	Label	Lum. Lumens	LLF	Description	Lum. Watts	Total Watts
□	100	4S-CV1	70459	0.950	EPH-LS-08-0640L-57-70-4S-CV1	697	69700
□	38	5S-CV1	66485	0.950	EPH-LS-08-0640L-57-70-5S-CV1	697	26486
□	16	SS	90904	0.950	EPH-LS-08-0640L-57-70-SS	681	10896

Calculation Summary									
Scene: VOLLEYBALL									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	CV	UG
Basketball-Pickleball	Illuminance	Fc	44.54	55	31	1.44	1.77	0.14	1.42
Field 1	Illuminance	Fc	30.01	45	18	1.67	2.50	0.21	1.91
Field 2	Illuminance	Fc	30.47	42	14	2.18	3.00	0.24	2.60
Field 3	Illuminance	Fc	30.12	41	17	1.77	2.41	0.21	1.78
Property Line	Illuminance	Fc	0.24	1.0	0.0	N.A.	N.A.	N.A.	N.A.
Small Soccer	Illuminance	Fc	32.97	48	22	1.50	2.18	0.18	1.91
Volleyball 1	Illuminance	Fc	28.71	41	17	1.59	2.41	0.24	1.41
Volleyball 2	Illuminance	Fc	30.75	46	19	1.62	2.42	0.25	1.44
Wetlands area	Illuminance	Fc	0.96	6.4	0.1	9.60	84.00	N.A.	N.A.

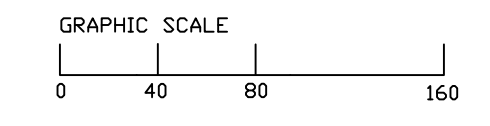
B1, B2 = 50' 3 LS08 + 3 BACK  
 B3, B4 = 50' 3 LS08  
 P1 - P4 = 50' 4 LS08  
 S1 - S7 = 60' 10 LS08  
 S8 = 60' 10 FRONT + 10 BACK  
 S9 - S11 = 60' 10 LS08

Scene/Channel Summary	
Channel	# Lums
BASKETBALL	12
FIELD 1	40
FIELD 2	40
FIELD 3	40
SMALL SOC	16
VOLLEYBALL	6

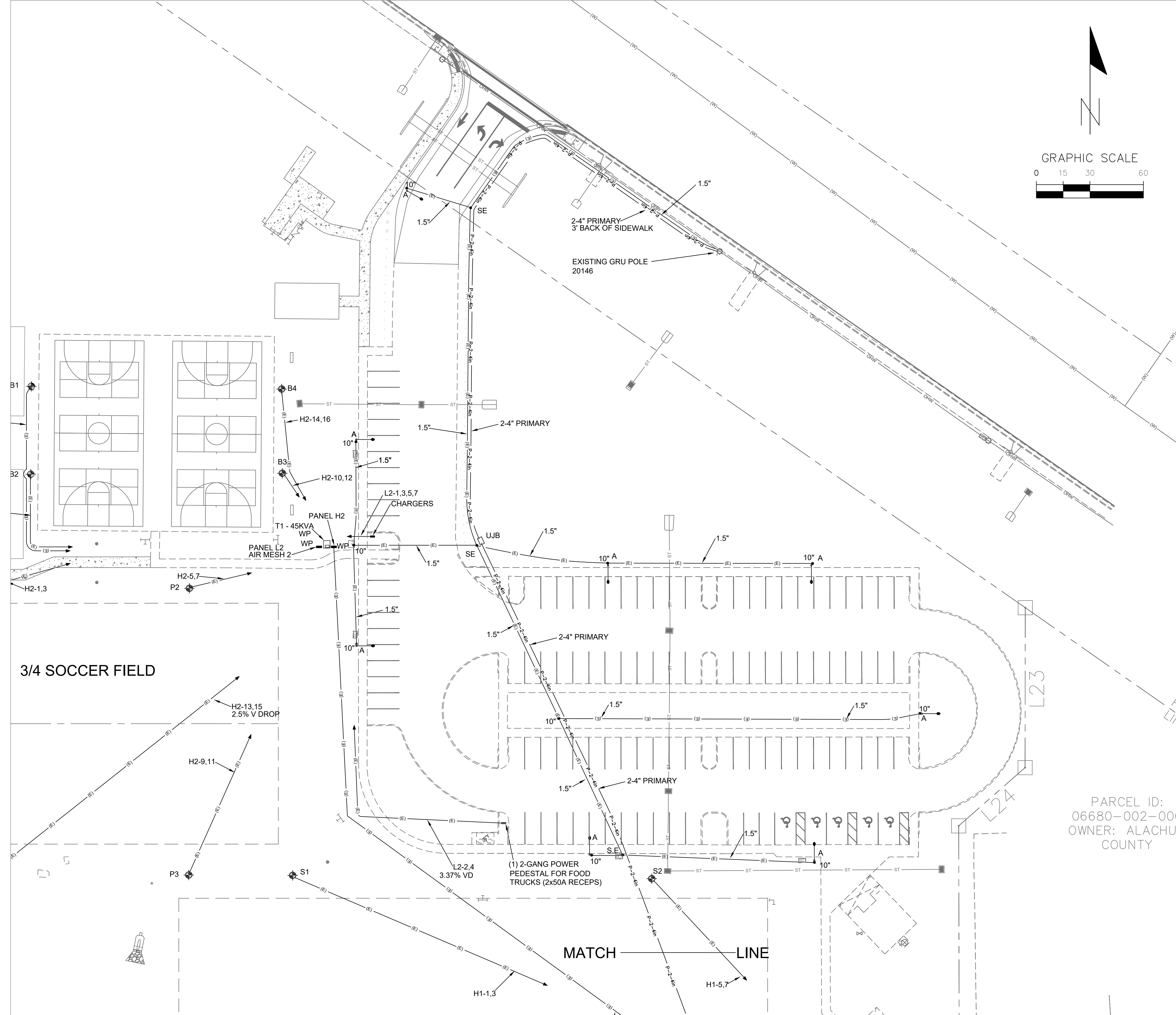
**THIS IS NOT A CONSTRUCTION DOCUMENT**  
 NOTICE: THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NGU SPORTS LIGHTING LLC. ITS ACCEPTANCE CONSTITUTES AGREEMENT THAT THE DRAWING WILL BE TREATED AS CONFIDENTIAL. IT IS TO BE RETURNED UPON REQUEST AND IS NOT TO BE COMMUNICATED, DISCLOSED, OR COPIED EXCEPT AS EXPRESSLY AUTHORIZED BY NGU.  
 THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION AND THE PERFORMANCE OF EPHEBUS LUMINAIRES REPRESENTED HERE. IT WAS BASED UPON INFORMATION PROVIDED TO NGU SPORTS LIGHTING, LLC AND ANY VARIATION FROM DESIGN TO INSTALLATION MAY AFFECT THE EXPECTED RESULTS.

2401 PGA Blvd, Suite 110  
 Palm Beach Gardens, FL 33410  
 www.NGUsportslighting.com  
 Phone: 1-855-NGU-LEDS  
 Passion and Commitment exclusively for Ephesus LED Sports Lighting

**FOREST PARK**  
**GAINESVILLE, FL**  
**ALL FIELDS AND PROPERTY LINES**  
**NEW SITE PLAN, CHANGE TO B POLES**  
**FIELDS @ 30 FC, COURTS @ 40 FC**

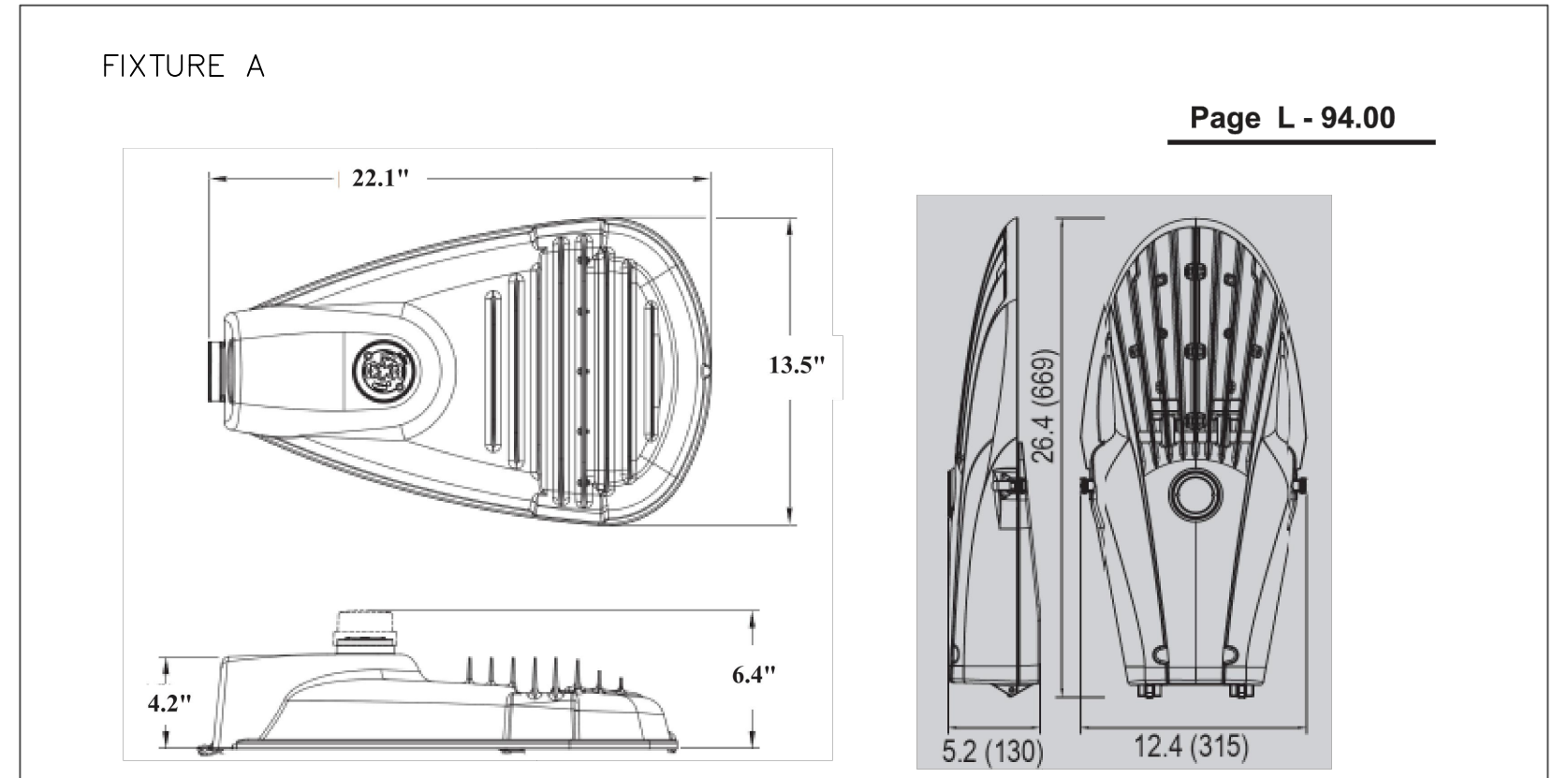


DESIGNED BY <b>H. JOHNSON, LC</b>	DATE <b>10/26/2022</b>	SCALE <b>1" = 80'</b>	DRAWING NUMBER <b>LD21304J</b>
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Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Code or Standard
Paved Parking	+	1.2 fc	2.9 fc	0.5 fc	5.8:1	2.4:1	IES RP-20-14 Lighting of Parking Facilities: Parking Area R4 Asphalt - 5 fc minimum <4:1 Avg/Min, <15:1 Max/Min
P/L @ Fire Station	+	0.2 fc	0.9 fc	0.0 fc	N/A	N/A	< 1FTC, 30-6.12D.2.b.i
P/L @ SW 20 Ave	+	0.1 fc	2.6 fc	0.0 fc	N/A	N/A	< 5FTC 30-6.12D.2.b.iv
P/L @ SW 43 Street	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	< 5FTC 30-6.12D.2.b.v
P/L South (Multifamily)	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	< 1FTC, 30-6.12D.2.b.i
P/L West	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	< 1FTC, 30-6.12D.2.b.i
Area West and South of Parking	+	0.1 fc	1.1 fc	0.0 fc	N/A	N/A	NA, INFORMATIONAL PURPOSES ONLY

- NOTES:
- A. NO LIGHT ABOUT 90 DEGREES ABOVE HORIZONTAL PLANE AT FIXTURE HEIGHT
  - B. LUMINAIRES ARE FULL CUT-OFF.
  - C. THE MAXIMUM MOUNTING HEIGHT IS 30' (30-6.12.D.1.e)
  - D. ALL PARKING LOT LIGHTING ARE GRU RENTAL LIGHTS AND POLES.
  - E. THE LUMINAIRES AND ARMS ARE TO BE GREY
  - F. POLES ARE 35' CONCRETE POLES BURIED 9" WITH 10' ARMS FOR 30' MOUNTING HEIGHT.
  - G. LIGHTS ARE CONTROLLED BY INDIVIDUAL PHOTOCELLS.
  - H. THE LIGHTING DESIGN MEETS THE SPECIFIC ILLUMINATION REQUIREMENTS FOR PARKING LOT LIGHTING (30-6.12.E.4.a&b).
  - I. POLES ARE TO BE INSTALLED 3" BEHIND BACK OF CURB OR 1' FROM SIDEWALK.
  - J. CUSTOMER MUST COMPLETE A GRU RENTAL LIGHTING APPLICATION
  - K. COORDINATE INSTALLATION WITH GRU
  - L. SIDEWALK LIGHTING NOT WITHIN SCOPE OF THIS PROJECT.
  - M. PHOTOMETRICS INCLUDE GRU RENTAL LIGHTS ONLY, NO SPORTS LIGHTING.



Description	Manufacturer	Catalog No.	Stock No.
LUMINAIRE, LED ROADWAY CUTOFF 3, GRAY WITH DIE-CAST ALUMINUM HOUSING, SEE COMPLETE SPECIFICATIONS ON PAGE L-90.00 THRU L-90.03.	GENERAL ELECTRIC	ERLH-0-13-C3-30-A-GRAY-GLR-052	58337-5
GENERAL ELECTRIC	ERLH-0-13-C3-30-A-GRAY-GLR-052		
EOI ("e-lite-star")	ESU-FA013P03230M-135FIU1-1542N		
GENERAL ELECTRIC	ERLH-0-13-G1-30-A-GRAY-GLR		
HOUSE SHIELD	GENERAL ELECTRIC	ELSHS-ERL1-39902-7	39902-7

NOTE: 20 YEAR PHOTOCONTROL LISTED ON ELECTRIC STANDARDS PAGE P-5.45, S/N 58121-6

Revision Date:  
 9-26-17 KLC  
 10-4-17 KLC  
 3-9-18 KLC  
 10-1-18 KLC  
 3-18-19 KLC

GRU  
 More than Energy

ITEM NAME: LUMINAIRE, LED ROADWAY CUTOFF 3 (3000K) (III) - GRAY

Gainesville Regional Utilities  
 Electric System Approved Materials Manual

PARCEL ID: 06680-002-000  
 OWNER: ALACHUA COUNTY

LIGHTING PLAN PREPARED BY WILLIAM T. STORMANT, P.E.

SEAL

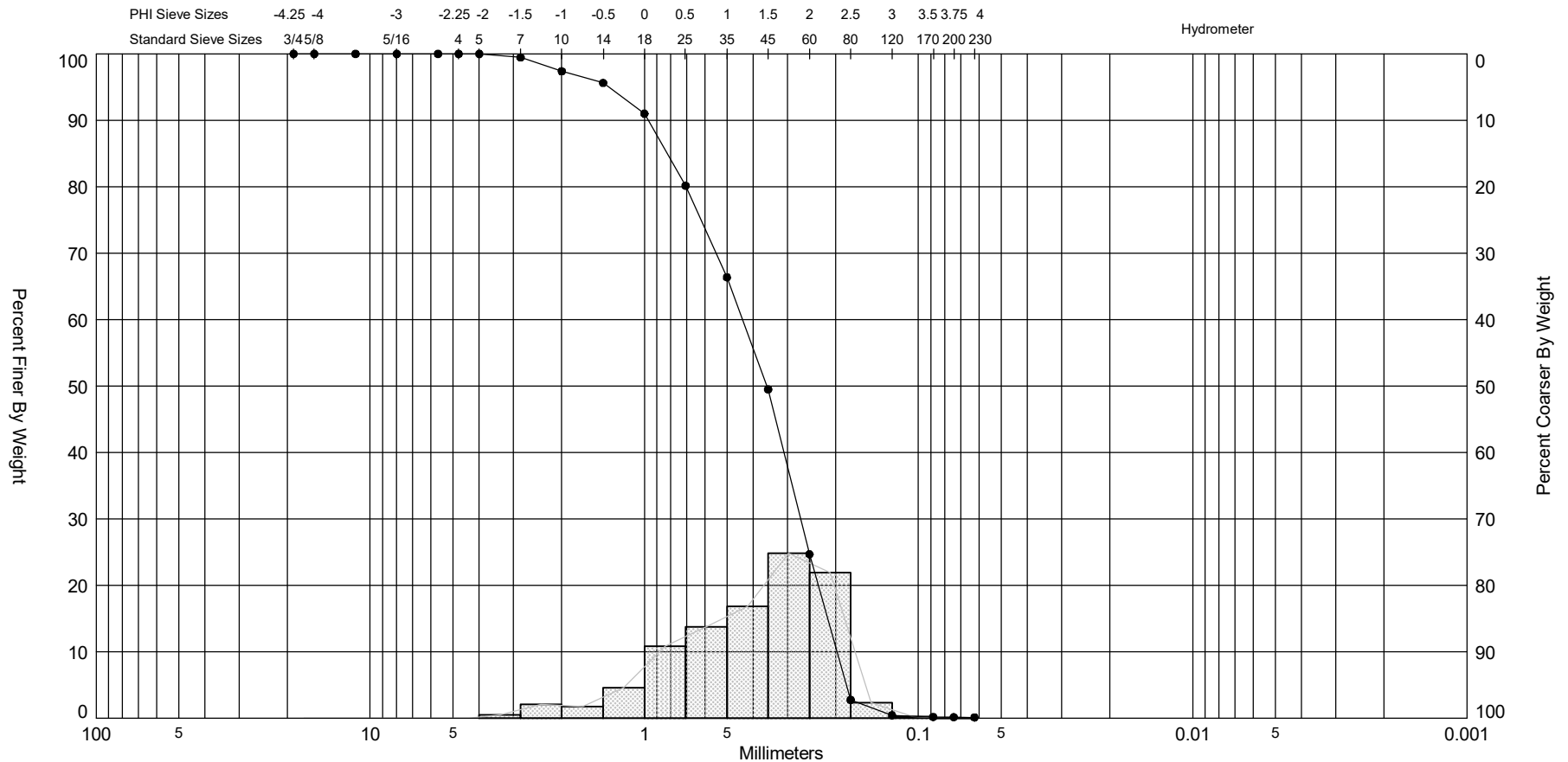
WILLIAM T. STORMANT, P.E.  
 ELECTRICAL ENGINEER  
 5304 NW 173 Street, Alachua, FL 32615  
 stormantwt@cox.net  
 (352) 665-1426  
 P.E. No.: 44156

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Light Loss Factor	Total Lamp Lumens	Wattage	Distribution	Notes
+	A	8	GE LIGHTING SOLUTIONS	ERLH_13C330	Evolve LED Roadway Streetlight-ERLH	LED	1	0.9	12500	111	TYPE III	GRU Rental Light, 30' Mounting height, 35' Concrete Pole, 10' arm.(GRU Type 3 luminaire)


18001 Research Drive  
 Alachua, Florida 32615  
 (352) 331-1976  
 www.chw-inc.com  
 est. 1988 FLORIDA CA-5075  
 CHW Professional Consultants  
 1"=20'  
 VERIFY SCALE ON ORIGINAL DRAWING  
 0 MAY BE USED FOR THIS SHEET, ADJUST SCALES ACCORDINGLY.  
 CONSTRUCTION REVISIONS  
 STORMANT, WILLIAM T.  
 03/11/20 VOLLEYBALL LIGHTING ADDED  
 10/6/22 MOVED L2  
 11/16/22 CONVERTED SYSTEM TO 480V  
 FOREST PARK SPORTSLIGHTING  
 PHOTOMETRIC PLAN FOR PARKING LOT  
 SHEET NUMBER: 00-0000  
 SHEET NO: P1



SIEVE ANALYSIS ST. JOHNS CO. GPJ FL DEP ROSS.GDT 10/10/22



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
9-26 #6am	—●—		SW	#200 - 0.15 #230 - 0.12			1.49	0.41	-0.8	3.35	0.92	Project Name:	St. Johns County Goldhead Plant
Comments: 435,500 ton sample / moisture 5.4%											Analysis Date:	09-26-22	
Depths and elevations based on measured values											Analyzed By:	Elijah weaver	
							Goldhead Sand Plant ↓ Keystone Heights, FL 32656					Latitude:	
												Longitude:	
												Horizontal System:	
												Vertical System:	





### BRANCH CIRCUIT PANELBOARD SCHEDULE PANEL H1

FOR 480/277 VOLT, THREE PHASE, 4-WIRE SERVICE ENTRANCE RATED. PROVIDE ALL SPARE BREAKERS AND GROUND BAR. 200 AMP. MAIN BREAKER, 22,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL.

SERVING POLE	ZONE	WIRE			BREAKER		CIR NO	CONNECTED LOAD VA		CIR NO	BREAKER			WIRE			SERVING POLE	ZONE
		HOT	NEUT	GRD	AMP	POLES		POLES	AMP		GRD	NEUT	HOT	HOT	NEUT	GRD		
LIGHT POLE S1 - SOCCER 1		8		8	30	2	1	7400	7400	2	2	30	8		8	LIGHT POLE S8 - SOCCER 2		
		8					3								8	(WESTSIDE OF POLE)		
LIGHT POLE S2 - SOCCER 1		8		8	30	2	5	7400	7400	6	2	30	8		8	LIGHT POLE S8 - SOCCER 3		
		8					7								8	(EASTSIDE OF POLE)		
LIGHT POLE S3 - SOCCER 1		8		8	30	2	9	7400	7400	10	2	30	8		8	LIGHT POLE S9 - SOCCER 3		
		8					11								8			
LIGHT POLE S4 - SOCCER 1		8		8	30	2	13	7400	7400	14	2	30	8		8	LIGHT POLE S10 - SOCCER 3		
		8					15								8			
LIGHT POLE S5 - SOCCER 2		8		8	30	2	17	7400	7400	18	2	30	8		8	LIGHT POLE S11 - SOCCER 3		
		8					19								8			
LIGHT POLE S6 - SOCCER 2		8		8	30	2	21	7400	3000	22	2	15	12		12	3 KVA TRANSFORMER FOR L1		
		8					23								12			
LIGHT POLE S7 - SOCCER 2		8		8	30	2	25	7400										
		8					27											
							29											
							31											
							33											
							35											
							37											
							39			40	2	*				TVSS		
							41			42								

LIGHTS X 1.25 = 111,000 VA (68103 VA CONNECTED)  
 AIR MESH = 180 VA  
 TOTAL = 111,180 VA (134 AMP, PROVIDE 200A SERVICE 1 SETS 4-3/0 IN 2" C.)  
 \* - SIZE TVSS BREAKER PER MANUFACTURER SPECIFICATIONS.

### BRANCH CIRCUIT PANELBOARD SCHEDULE PANEL H2

FOR 480/277 VOLT, THREE PHASE, 4-WIRE SERVICE ENTRANCE RATED. PROVIDE ALL SPARE BREAKERS AND GROUND BAR. 200 AMP. MAIN BREAKER, 22,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL. SERVICE ENTRANCE RATED.

SERVING POLE	ZONE	WIRE			BREAKER		CIR NO	CONNECTED LOAD VA		CIR NO	BREAKER			WIRE			SERVING POLE	ZONE
		HOT	NEUT	GRD	AMP	POLES		POLES	AMP		GRD	NEUT	HOT	HOT	NEUT	GRD		
LIGHT POLE P-1 - SOCCER *3/4"		8		8	20	2	1	2960	2220	2	2	20	8		8	LIGHT POLE B1 - BASKET BALL		
		8					3								8	(EASTSIDE OF POLE)		
LIGHT POLE P-2 - SOCCER *3/4"		8		8	20	2	5	2960	2220	6	2	20	8		8	LIGHT POLE B2 - BASKET BALL		
		8					7								8	(EASTSIDE OF POLE)		
LIGHT POLE P-3 - SOCCER *3/4"		8		8	20	2	9	2960	2220	10	2	20	8		8	LIGHT POLE B3 - BASKET BALL		
		8					11								8			
LIGHT POLE P-4 - SOCCER *3/4"		8		8	20	2	13	2960	2220	14	2	20	8		8	LIGHT POLE B4 - BASKET BALL		
		8					15								8			
50 KVA FOR L2		1		6	125	2	17	36020										
		1					19											
							21											
							23											
							25			2220	2	20	8		8	LIGHT POLE B1 - VOLLEYBALL		
							27								8	(WESTSIDE OF POLE)		
							29			2220	30	2	20	8	8	LIGHT POLE B2 - VOLLEYBALL		
							31								8	(WESTSIDE OF POLE)		
							33											
							35											
							37											
							39			40	2	*				TVSS		
							41			42								

LIGHTS X 1.25 = 31450 VA (25,160 VA CONNECTED)  
 CHARGERS X 1.25 = 16640 VA (13,312 VA CONNECTED)  
 FOOD TRUCKS = 19200 VA (\* ASSUMED 80% OF 100 A)  
 AIR MESH = 180 VA  
 TOTAL = 67470 VA (81 AMP, PROVIDE 200 AMP PANEL, 4-250 KCMIL CU IN 2.5" C.)  
 \* - SIZE TVSS BREAKER PER MANUFACTURER SPECIFICATIONS.

### ZONE SCHEDULE

NO CONTACTORS, ALL POLES CONTROLLED VIA THE RESPECTIVE AIR MESH

SERVING POLE	ZONE	CONTROL CABINET	QUAN OF LIGHTS
LIGHT POLE S-1 - SOCCER 1		AIR MESH 1	10
LIGHT POLE S-2 - SOCCER 1			10
LIGHT POLE S-3 - SOCCER 1			10
LIGHT POLE S-4 - SOCCER 1			10
LIGHT POLE S-3 - SOCCER 2			10
LIGHT POLE S-4 - SOCCER 2			10
LIGHT POLE S-5 - SOCCER 2			10
LIGHT POLE S-6 - SOCCER 2			10
LIGHT POLE S-5 - SOCCER 3			10
LIGHT POLE S-6 - SOCCER 3			10
LIGHT POLE S-7 - SOCCER 3			10
LIGHT POLE S-8 - SOCCER 3			10/10
LIGHT POLE S-9 - SOCCER 3			10
LIGHT POLE S-10 - SOCCER 3			10
LIGHT POLE S-11 - SOCCER 3			10
LIGHT POLE P-1 - SOCCER *3/4"		AIR MESH 2	4
LIGHT POLE P-2 - SOCCER *3/4"			4
LIGHT POLE P-3 - SOCCER *3/4"			4
LIGHT POLE P-4 - SOCCER *3/4"			4
LIGHT POLE B-1 - BASKETBALL	FRONT		3
LIGHT POLE B-2 - BASKETBALL	FRONT		3
LIGHT POLE B-3 - BASKETBALL			3
LIGHT POLE B-4 - BASKETBALL			3
LIGHT POLE B-1 - VOLLEYBALL	BACK		3
LIGHT POLE B-2 - VOLLEYBALL	BACK		3

### POLE SCHEDULE

POLES	MOUNTING HEIGHT
S1-11	60'
P1-P4 (3/4 SIZE SOCCER FIELD)	50'
B1-B4	50'

### BRANCH CIRCUIT PANELBOARD SCHEDULE PANEL L1

FOR 240/120 VOLT, SINGLE PHASE, 3-WIRE FEEDER. PROVIDE ALL SPARE BREAKERS AND GROUND BAR. 60 AMP. MAIN LUG ONLY, 22,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL.

SERVING	WIRE			BREAKER		CIR NO	CONNECTED LOAD VA	CIR NO	BREAKER			WIRE			SERVING
	HOT	NEUT	GRD	AMP	POLES				POLES	AMP	GRD	NEUT	HOT	HOT	
MAIN (BACK FED *)	12	12	12	15	2	1			2						SPACE
	12								4						SPACE
AIRMESH 1 - SOCCER 1, 2, 3	12	12	12	15	1	5	180		6						SPACE

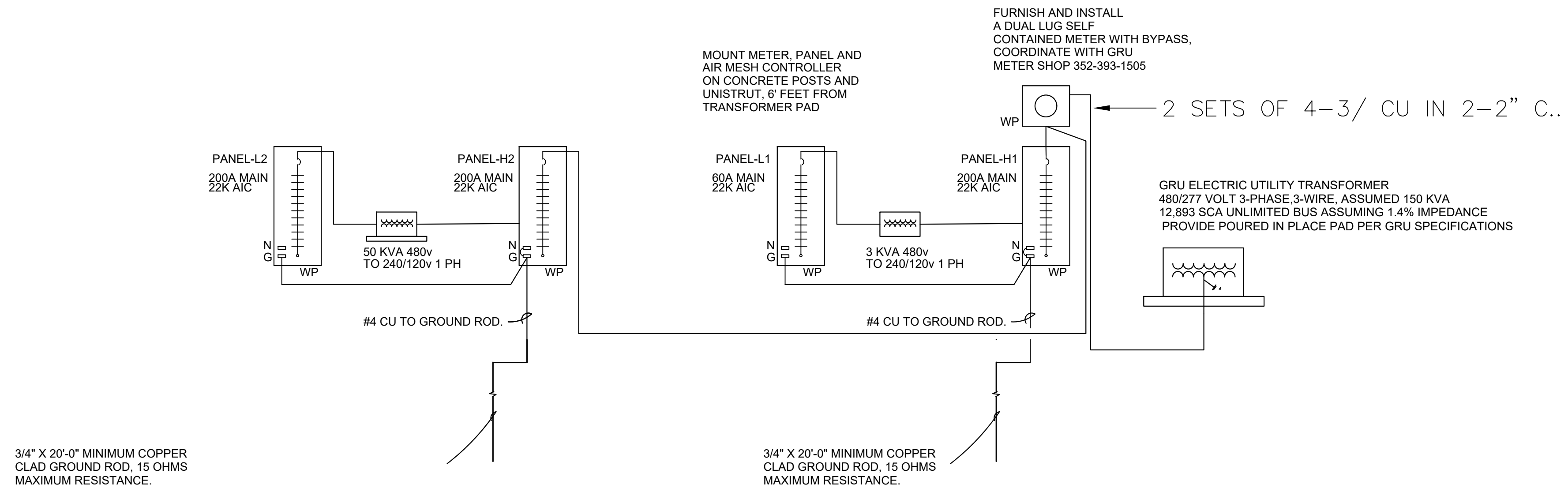
\* - PROVIDE HOLD DOWN CLIP  
 AIR MESH = 180 VA  
 TOTAL = 180 VA (PROVIDE 20 A FEEDER TO 3 KVA TRANSFORMER)

### BRANCH CIRCUIT PANELBOARD SCHEDULE PANEL L2

FOR 240/120 VOLT, SINGLE PHASE, 3-WIRE FEEDER. PROVIDE ALL SPARE BREAKERS AND GROUND BAR. 200 AMP. MAIN BREAKER, 22,000 AIR SYMMETRICAL FULLY RATED ALL BREAKERS. 100% NEUTRAL. SERVICE ENTRANCE RATED.

SERVING POLE	ZONE	WIRE			BREAKER		CIR NO	CONNECTED LOAD VA		CIR NO	BREAKER			WIRE			SERVING POLE	ZONE
		HOT	NEUT	GRD	AMP	POLES		POLES	AMP		GRD	NEUT	HOT	HOT	NEUT	GRD		
CHARGER 1 - PORT 1		8		10	40	2	1	6656	*19200	2	2	100	8	3/0	3/0	FOOD COURT PEDESTAL		
		8					3											
CHARGER 1 - PORT 2		8		10	40	2	5	6656	180	6	1	20	12	12	12	AIRMESH 2-BBALLU3/4 SOCCER		
		8					7											
							9											
							11											
							13											
							15											
							17											
							19											

CHARGERS X 1.25 = 16640 VA (13,312 VA CONNECTED)  
 FOOD TRUCKS = 19200 VA (\* ASSUMED 80% OF 100 A)  
 AIR MESH = 180 VA  
 TOTAL = 36020 VA (150 AMP, PROVIDE 200 AMP PANEL, 3-3/0 & #4 EGC CU)  
 \* - SIZE TVSS BREAKER PER MANUFACTURER SPECIFICATIONS.



ELECTRICAL DISTRIBUTION ONE LINE DIAGRAM NOT TO SCALE

LIGHTING PLAN PREPARED BY WILLIAM T. STORMANT, P.E.

SEAL  
 WILLIAM T. STORMANT, P.E.  
 ELECTRICAL ENGINEER  
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 www.chw-inc.com  
 est. 1988 FLORIDA  
 CA-5075

CHW  
 Professional Consultants

SCALE: 1"=20'  
 VERIFY SCALE BAR AND SCALE ON ORIGINAL DRAWING  
 0 IN ANY CASE, THE SCALE OF THIS SHEET SHALL BE AS SHOWN ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

REVISIONS  
 03/11/20 VOLLEYBALL LIGHTING ADDED  
 10/6/22 MOVED L2  
 11/16/22 CONVERTED SYSTEM TO 480V

CLIENT: CAUSSEAU, HEWITT, & WALPOLE, INC.  
 ENGINEERING - SURVEYING - PLANNING  
 PROJECT: FOREST PARK SPORTSLIGHTING  
 SHEET TITLE: PANELS AND ONE LINE

REVISIONS  
 DESIGNER:  
 QUALITY CONTROL:  
 PROJECT NUMBER: 00-0000

File Name: C:\Users\whm\Documents\Forest Park WSPN\Forest Park Lighting Plan\_11 15 22.dwg  
 Text: Storm\_1 Plot Date: Nov 16, 2022 4:17pm

ELECTRICAL SPECIFICATIONS

A. GENERAL

- PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND NECESSARY ITEMS FOR THE FOLLOWING COMPLETE AND OPERATING SYSTEMS: UTILITY CONDUIT (PRIMARY AND PARKING RENTAL LIGHTING INFRASTRUCTURE, AND COMPLETE SPORTS LIGHTING SYSTEMS (PANELS, WIRE, STEP DOWN TRANSFORMERS, ETC.)
- THE SPORTS LIGHTING SYSTEM SHALL BE PROVIDED AS DESIGNED IN THE SHEET TITLED FOREST PARK BY NGU SPORTS LIGHTING, INC. BASIS OF DESIGN IS NGU SPORTS LIGHTING INC, EPHEBUS LED SPORTS LIGHTING SYSTEM.
- OBTAIN AND PAY ALL FEES AND PERMITS REQUIRED TO INSTALL THE COMPLETE SYSTEMS.
- IT IS THE INTENT OF THESE DRAWINGS TO PROVIDE A COMPLETE ELECTRICAL SYSTEM, REGARDLESS OF WHETHER EACH INDIVIDUAL COMPONENT IS MENTIONED OR NOT.
- THE WORK SHALL COMPLY WITH ALL LEGALLY REQUIRED CODES AND STANDARDS, INCLUDING:
  - NFPA 70, NATIONAL ELECTRICAL CODE LATEST EDITION
  - NECA STANDARD OF INSTALLATION
  - NFPA 72 LATEST ADOPTED REVISION
  - FLORIDA BUILDING CODE LATEST REVISIONS.
  - NFPA 101 LATEST ADOPTED REVISION
  - ADA LATEST ADOPTED REVISION
  - GAINESVILLE REGIONAL UTILITY STANDARDS AND POLICIES.
  - UNDERWRITER'S LABORATORY STANDARDS (UL).
  - CITY OF GAINESVILLE CODE OF ORDINANCES
  - ILLUMINATION ENGINEERING SOCIETY HANDBOOK 10TH EDITION
  - OTHER APPLICABLE CODES AND STANDARDS THAT APPLY TO THIS TYPE OF CONSTRUCTION.

B. MATERIALS AND WORKMANSHIP

- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY PLACEMENT OF ALL CONDUITS, JUNCTION BOXES, CABINETS, TEMPORARY ELECTRICAL SERVICE, SPORTS LIGHTING ASSEMBLIES AND OTHER WIRING DEVICES AS THE CONSTRUCTION PROGRESSES.
- OUTLET BOXES SHALL BE STEEL 4" SQUARE X 1.5" DEEP MINIMUM LOCATED AS FOLLOWS:
  - WALL SWITCHES 48" ABOVE FINISHED FLOOR TO CENTERLINE TO MEET ADA.
  - CONVENIENCE OUTLETS 18" ABOVE FINISHED FLOOR OR AS NOTED.
  - EQUIPMENT OUTLETS AS REQUIRED BY THE EQUIPMENT.
- WIRING SYSTEMS SHALL BE AS FOLLOWS:
  - UNDERGROUND MAY BE SCHEDULE 40 PVC.
  - MC CABLE OR EMT WHERE PERMITTED BY CODE.
  - RIGID GALVANIZED STEEL WHERE REQUIRED BY CODE.
  - FLEXIBLE STEEL CONDUIT WHERE REQUIRED, LIQUID TIGHT WHERE REQUIRED.
- CONDUCTORS SHALL BE COPPER TYPE THWN-2.
- CONVENIENCE RECEPTACLES SHALL BE 15 AMP. NEMA 5-15R, UNLESS NOTED OTHERWISE.
- WALL SWITCHES SHALL BE 20 AMP. 120/277 VOLT AC.
- PANELBOARDS SHALL BE BY SQUARE D.
- ALL METAL BOXES, CABINETS, CONDUIT, EQUIPMENT, ETC. SHALL BE GROUNDED AS REQUIRED BY CODE. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR ALL CIRCUITS.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ITEMS AND EQUIPMENT SHOWN AS PART OF THE GENERAL CONTRACT WHICH REQUIRE ELECTRICITY, INCLUDING CONTROL WIRING AND WIRING TO CONNECT EXISTING EQUIPMENT.
- FUSES SHALL BE DUAL-ELEMENT CURRENT LIMITING FUSES IN ALL DISCONNECT SWITCHES OR OTHER FUSIBLE DEVICES. FURNISH A SPARE FUSE OF EACH TYPE USED ON THE JOB.
- ELECTRICAL CONTRACTOR SHALL INSTALL AND CONNECT MOTOR STARTERS, RELAYS, SWITCHES, AND RELATED ITEMS WHICH ARE SPECIFIED BY OTHERS.
- ALL MATERIAL SHALL BE NEW AND UL APPROVED, LISTED, OR LABELED.
- ALL ELECTRICAL EQUIPMENT AND SYSTEMS SHALL BE TESTED AND ADJUSTED FOR PROPER OPERATION. COMPLETE WIRING SYSTEM SHALL BE FREE OF SHORT CIRCUITS.
- CONTRACTOR SHALL MAKE COMPLETE CONNECTIONS TO ALL EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT LOCATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE TRANSIENT VOLTAGE SURGE SUPPRESSORS AT PANELS H1 & H2 CAPABLE OF PROVIDING 40 KA PROTECTION PER PHASE. SERVICE ENTRANCE RATED AND UL 1449 LISTED.

ELECTRICAL NOTES

- FOR THE UTILITY SYSTEM, INSTALL LONG RADIUS SWEEPS AT UTILITY POLE, PADS AND ALL CHANGES OF DIRECTION. INSTALL PRIMARY CONDUITS WITH 48" COVER STREET LIGHT CONDUITS WITH 36" OF COVER. VERIFY REQUIREMENTS WITH GRU. PROVIDE SINGLE PHASE TRANSFORMER PADS (B-3), JD JUNCTION BOXES (B-21), JD SERVICE ENCLOSURES (B-24), 10" BURIED WIRE ENCLOSURES (B-26) PADS AS PER GRU REQUIREMENTS. PAGES NOTED IN PARENTHESIS ARE FOUND IN GRU ED SERVICE GUIDE APPENDICES.
- COORDINATE LOCATIONS OF ELECTRICAL EQUIPMENT, DEVICES, OUTLETS, FIXTURES, ETC. WITH ARCHITECTURAL AND CIVIL PLANS PRIOR TO INSTALLATION. DO NOT SCALE ELECTRICAL DRAWINGS.
- NOT USED.
- PROVIDE INSULATED GROUNDING CONDUCTOR FROM EACH EQUIPMENT CONNECTION AND OUTLET TO GROUNDING BAR IN PANELBOARDS.
- PROVIDE AN INSULATED GROUNDING CONDUCTOR IN ALL FEEDER AND BRANCH CIRCUITS.
- CONTRACTOR SHALL PROVIDE ADDITIONAL JUNCTION BOXES, CONDUCTORS AND OTHER MATERIALS AND LABOR NECESSARY TO CONNECT PARALLEL OR OVERSIZED FEEDER RUNS WHERE SUCH FEEDERS EXCEED CONNECTION CAPACITY OF CIRCUIT BREAKERS, PANELBOARDS AND OTHER CONNECTION POINTS.
- RISER DIAGRAMS SHOW ONLY THE GENERAL CONFIGURATION OF THE SYSTEM. REFER TO THE APPROPRIATE DRAWINGS FOR EXACT DEVICE, QUANTITIES AND LOCATIONS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATE AND PROPER SUPPORT FOR ALL ELECTRICAL DEVICES.
- ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. LOCATED IN DAMP AREAS OR OUTDOORS SHALL BE WEATHERPROOF.
- GROUND RODS SHALL BE INSTALLED AT ALL LIGHTING POLES IN ACCORDANCE WITH THE NEC.
- ALL SPORTS LIGHTING FIXTURES SHALL BE FUSED.
- PULL BOXES SHALL BE PROVIDED AS NECESSARY OF SECONDARY CONDUIT RUNS.
- ANY SUBSTITUTIONS MUST BE APPROVED PRIOR TO SUBMITTING BID.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATE AND PROPER SUPPORT FOR ALL ELECTRICAL OUTLETS, DEVICES, LIGHT FIXTURES, ETC.
- ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. LOCATED OUTDOORS SHALL BE WEATHERPROOF.
- EXISTING UTILITIES AND OTHER UNDERGROUND OR CONCEALED ITEMS ARE SHOWN FOR REFERENCE ONLY. ADDITIONAL ITEMS NOT SHOWN MAY BE PRESENT AND LOCATIONS MAY DIFFER FROM THAT SHOWN. CONTRACTOR SHALL EXCAVATE AND CONDUCT DEMOLITION SO AS TO AVOID DAMAGE TO EXISTING ITEMS. SHALL NOTIFY OWNER AND ENGINEER AT ONCE OF ALL DAMAGE AND SHALL REPAIR DAMAGE TO ORIGINAL CONDITION TO THE SATISFACTION OF OWNER AND ENGINEER AT NO CHANGE IN CONTRACT AMOUNT.

GENERAL SPECIFICATIONS FOR SPORTS LIGHTING SYSTEM

- FURNISH AND INSTALL SPORTS LIGHTING SYSTEMS MEETING IESNA RECOMMENDATIONS FOR RECREATION LEVEL PLAY FOR THE FOLLOWING LOCATIONS: THREE FULL SIZE SOCCER FIELDS, A 3/4 SIZE SOCCER FIELD, TWO BALL COURTS AND TWO VOLLEYBALL COURTS AS SHOWN ON THE PLANS.
- THE BASIS OF DESIGN OF EPHEBUS LIGHTING SYSTEMS. IF A DIFFERENT SYSTEM IS PROPOSED, THE REVISED PHOTOMETRIC PLAN AND EQUIPMENT CUT SHEETS MUST BE SUBMITTED TO THE ENGINEER/OWNER FOR APPROVAL.
- THE LIGHTING SYSTEM IS CONTROLLED BY WAY OF A CELLULAR CONTROLLED WIRELESS MESH SYSTEM THAT IS ACCESSED VIA CELLPHONE AND COMPUTER TERMINAL. THE BASIS OF DESIGN IS LUMASPORT 8 AIRMESH SYSTEM (2 REQUIRED). THIS SYSTEM DOES NOT REQUIRE CONTACTORS.
- THE LIGHTS MUST BE 5700 DEGREES KELVIN, LED AND SHIELDED OR SHROUDED. BASIS OF DESIGN IS EPHEBUS LUMASPORT 8, 240V RATED. REFER TO NGU PLAN FOR TYPE AND QUANTITIES.
- ONE BRANCH CIRCUIT WILL FEED EACH POLE. EACH LIGHT TO BE FUSED INDIVIDUALLY AT POLE LOCATED POWER DISTRIBUTION BOX.
- POLES ARE TO BE SIZED TO MEET FLORIDA BUILDING CODE WIND LOADING REQUIREMENTS. POLES WITHIN 20' OF THE TRANSMISSION LINE SHALL BE DESIGNED TO MEET RISK CATEGORY 4. THE BASIS OF DESIGN IS CONCRETE POLES WITH MOUNTING HEIGHTS AS SHOWN IN THE POLE SCHEDULE.
- ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. LOCATED OUTDOORS SHALL BE WEATHERPROOF.
- SPORTS LIGHTING SYSTEM SHALL MEET APPLICABLE ILLUMINATING ENGINEERING SOCIETY RECOMMENDATIONS FOR THE BASKET BALL AND SOCCER FIELDS FOUND IN THE IESNA LIGHTING HANDBOOK 10TH EDITION. THE ILLUMINATION LEVELS AT THE SOUTHERN PROPERTY LINE SHALL NOT EXCEED 1 FOOT-CANDLE AS REQUIRED.
- THE WIRING FROM THE POLE DISTRIBUTION BOX TO THE LIGHTS SHALL BE PRE TERMINATED BY THE MANUFACTURER.
- THE LIGHTING DESIGN PROPOSAL FROM THE LIGHTING MANUFACTURER SHALL INCLUDE QUOTATION, BILL OF MATERIALS, PHOTOMETRIC DRAWING DESIGN PLAN, PRODUCT SPECIFICATION SHEETS, INSTALLATION MANUALS, AND INSTALLATION DRAWINGS.

ELECTRICAL LEGEND

- S13 SPORTS LIGHTING POLE AND FIXTURES. "S13" INDICATES POLE IDENTIFIER. FOR HEIGHT OF POLE AND NUMBER FIXTURES REFER TO POLE SCHEDULE
- A PARKING LUMINAIRE AND POLE. "A" INDICATES TYPE LUMINAIRE AND POLE.
- UJB UNDERGROUND DISTRIBUTION JUNCTION BOX FOR GRU PRIMARY CABLE.
- SE SERVICE ENCLOSURE - JUNCTION BOX FOR GRU SECONDARY CABLE
- 10" BURIED WIRE ENCLOSURE - 10" ROUND JUNCTION BOX FOR GRU SECONDARY CABLE
- WP DUPLEX RECEPTACLE OUTLET WITH GROUND - NEMA 5-20R WEATHERPROOF 18"A.F.F.
- GF DUPLEX RECEPTACLE OUTLET WITH GROUND FAULT INTERRUPTING 18"A.F.F. - NEMA 5-20R
- E EQUIPMENT CONNECTION OUTLET - VERIFY LOCATION
- J JUNCTION BOX
- S SINGLE POLE SWITCH 48"A.F.F. OR AS INDICATED
- T TRANSFORMER
- M METER
- L1 BRANCH CIRCUIT PANELBOARD, "L1" IS PANEL IDENTIFIER
- S SAFETY SWITCH - RATING AND FUSING AS INDICATED
- T TRANSFORMER
- L1-1,3 HOMERUN TO PANELBOARD, "L1" INDICATES THE PANELBOARD NUMBER. "1,3" INDICATES THE BRANCH CIRCUIT NUMBERS.
- C CONDUIT STUB-UP

LIGHTING FIXTURE SCHEDULE

TYPE	VOLTAGE	DESCRIPTION
A	120V	COBRAHEAD, FULL CUTOFF, 140-155W HPS, TYPE 3 DISTRIBUTION STREET LIGHT ON 35' CONCRETE POLE. 30' MOUNTING HEIGHT, 10' ARM GRU RENTAL LIGHT AND POLE. SEE SHEET P1.
	240V	SPORTS LIGHTING - BASIS OF DESIGN NGU EPHEBUS LIGHTING SYSTEM - REFER TO SPORTS LIGHTING SPECIFICATION DOCUMENT FOR DETAILS.

ELECTRICAL ABBREVIATIONS

A	AMPS	HOA	HAND-OFF-AUTOMATIC
AICS	AMPS INTERRUPTING CAPACITY SYMMETRICAL	K	KILO
BKR	BREAKER	LTG	LIGHTING
C	CONDUIT	MTD	MOUNTED
CKT	CIRCUIT	NEC	NATIONAL ELECTRICAL CODE
GRU	GAINESVILLE REGIONAL UTILITIES	NO	NORMALLY OPEN CONTACTS
CU	COPPER	NC	NORMALLY CLOSED CONTACTS
EX	EXISTING TO REMAIN	OHE	OVERHEAD ELECTRIC
F	FUSE	OHP	OVERHEAD PRIMARY
FC	FOOT CANDLES	P	POLE
GF	GROUND FAULT INTERRUPTER	PWR	POWER
GRD	GROUND	RGS	RIGID GALVANIZED STEEL
		SF	SUPPLY FAN
		UGE	UNDERGROUND ELECTRIC
		UGP	UNDERGROUND PRIMARY
		UGS	UNDERGROUND SECONDARY
		UL	UNDERWRITERS LABORATORIES
		V	VOLTS
		VA	VOLT-AMPERES
		VAR	VOLT-AMPERES REACTIVE
		VD	VOLTAGE DROP%
		W	WATTS OR WIRE
		WP	WEATHERPROOF
		ø	PHASE

LIGHTING PLAN PREPARED BY WILLIAM T. STORMANT, P.E.

SEAL

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est. 1988 FLORIDA  
CA-5075

**CHW**  
Professional Consultants

SCALE: 1"=20'  
VERIFY SCALE BAR AND SCALE ON ORIGINAL DRAWING  
0" MAY BE USED FOR THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/REV. REVISIONS

DATE: 03/11/20  
PROJECT: FOREST PARK SPORTS LIGHTING  
SHEET TITLE: SPECIFICATIONS AND LEGEND  
PROJECT NUMBER: 00-0000

CLIENT: CAUSSEAU, HEWITT, & WALPOLE, INC.  
ENGINEERING - SURVEYING - PLANNING  
PROJECT: FOREST PARK SPORTS LIGHTING  
SHEET TITLE: SPECIFICATIONS AND LEGEND  
PROJECT NUMBER: 00-0000

REVISION:  
DESIGNER:  
QUALITY CONTROL:  
PROJECT NUMBER: 00-0000

REVISION:  
DESIGNER:  
QUALITY CONTROL:  
PROJECT NUMBER: 00-0000

REVISION:  
DESIGNER:  
QUALITY CONTROL:  
PROJECT NUMBER: 00-0000

SHEET NO.: P5

Project	Catalog #	Type
Prepared by	Notes	Date



## Ephesus LUMASPORT 8

White LED Sports & Entertainment Luminaire

**Typical Applications**  
Pro Arenas • University & Collegiate Arenas • University & Collegiate Stadiums • Multi-Event & Convention Centers • Gymsnasiums & Field Houses

### Product Certification



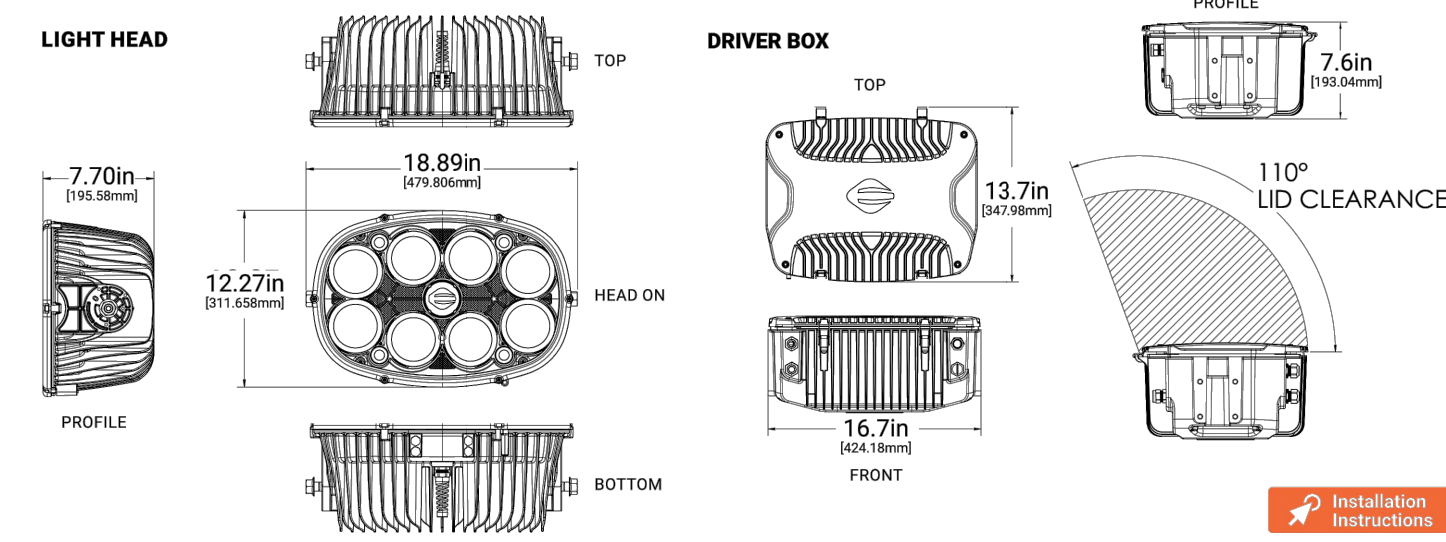
### Top Product Features

- 55,000 or 90,000 lumen output options
- Glare and cutoff control via Hybrid Reflector and TIR Optical System
- Reduce install time with pre-aimable two-piece assembly
- Virtually eliminate maintenance with power redundancy
- Industry leading light source reliability with Chip-on-Board LEDs
- Greater than 92% lumen maintenance at 55,000 hours
- Wired DMX or Wireless AirMesh controls options to suit your needs

### Interactive Menu

- Dimensional Details page 1
- Ordering Information page 2
- Dimensional and Mounting Details page 3
- Visor (VHE) Configuration page 4
- Performance Data page 5
- Optical Performance Data page 6
- Ordering Information for Accessories page 8
- Accessory Dimensions and Part Details page 9
- Example System Topology page 11

### Dimensional Details



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## SPORTS LIGHTING FIXTURE

REFER TO NGU PLAN FOR MODEL NUMBERS

## LUMASPORT 8

### Order Information

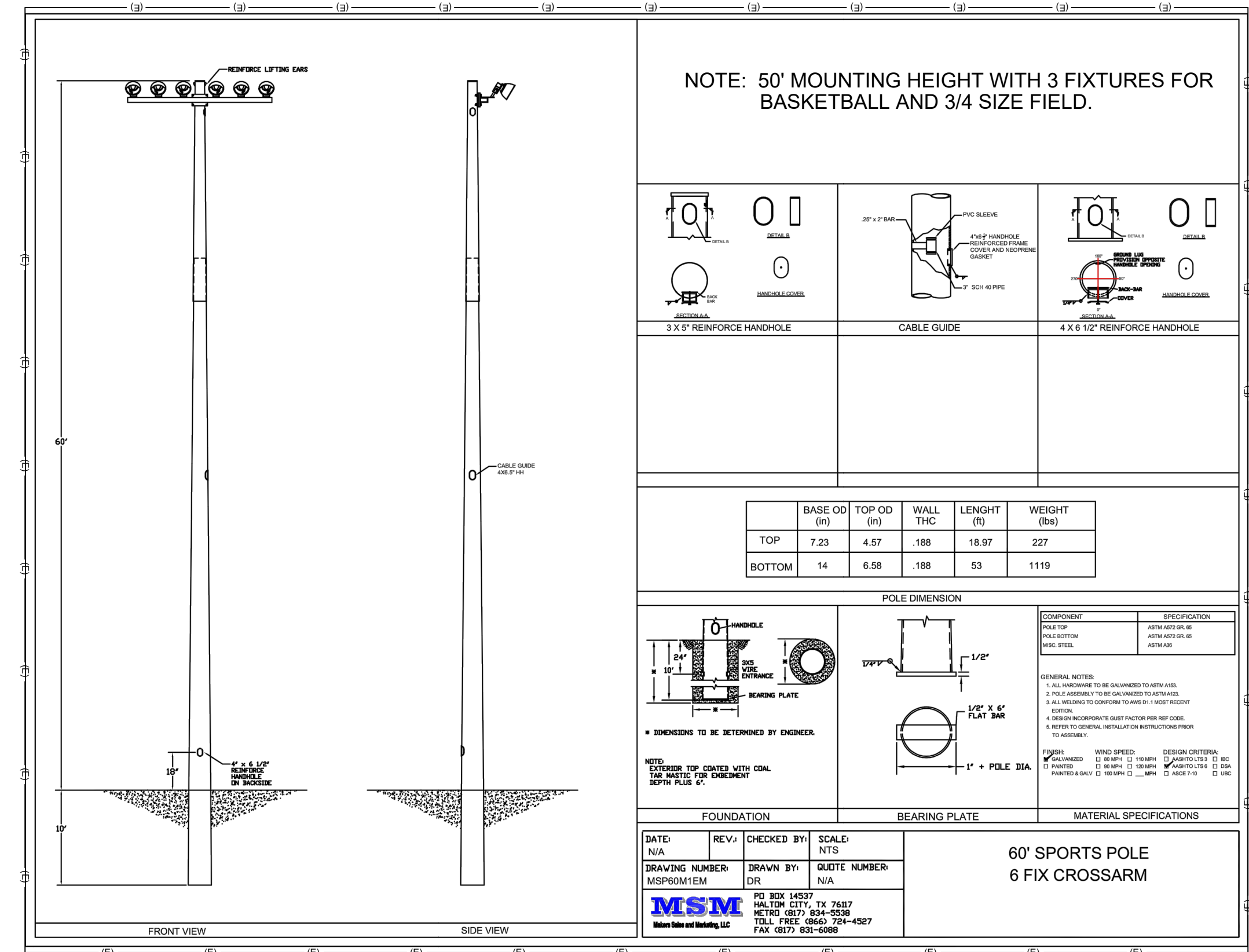
NOTE: A complete fixture order requires a selection entry for Brand, Family, Model, Power Configuration, Color, CCT, CRI, Optic, Light Head Cable (DC), Voltage, Control, Mount Configuration, Power Cable (AC), Options, Packaging, & International Option.  
SAMPLE ORDER NUMBER: EPH-LS-08-0320L-BLK-40-70-15-C04-HV-LB-LY-A00-HEG-BP-ST

Brand	Family	Model	Power Configuration	Color	CCT	CRI	Optic	Light Head Cable (DC)
EPH	LS	08	0320L - 320W Local Power 0400L - 400W Local Power	BLK - Black WHT - White	40 - 4000K 50 - 5000K 57 - 5700K	70 - 70 CRI 80 - 80 CRI	18 - NEMA 3   17.5   33.3 25 - NEMA 3   21.9   40.2 38 - NEMA 3   25.4   45.7 45 - NEMA 4   26.0   54.4 58 - NEMA 5   26.0   82.4 77 - NEMA 7   22.5   131.0	C04 - 4ft Cable, Standard C10 - 10ft Cable, Catwalk

Voltage	Control	Mount Configuration	Power Cable (AC)	Options	Packaging	International Option
LV - Low Voltage HV - High Voltage	AM - Wireless AirMesh LB - Wired DMX NC - No Control	LV - Local Vise LP - Local Pendant	A00 - Standard, No Cable A04 - 4ft Cable A10 - 10ft Cable A15 - 15ft Cable	HEG - No Visor   High Efficiency Glass Lens VHE - Visor   High Efficiency Glass Lens	BP - Bulk Pack UP - Unit Packaging	ST - Standard



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## SOCCER FIELD POLE EXAMPLE

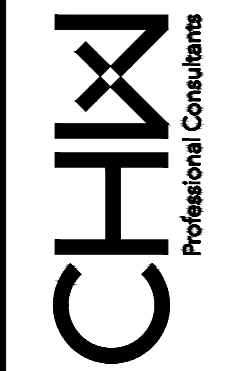
DO NOT USE FOR POLE SIZING FOR WIND LOADING

LIGHTING PLAN PREPARED BY WILLIAM T. STORMANT, P.E.

SEAL

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SCALE: 1" = 20'  
VERIFY SCALE BASE DIMENSIONS ON ORIGINAL DRAWING  
0.5" MAXIMUM PERMITTED THIS SHEET, ADJUST SCALES ACCORDINGLY.

REVISIONS  
CONSTRUCTION/REV REVISIONS

DATE: 03/11/20  
BY: WTS  
DESCRIPTION: VOLLEYBALL LIGHTING ADDED  
10/6/22 MOVED L2  
11/16/22 CONVERTED SYSTEM TO 480V

CLIENT: CAUSSEAU, HEWETT, & WALPOLE, INC.  
ENGINEERING - SURVEYING - PLANNING  
PROJECT: FOREST PARK SPORTSLIGHTING

DESIGNER: WTS  
QUALITY CONTROL: WTS  
PROJECT NUMBER: 00-0000

SHEET TITLE: SPORTS LIGHTING CUTSHEETS

SHEET NO.: P6

File Name: C:\Users\wherm...\_Documents\Forest Park WSPN\Forest Park Lighting Plan\_11 15 22.dwg  
Text: Storm... Plot Date: Nov 16, 2022 4:18pm

# Granularmetric Report

Depths and elevations based on measured values



Goldhead Sand Plant  
Keystone Heights, FL 32656

Project Name: St. Johns County Goldhead Plant

Sample Name: 9-26 #6am

Analysis Date: 09-26-22

Analyzed By: Elijah weaver

Latitude:

Longitude:

Coordinate System:

Elevation (ft):

USCS:

SW

Munsell:

Wet - 7.5YR-8/1

Comments:

435,500 ton sample / moisture 5.4%

Dry Weight (g): 331.50	Wash Weight (g): 331.10	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #200 - 0.15 #230 - 0.12	Organics (%):	Carbonates (%):	Shells (%): 0.00
---------------------------	----------------------------	---------------------------	-------------------------	--	---------------	-----------------	---------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	1.80	0.54	1.80	0.54
10	-1.00	2.00	6.90	2.08	8.70	2.62
14	-0.50	1.41	5.80	1.75	14.50	4.37
18	0.00	1.00	15.30	4.62	29.80	8.99
25	0.50	0.71	36.00	10.86	65.80	19.85
35	1.00	0.50	45.70	13.79	111.50	33.63
45	1.50	0.35	55.90	16.86	167.40	50.50
60	2.00	0.25	82.30	24.83	249.70	75.32
80	2.50	0.18	72.70	21.93	322.40	97.25
120	3.00	0.13	7.60	2.29	330.00	99.55
170	3.50	0.09	0.90	0.27	330.90	99.82
200	3.75	0.07	0.10	0.03	331.00	99.85
230	4.00	0.06	0.10	0.03	331.10	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.45	2.20	1.99	1.49	0.69	0.32	-0.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.28	0.41	0.92	-0.8	3.35

GRANULARMETRIC REPORT ST. JOHNS CO. GPJ FL DEP ROSS GDT 10/10/22