Permit #: 144
Permit Date: 02/27/24

**Permit Type:** Planning Commission **Case Number:** PC 24-12 CUP

PC Meeting Date: c. 1st Tuesday of April

**BZA Meeting Date:** 

**Assigned Meeting Date:** 04/02/2024

**Special Meeting Date:** 

Applicant Is: Architect
Applicant Name: Chuck Miller
Applicant Address: 508 Houston Street
Applicant City, State, ZIP: Nashville, TN 37203
Applicant Phone Number: 615.254.4100

Applicant Email: cmiller@anecdotexp.com

Description: Request to add tennis court lighting as approved by the BZA on 10.18.22 in the Master Plan.

Project Cost: 0
Square Feet: 0
Lot Area: 0
Lot Coverage: 0
Heat/cooled area: 0
Proposed Height(ft.): 0

#of stories: 0
Lot Depth/Width Ratio:

Avg. front setback of adjacent homes:

Zoning District: Zone D

Radnor Lake Impact Zone: No Steep Slope: No Plat/Subdivison: No

Status: Open

Assigned To: Desiree Lohr

**Property** 

Parcel # Address Legal Description Owner Name Owner Phone Zoning

13215004600 4700 FRANKLIN PIKE PARCEL CONSOLIDATION FRANKLIN ROAD FRANKLIN ROAD ACADEMY ACADEMY, INC.

Fees

Fee Description Notes Amount

CUP not including impervious surface (non-variance) \$1,000.00

Total \$1,000.00

**Payments** 

Date Paid By Description Payment Type Accepted By Amount
02/27/2024 Chuck Miller 107664 Desiree Lohr \$1,000

 02/27/2024
 Chuck Miller
 107664
 Desiree Lohr
 \$1,000.00

 Outstanding Balance
 \$0.00



#### **MEMORANDUM**

To: Mr. Stephen Snow

From: Zac Dufour, P.E.

Kimley-Horn and Associates, Inc.

Date: March 1, 2024

Subject: PC Case 24-12, Franklin Road Academy

We have completed our review of the Conditional Use Permit Site Plan for Franklin Road Academy for the addition lighting to the Tennis Courts.

The proposed project is to install 4 light poles at the corners of each tennis court block on the Franklin Road Academy campus. The applicant has submitted a site plan showing the locations of the lights, an electrical plan and a photometric plan showing the photometrics from the lights at the courts and at the nearest property line. They are meeting the City requirements for light spill at the property line. These lights were part of the approved Franklin Road Academy Master Plan that was approved by the Board of Zoning Appeals. They have also provided documentation that the light fixtures are dark sky compliant.

Please see below for engineering comments.

#### Comments

There are no comments on the site plan package that was submitted.

#### **Recommendation**

This project is recommended for approval.

c: File

# Franklin Road Academy Tennis Nashville,TN

#### **Lighting System**

| Pole/ | Pole/Fixture Summary |             |            |             |                |          |         |  |  |  |  |  |  |  |
|-------|----------------------|-------------|------------|-------------|----------------|----------|---------|--|--|--|--|--|--|--|
| F     | Pole ID              | Pole Height | Mtg Height | Fixture Qty | Luminaire Type | Load     | Circuit |  |  |  |  |  |  |  |
|       | T1-T4                | 50'         | 50'        | 2           | TLC-LED-1200   | 2.34 kW  | Α       |  |  |  |  |  |  |  |
|       | T5-T8                | 50'         | 50'        | 2           | TLC-LED-1200   | 2.34 kW  | В       |  |  |  |  |  |  |  |
|       | 8                    |             |            | 16          |                | 18.72 kW |         |  |  |  |  |  |  |  |

|   | Circuit Summary |             |         |             |  |  |  |  |  |  |  |  |  |
|---|-----------------|-------------|---------|-------------|--|--|--|--|--|--|--|--|--|
| П | Circuit         | Description | Load    | Fixture Qty |  |  |  |  |  |  |  |  |  |
| П | Α               | Tennis 1    | 9.36 kW | 8           |  |  |  |  |  |  |  |  |  |
| П | В               | Tennis 2    | 9.36 kW | 8           |  |  |  |  |  |  |  |  |  |

|   | Fixture Type Summary |                    |         |         |          |          |          |          |
|---|----------------------|--------------------|---------|---------|----------|----------|----------|----------|
| ı | Туре                 | Source             | Wattage | Lumens  | L90      | L80      | L70      | Quantity |
| ı | TLC-LED-1200         | LED 5700K - 75 CRI | 1170W   | 150,000 | >120,000 | >120,000 | >120,000 | 16       |

| Single Luminaire Amperage Draw Chart              |      |      |      |      |      |      |      |  |  |  |
|---|------|------|------|------|------|------|------|--|--|--|
| Driver Specifications Line Amperage Per Luminaire |      |      |      |      |      |      |      |  |  |  |
| (.90 min power factor) (max draw)                 |      |      |      |      |      |      |      |  |  |  |
| Single Phase Voltage                              | 208  | 220  | 240  | 277  | 347  | 380  | 480  |  |  |  |
| Siligle Filase Voltage                            | (60) | (60) | (60) | (60) | (60) | (60) | (60) |  |  |  |
| TLC-LED-1200                                      | 6.9  | 6.5  | 6.0  | 5.2  | 4.2  | 3.8  | 3.0  |  |  |  |

#### **Light Level Summary**

| Cuid Name                | Calmilation Matric              |         |      | Illumina | tion    |         | Circuits | Fixture |
|--------------------------|---------------------------------|---------|------|----------|---------|---------|----------|---------|
| Grid Name                | Calculation Metric              | Ave     | Min  | Max      | Max/Min | Ave/Min | Circuits | Qty     |
| Property Spill           | Horizontal Illuminance          | 0.0138  | 0.00 | 0.11     | -       | -       | A,B      | 16      |
| Property Spill           | Max Vertical Illuminance Metric | 0.0318  | 0.00 | 0.24     | -       | -       | A,B      | 16      |
| Tennis 1                 | Horizontal Illuminance          | 51.03   | 42   | 64       | 1.53    | 1.21    | Α        | 8       |
| Tennis 1 Spill           | Horizontal Illuminance          | 0.0008  | 0.00 | 0.00     | -       | -       | Α        | 8       |
| Tennis 1 Spill           | Max Vertical Illuminance Metric | 0.0034  | 0.00 | 0.02     | -       | -       | Α        | 8       |
| Tennis 1 Spill - Candela | Max Candela Metric              | 90.8775 | 0.00 | 633.63   | -       | -       | Α        | 8       |
| Tennis 2                 | Horizontal Illuminance          | 51.68   | 43   | 64       | 1.50    | 1.21    | В        | 8       |
| Tennis 2 Spill           | Horizontal Illuminance          | 0.0003  | 0.00 | 0.00     | -       | -       | В        | 8       |
| Tennis 2 Spill           | Max Vertical Illuminance Metric | 0.0013  | 0.00 | 0.01     | -       | -       | В        | 8       |
| Tennis 2 Spill - Candela | Max Candela Metric              | 27.5506 | 0.00 | 265.55   | -       | -       | В        | 8       |

#### From Hometown to Professional



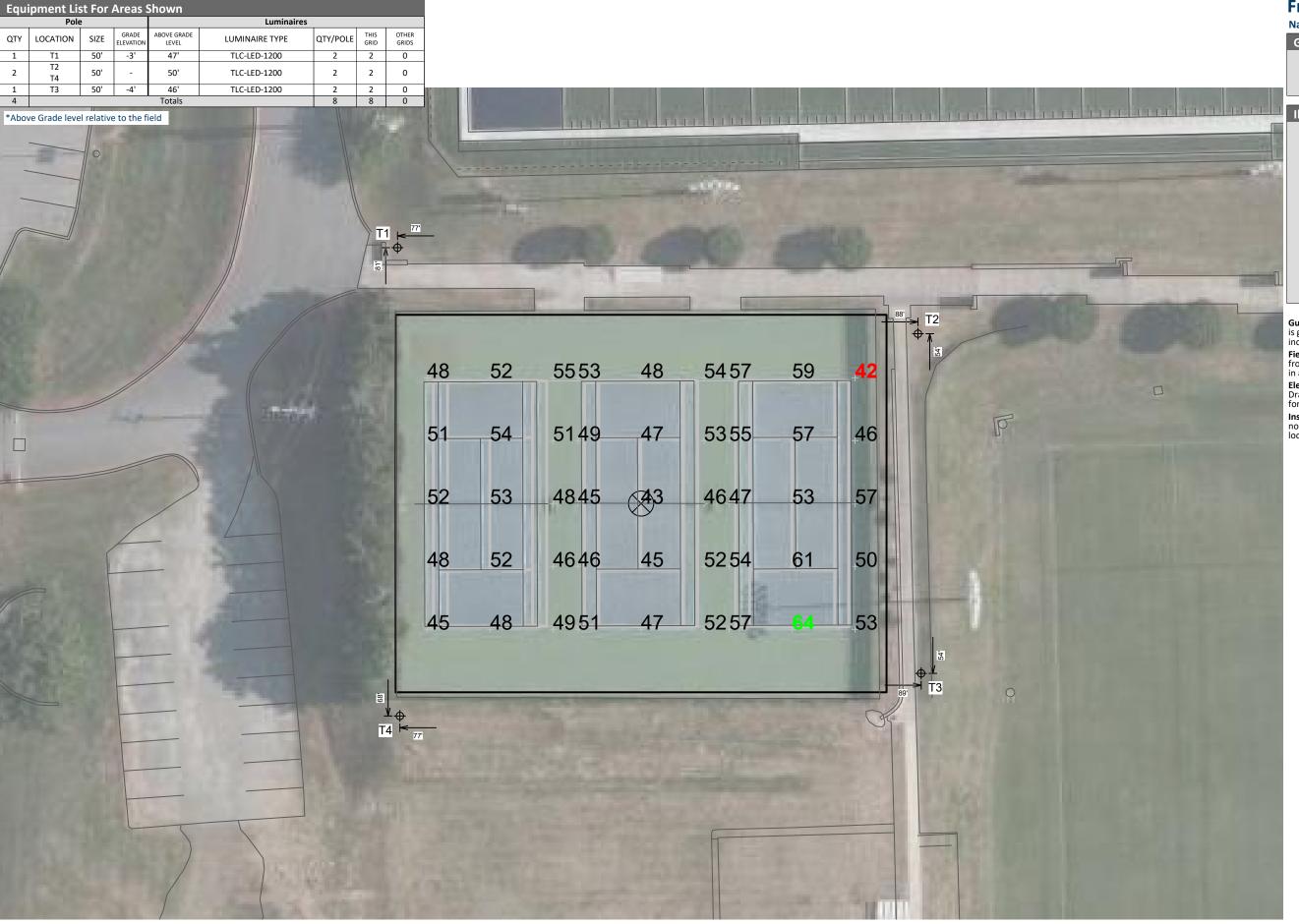












Pole location(s)  $\bigoplus$  dimensions are relative

to 0,0 reference point(s)

ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24

#### **Franklin Road Academy Tennis**

Grid Summary Name Tennis 1 Size 3 Court - 12' Spacing Spacing 20.0' x 20.0' Height 3.0' above grade

#### Illumination Summary Entire Grid Guaranteed Average 50 Scan Average 51.03 Maximum 64 Minimum 42 Avg/Min 1.21 Guaranteed Max/Min 2 Max/Min 1.53 UG (adjacent pts) 0.00 CU 0.75 No. of Points 45 LUMINAIRE INFORMATION Applied Circuits A No. of Luminaires 8 Total Load 9.36 kW

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-6-15.

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

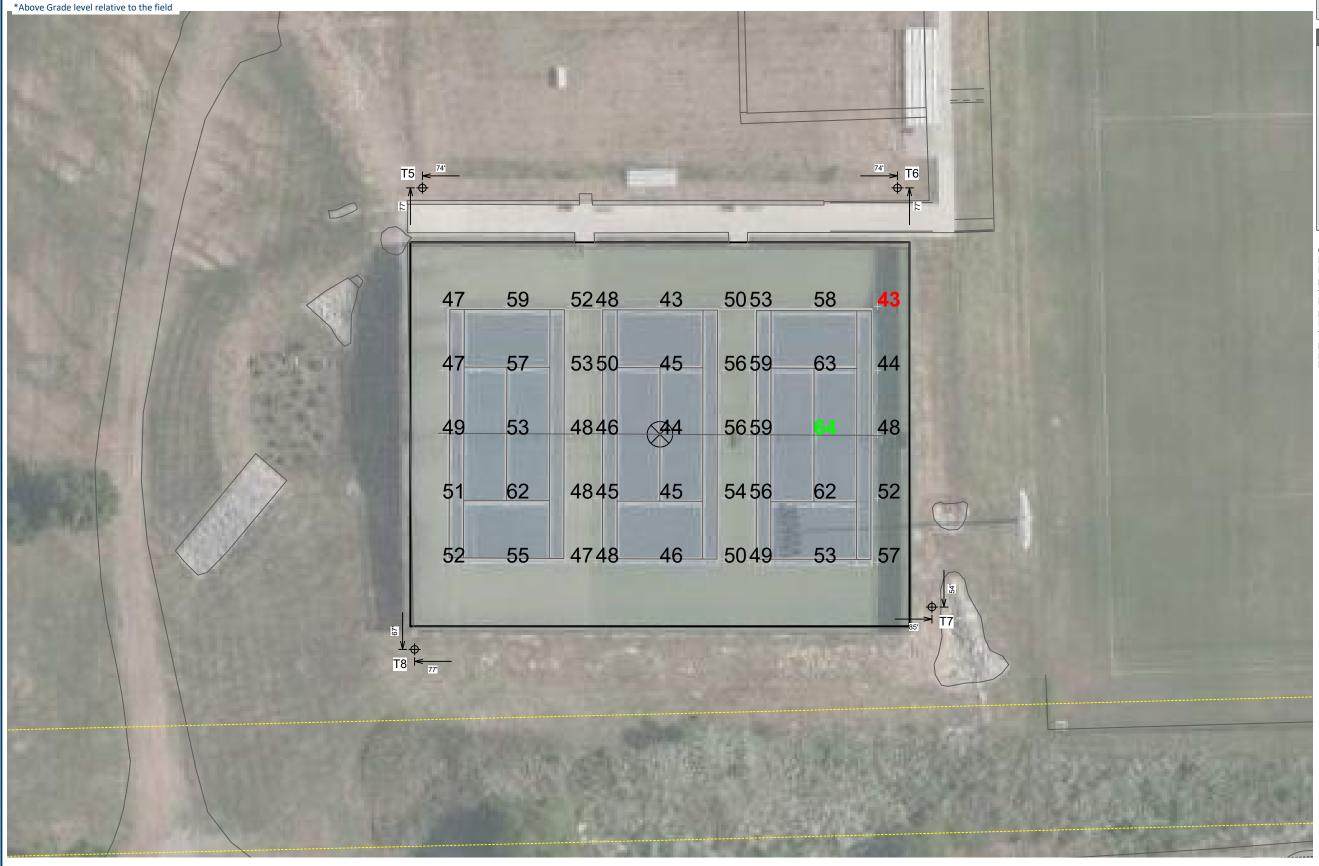
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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| Equipment List For Areas Shown |                 |      |                    |                      |                |          |              |                |  |  |  |
|--------------------------------|-----------------|------|--------------------|----------------------|----------------|----------|--------------|----------------|--|--|--|
|                                | Pole Luminaires |      |                    |                      |                |          |              |                |  |  |  |
| QTY                            | LOCATION        | SIZE | GRADE<br>ELEVATION | ABOVE GRADE<br>LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS<br>GRID | OTHER<br>GRIDS |  |  |  |
| 4                              | T5-T8           | 50'  | -                  | 50'                  | TLC-LED-1200   | 2        | 2            | 0              |  |  |  |
| 4                              | Totals 8 8 0    |      |                    |                      |                |          |              |                |  |  |  |

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### **Franklin Road Academy Tennis**

**Grid Summary** Name Tennis 2 Size 3 Court - 12' Spacing Spacing 20.0' x 20.0' Height 3.0' above grade

#### Illumination Summary Entire Grid Guaranteed Average 50 Scan Average 51.68 Maximum 64 Minimum 43 Avg/Min 1.21 Guaranteed Max/Min 2 Max/Min 1.50 UG (adjacent pts) 0.00 CU 0.76 No. of Points 45 LUMINAIRE INFORMATION Applied Circuits B No. of Luminaires 8 Total Load 9.36 kW

**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-6-15.

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** Luminaires ABOVE GRADE LEVEL GRADE ELEVATION QTY/POLE THIS GRID LOCATION SIZE LUMINAIRE TYPE TLC-LED-1200 T2 50' 50' TLC-LED-1200 2 TLC-LED-1200 T3 46' 8 8 Totals \*Above Grade level relative to the field 0.0 T4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 SCALE IN FEET 1:60

Pole location(s) ⊕ dimensions are relative

to 0,0 reference point(s)

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## Franklin Road Academy Tennis

lashville.TN

Rame Tennis 1 Spill
Spacing 30.0' x 30.0'
Height 3.0' above grade

#### 

**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-6-15.

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.

Total Load 9.36 kW



#### **Equipment List For Areas Shown** Luminaires ABOVE GRADE LEVEL GRADE ELEVATION QTY/POLE THIS GRID LOCATION SIZE LUMINAIRE TYPE TLC-LED-1200 T2 50' 50' TLC-LED-1200 2 TLC-LED-1200 T3 46' 8 8 Totals \*Above Grade level relative to the field 0.0 T4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 SCALE IN FEET 1:60

Pole location(s) ⊕ dimensions are relative

to 0,0 reference point(s)

ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24

## Franklin Road Academy Tennis

lashville.TN

Rame Tennis 1 Spill
Spacing 30.0' x 30.0'
Height 3.0' above grade

# Illumination Summary MAINTAINED MAX VERTICAL FOOTCANE Entire Grid Scan Average Maximum Minimum CU No. of Points LUMINAIRE INFORMATION Applied Circuits No. of Luminaires No. of Luminaires 8

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

Total Load 9.36 kW

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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** ABOVE GRADE LEVEL GRADE ELEVATION QTY/POLE THIS GRID LOCATION SIZE LUMINAIRE TYPE TLC-LED-1200 50' 50' TLC-LED-1200 2 50' -4' TLC-LED-1200 T3 46' 8 8 Totals \*Above Grade level relative to the field /169 160 27 12 462 468 229 69 14 61 109 145 T4 436 390 2 37 5 T5 112 29 122 191 71 177 SCALE IN FEET 1:60

Pole location(s) ⊕ dimensions are relative

to 0,0 reference point(s)

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# Franklin Road Academy Tennis

lashville.TN

Grid Summary

Name Tennis 1 Spill - Candela Spacing 30.0' x 30.0' Height 5.0' above grade

Illumination Summary

MAINTAINED CANDELA (PER FIXTUE

Entire Grid

90.8775

Maximum
633.63

Minimum
CU
0.00

No. of Points

LUMINAIRE INFORMATION
Applied Circuits

A MAINTAINED CANDELA (PER FIXTUE

Entire Grid

90.8775

633.63

0.00

0.00

50

LUMINAIRE INFORMATION

Applied Circuits

No. of Luminaires 8

Total Load 9.36 kW

**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-6-15.

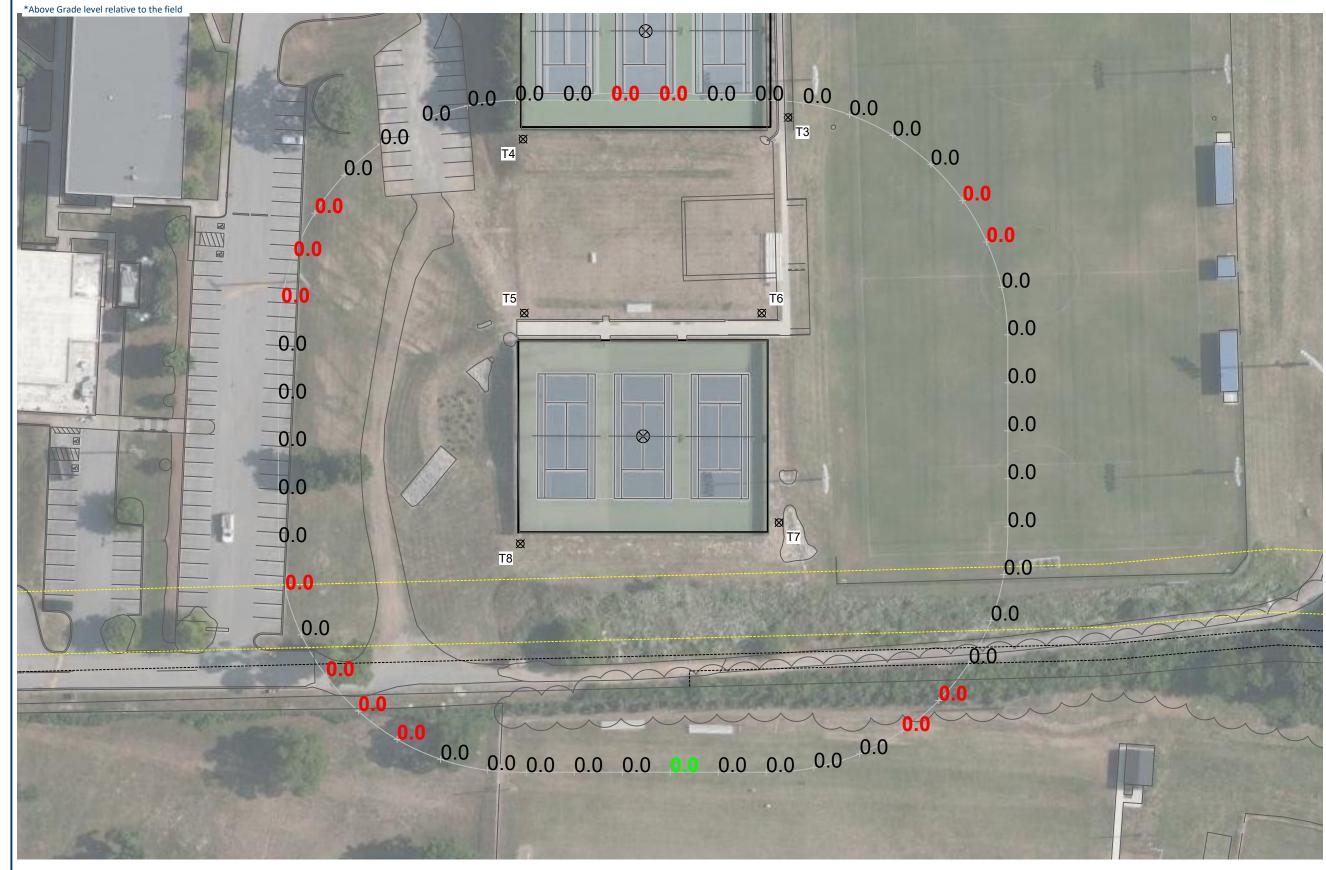
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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 |                 |      |                    |                      |                |          |              |                |  |  |  |
|--------------------------------|-----------------|------|--------------------|----------------------|----------------|----------|--------------|----------------|--|--|--|
|                                | Pole Luminaires |      |                    |                      |                |          |              |                |  |  |  |
| QTY                            | LOCATION        | SIZE | GRADE<br>ELEVATION | ABOVE GRADE<br>LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS<br>GRID | OTHER<br>GRIDS |  |  |  |
| 4                              | T5-T8           | 50'  | -                  | 50'                  | TLC-LED-1200   | 2        | 2            | 0              |  |  |  |
| 4                              | Totals 8 8 0    |      |                    |                      |                |          |              |                |  |  |  |

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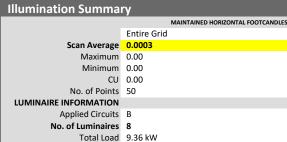
Pole location(s)  $\oplus$  dimensions are relative

to 0,0 reference point(s)

Franklin Road Academy Tennis

Nashville.TN

Name Tennis 2 Spill
Spacing 30.0' x 30.0'
Height 3.0' above grade



**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-6-15.

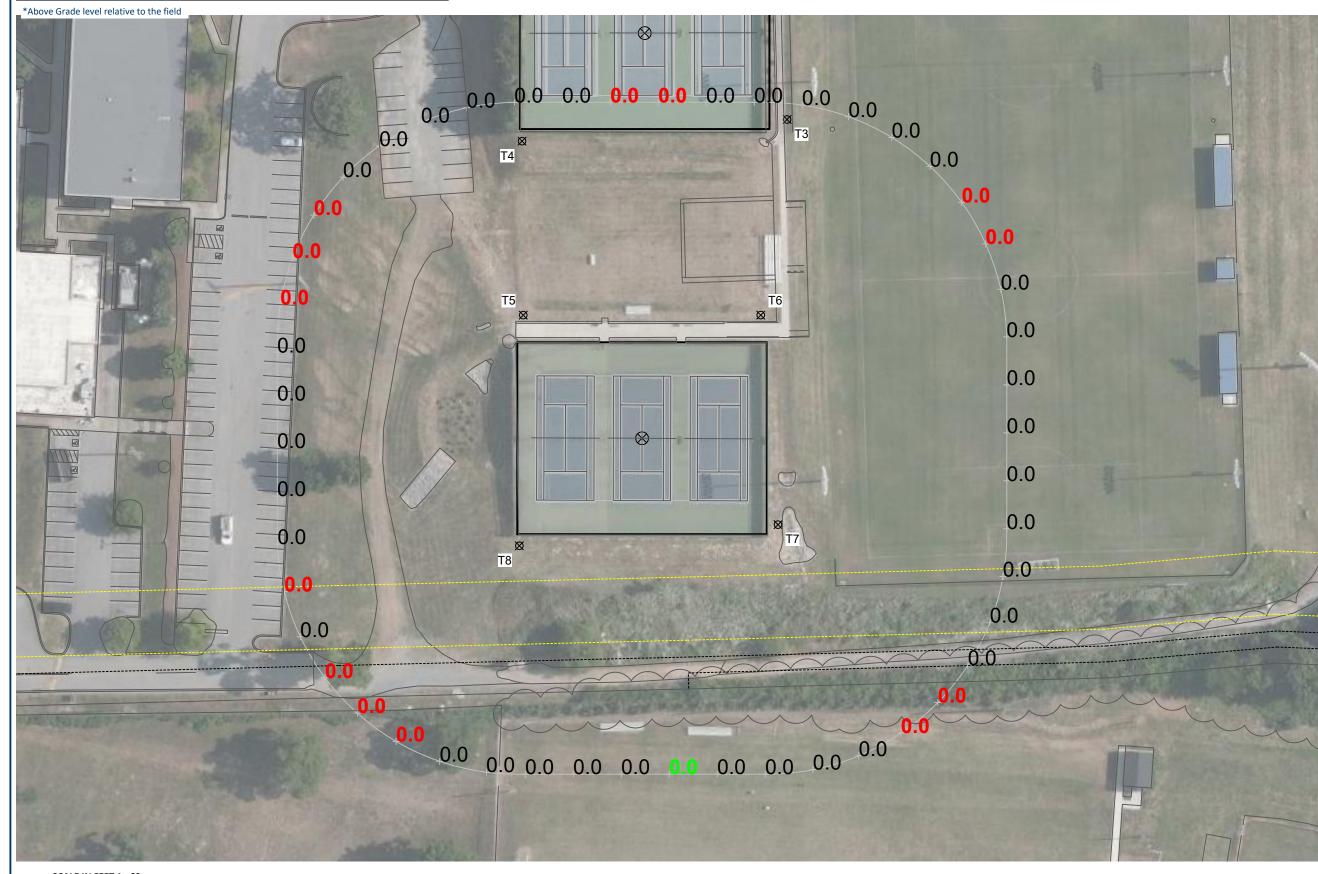
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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 |                 |      |                    |                      |                |          |              |                |  |  |  |  |
|--------------------------------|-----------------|------|--------------------|----------------------|----------------|----------|--------------|----------------|--|--|--|--|
|                                | Pole Luminaires |      |                    |                      |                |          |              |                |  |  |  |  |
| QTY                            | LOCATION        | SIZE | GRADE<br>ELEVATION | ABOVE GRADE<br>LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS<br>GRID | OTHER<br>GRIDS |  |  |  |  |
| 4                              | T5-T8           | 50'  | -                  | 50'                  | TLC-LED-1200   | 2        | 2            | 0              |  |  |  |  |
| 4                              | Totals 8 8 0    |      |                    |                      |                |          |              |                |  |  |  |  |

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Pole location(s)  $\oplus$  dimensions are relative

to 0,0 reference point(s)

Franklin Road Academy Tennis

Nashville.TN

Rame Tennis 2 Spill
Spacing 30.0' x 30.0'
Height 3.0' above grade

Illumination Summary

MAINTAINED MAX VERTICAL FOOTCANDLE
Entire Grid

Scan Average
0.0013

Maximum
0.00
CU
0.00
No. of Points
LUMINAIRE INFORMATION
Applied Circuits
No. of Luminaires
Total Load
9.36 kW

**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-6-15.

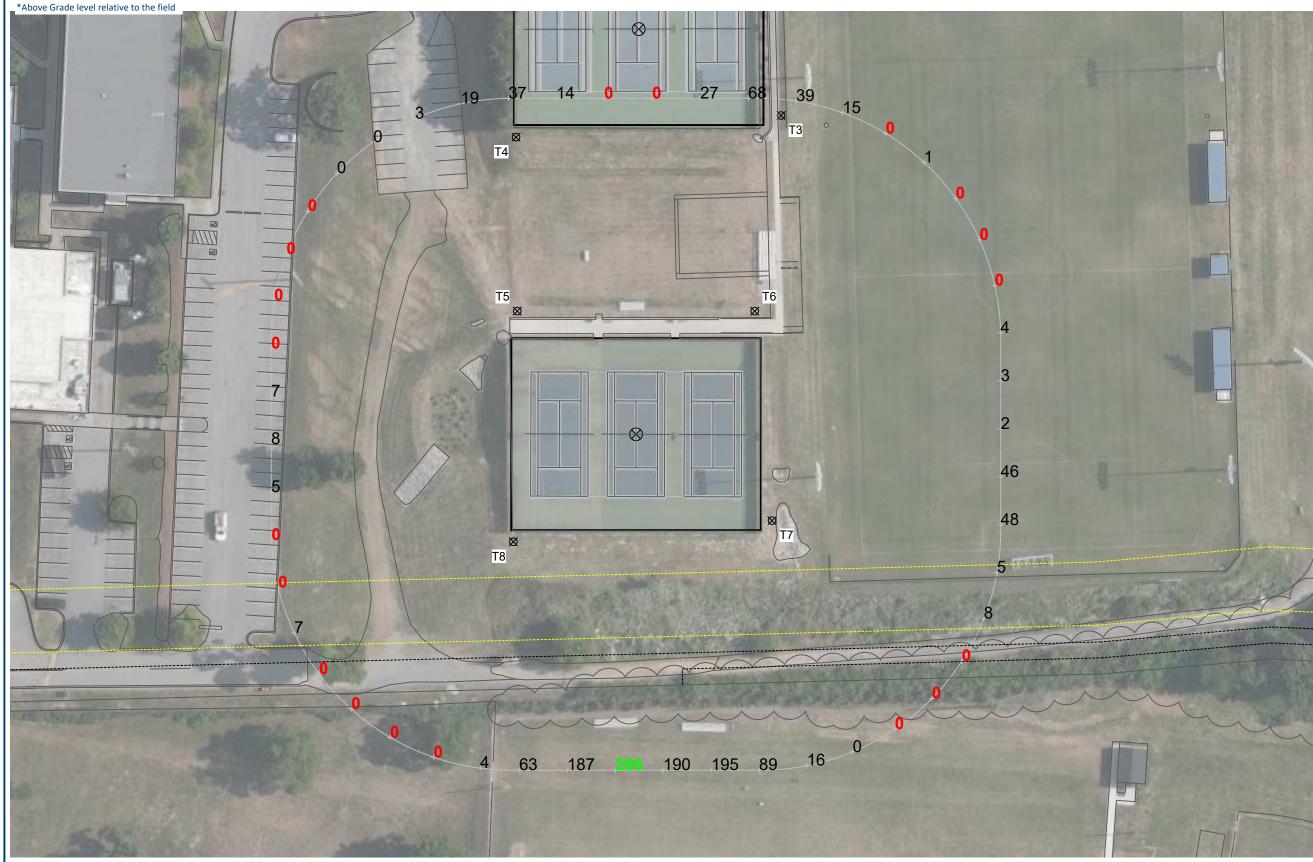
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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



| Equi | Equipment List For Areas Shown |      |                    |                      |                |          |              |                |  |  |  |  |
|------|--------------------------------|------|--------------------|----------------------|----------------|----------|--------------|----------------|--|--|--|--|
|      | Pole Luminaires                |      |                    |                      |                |          |              |                |  |  |  |  |
| QTY  | LOCATION                       | SIZE | GRADE<br>ELEVATION | ABOVE GRADE<br>LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS<br>GRID | OTHER<br>GRIDS |  |  |  |  |
| 4    | T5-T8                          | 50'  | -                  | 50'                  | TLC-LED-1200   | 2        | 2            | 0              |  |  |  |  |
| 4    | Totals 8 8 0                   |      |                    |                      |                |          |              |                |  |  |  |  |

0' 120' ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24



Franklin Road Academy Tennis

Nashville.TN

Grid Summary

Name Tennis 2 Spill - Candela Spacing 30.0' x 30.0' Height 5.0' above grade

Illumination Summary

MAINTAINED CANDELA (PER FIXTURE INFORMATION

Applied Circuits

No. of Luminaires

No. of Luminaires

Administration Fixture Fixt

**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-6-15.

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

Total Load 9.36 kW

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





Pole location(s)  $\oplus$  dimensions are relative

to 0,0 reference point(s)

0' 160' ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24

# **Franklin Road Academy Tennis**

Grid Summary Name Property Spill Spacing 30.0' x 30.0' Height 3.0' above grade

#### **Illumination Summary Entire Grid** Scan Average 0.0138 Maximum 0.11 Minimum 0.00 CU 0.00 No. of Points 29 LUMINAIRE INFORMATION Applied Circuits A,B No. of Luminaires 16 Total Load 18.72 kW

**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-6-15.

**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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Pole location(s)  $\oplus$  dimensions are relative

to 0,0 reference point(s)

0' 160' ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24

# Franklin Road Academy Tennis

shville.TN

Name Property Spill
Spacing 30.0' x 30.0'
Height 3.0' above grade

MAINTAINED MAX VERTICAL FOOTCANDLES
Entire Grid

Scan Average
Maximum
Minimum
CU
No. of Points
29

LUMINAIRE INFORMATION
Applied Circuits
No. of Luminaires
Total Load
18.72 kW

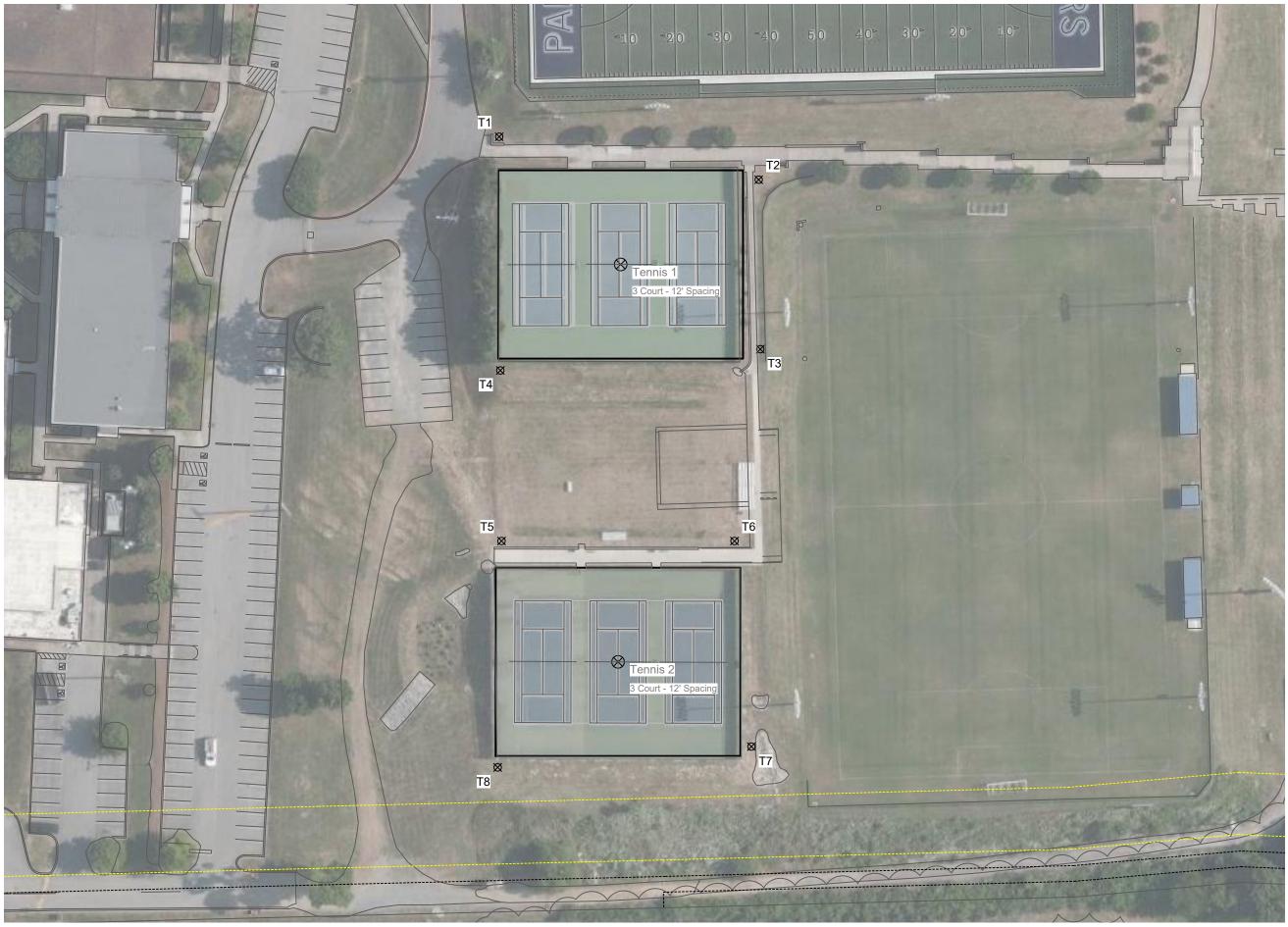
**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**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.





Pole location(s)  $\,\oplus\,$  dimensions are relative

to 0,0 reference point(s)

SCALE IN FEET 1:60

0' 60' 120' ENGINEERED DESIGN By: E.Gray • File #177993Cr2 • 01-Mar-24

# Franklin Road Academy Tennis

Nashville,TN

### **Equipment Layout**

# INCLUDES: · Tennis 1 · Tennis 2

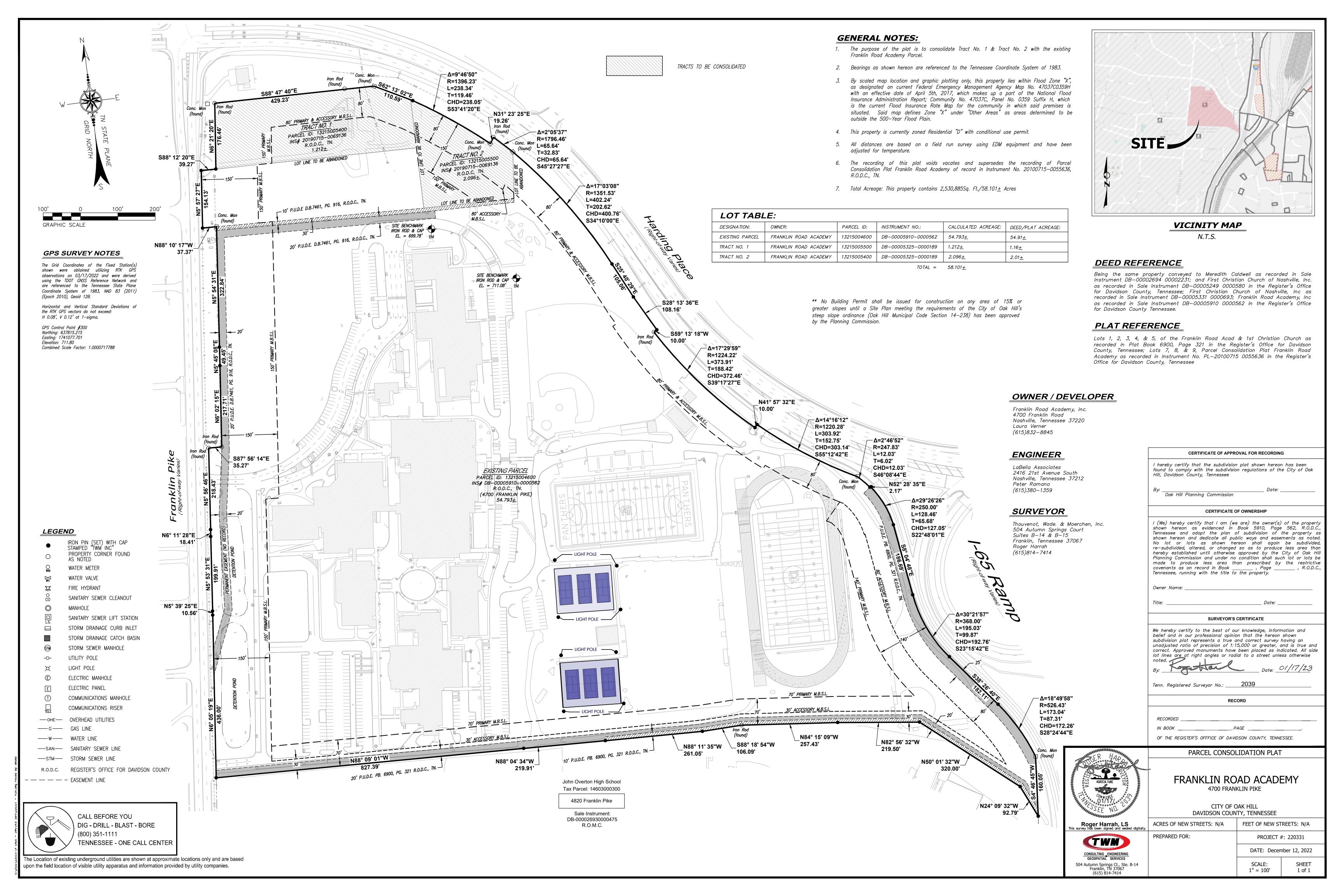
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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

| Eq | Equipment List For Areas Shown |      |                    |                      |                |          |  |  |  |  |  |  |
|----|--------------------------------|------|--------------------|----------------------|----------------|----------|--|--|--|--|--|--|
|    |                                | Pole |                    | Luminaires           |                |          |  |  |  |  |  |  |
| YT | LOCATION                       | SIZE | GRADE<br>ELEVATION | ABOVE<br>GRADE LEVEL | LUMINAIRE TYPE | QTY/POLE |  |  |  |  |  |  |
| 1  | T1                             | 50'  | -3'                | 47'                  | TLC-LED-1200   | 2        |  |  |  |  |  |  |
| 6  | T2<br>T4-T8                    | 50'  | 1                  | 50'                  | TLC-LED-1200   | 2        |  |  |  |  |  |  |
| 1  | T3                             | 50'  | -4'                | 46'                  | 2              |          |  |  |  |  |  |  |
| 8  |                                |      | Totals             | 5                    |                | 16       |  |  |  |  |  |  |

| Single Luminaire Amperage Draw Chart              |      |      |      |      |      |      |      |  |  |  |  |
|---|------|------|------|------|------|------|------|--|--|--|--|
| Driver Specifications Line Amperage Per Luminaire |      |      |      |      |      |      |      |  |  |  |  |
| (.90 min power factor) (max draw)                 |      |      |      |      |      |      |      |  |  |  |  |
| Single Phase Voltage                              | 208  | 220  | 240  | 277  | 347  | 380  | 480  |  |  |  |  |
| Single Phase Voltage                              | (60) | (60) | (60) | (60) | (60) | (60) | (60) |  |  |  |  |
| TLC-LED-1200                                      | 6.9  | 6.5  | 6.0  | 5.2  | 4.2  | 3.8  | 3.0  |  |  |  |  |





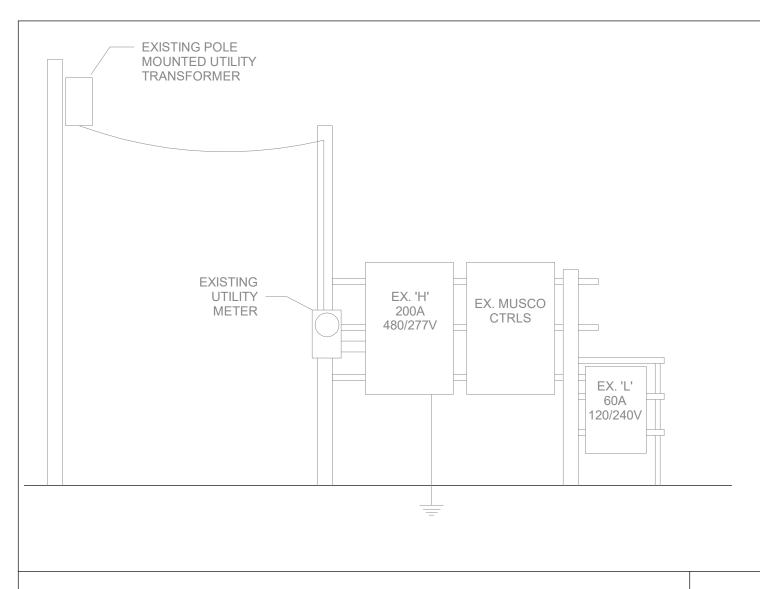
# GENERAL NOTES

A. FIELD LIGHTING AND CONTROLS BY OTHERS. CONTRACTOR SHALL COORDINATE INSTALLATION REQUIREMENTS WITH VENDOR PRIOR TO ROUGH-IN.

# KEYNOTES

- APPROXIMATE LOCATION OF EXISTING PANELS SERVING THE FOOTBALL FIELD. REFER TO RISER DIAGRAM ON THIS SHEET FOR ADDITIONAL DETAILS. EXISTING UNISTRUT SHALL BE EXPANDED TO SUPPORT NEW LIGHTING CONTROL EQUIPMENT. CONTRACTOR SHALL COORDINATE INSTALLATION REQUIREMENTS WITH VENDOR PRIOR TO ROUGH-IN.
- 2. PROVIDE CONNECTION TO TENNIS LIGHTING CIRCUIT 'T-1'. USE 3#12,#12G, 1"C.
- 3. PROVIDE CONNECTION TO TENNIS LIGHTING CIRCUIT 'T-2'. USE 3#10,#10G, 1"C.
- 4. FIELD LIGHTING AND CONTROLS REQUIREMENTS AT EACH POLE BY OTHERS. CONTRACTOR SHALL COORDINATE INSTALLATION REQUIREMENTS WITH VENDOR PRIOR TO





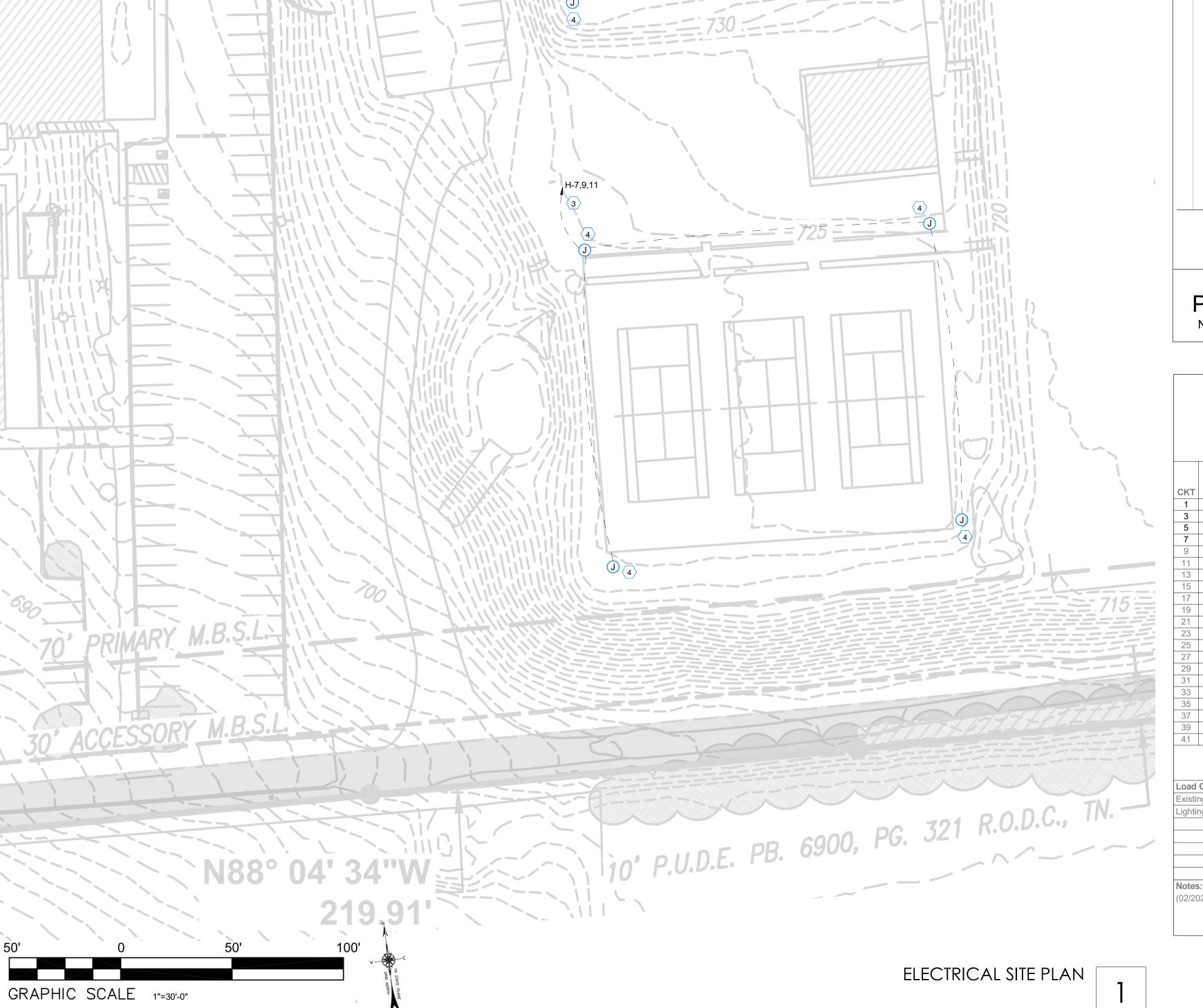
# Panel: H

PARTIAL ELECTRICAL RISER DIAGRAM 2

| Location: Football Field  Supply From: NES Pole Xfmr  Mounting: Surface Enclosure: Type 3R |                     |                |      |       |          |          | Volts:<br>Phases:<br>Wires: |          | re       |          |       | Mains | Rating: [<br>s Type: N<br>Rating: 2 |                     |     |
|--|---------------------|----------------|------|-------|----------|----------|-----------------------------|----------|----------|----------|-------|-------|-------------------------------------|---------------------|-----|
| KT   | Circuit Description | Load<br>Class. | Trip | Poles | Α        | В        | С                           | Α        | В        | С        | Poles | Trip  | Load<br>Class.                      | Circuit Description | СК  |
| 1  | T-1                 | Lighti         | 20 A | 3     | 3.12 kVA |          |                             | 0.00 kVA |          |          | 2     | 60 A  |                                     | F-1                 | 2   |
| 3  |                     |                |      |       |          | 3.12 kVA |                             |          | 0.00 kVA |          |       |       |                                     |                     | 4   |
| 5  |                     |                |      |       |          |          | 3.12 kVA                    |          |          | 0.00 kVA | 2     | 60 A  |                                     | F-2                 | 6   |
| 7  | T-2                 | Lighti         | 20 A | 3     | 3.12 kVA |          |                             | 0.00 kVA |          |          |       |       |                                     |                     | 8   |
| 9  |                     |                |      |       |          | 3.12 kVA |                             |          | 0.00 kVA |          | 2     | 60 A  |                                     | F-3                 | 10  |
| 1  |                     |                |      |       |          |          | 3.12 kVA                    |          |          | 0.00 kVA |       |       |                                     |                     | 12  |
| 3  | USABLE SPACE        |                |      | 1     |          |          |                             | 0.00 kVA |          |          | 2     | 60 A  |                                     | F-4                 | 14  |
| 5  | USABLE SPACE        |                |      | 1     |          |          |                             |          | 0.00 kVA |          |       |       |                                     |                     | 16  |
| 7  | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 18  |
| 9  | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 20  |
| 21   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 22  |
| 23   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 24  |
| 25   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 26  |
| 27   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 28  |
| 29   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 30  |
| 31   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 32  |
| 33   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 34  |
| 35   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 36  |
| 37   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 38  |
| 39   | USABLE SPACE        |                |      | 1     |          |          |                             |          |          |          | 1     |       |                                     | USABLE SPACE        | 40  |
| 1.4  | LICABLE OBAGE       |                |      | 4     |          |          |                             |          |          |          | - 4   |       |                                     | LICABLE OBAGE       | 4.0 |

| Load Classification | Connected Load | Demand Factor | Estimated Demand | Panel Totals               |            |
|---------------------|----------------|---------------|------------------|----------------------------|------------|
| Existing Load       | 68000 VA       | 125.00%       | 85000 VA         | Total Conn. Load:          | 86.72 kVA  |
| Lighting            | 18720 VA       | 100.00%       | 18720 VA         | Total Est. Demand:         | 103.72 kVA |
|                     |                |               |                  | Total Est. Design:         | 103.72 kVA |
|                     |                |               |                  | Total Conn. Current:       | 104 A      |
|                     |                |               |                  | Total Est. Demand Current: | 125 A      |
|                     |                |               |                  | Total Est. Design Current: | 125 A      |
|                     |                |               |                  |                            |            |

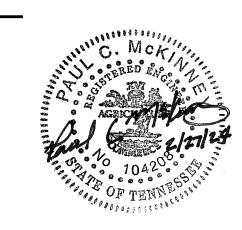
(02/2024) PEAK METERED LOAD = 68kVA | 68kVA x 125% = 85kVA OF EXISTING LOAD (FOOTBALL FIELD LIGHTING)



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ELECTRICAL - SITE PLAN