Mt Hope High School Tennis Bristol, RI

Lighting System

| Pole/Fixture Su | Pole/Fixture Summary | | | | | | | | | | | | |
|-----------------|----------------------|------------|-------------|----------------|----------|---------|--|--|--|--|--|--|--|
| Pole ID | Pole Height | Mtg Height | Fixture Qty | Luminaire Type | Load | Circuit | | | | | | | |
| T1 | 40' | 40' | 2 | TLC-LED-900 | 1.76 kW | Α | | | | | | | |
| T2 | T2 60' 60' | | 2 | TLC-LED-900 | 1.76 kW | Α | | | | | | | |
| | | 60' | 3 | TLC-LED-900 | 2.64 kW | В | | | | | | | |
| T3-T4 | 60' | 60' | 3 | TLC-LED-900 | 2.64 kW | В | | | | | | | |
| T5 | 60' | 60' | 2 | TLC-LED-900 | 1.76 kW | Α | | | | | | | |
| | | 60' | 3 | TLC-LED-900 | 2.64 kW | В | | | | | | | |
| T6 | 40' | 40' | 2 | TLC-LED-900 | 1.76 kW | Α | | | | | | | |
| 6 | | | 20 | | 17.60 kW | | | | | | | | |

| | Circuit Sumn | Circuit Summary | | | | | | | |
|---|--------------|-----------------|----------|-------------|--|--|--|--|--|
| ı | Circuit | Description | Load | Fixture Qty | | | | | |
| ı | Α | Tennis 1-2 | 7.04 kW | 8 | | | | | |
| | В | Tennis 3-5 | 10.56 kW | 12 | | | | | |

| ı | Fixture Type Summary | | | | | | | |
|---|----------------------|--------------------|---------|---------|----------|----------|----------|----------|
| ı | Туре | Source | Wattage | Lumens | L90 | L80 | L70 | Quantity |
| | TLC-LED-900 | LED 5700K - 75 CRI | 880W | 104,000 | >120,000 | >120,000 | >120,000 | 20 |

| 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-900 | 5.2 | 4.9 | 4.5 | 3.9 | 3.1 | 2.9 | 2.3 |

Light Level Summary

| | Calculation Grid Summary | | | | | | | | | |
|-----|--------------------------|---------------------------------|--------|------|---------------|---------|---------|----------|-------------|--|
| | Grid Name | Calculation Metric | | ıll | umination Ave | : | | Circuits | Fixture Qty | |
| | Grid Name | Calculation Wethe | Ave | Min | Max | Max/Min | Ave/Min | Circuits | Tixture Qty | |
| - 1 | Project Spill @ 3ft. | Horizontal Illuminance | 0.0000 | 0.00 | 0.00 | - | - | A,B | 20 | |
| - 1 | Project Spill @ 5ft. | Max Candela Metric | 0.0000 | 0.00 | 0.00 | - | - | A,B | 20 | |
| - 1 | Project Spill @ 5ft. | Max Vertical Illuminance Metric | 0.0000 | 0.00 | 0.00 | - | - | A,B | 20 | |
| - 1 | Tennis 1-2 | Horizontal Illuminance | 50.84 | 43 | 67 | 1.57 | 1.18 | Α | 8 | |
| - | Tennis 3-5 | Horizontal Illuminance | 55.12 | 46 | 67 | 1.47 | 1.21 | В | 12 | |

From Hometown to Professional





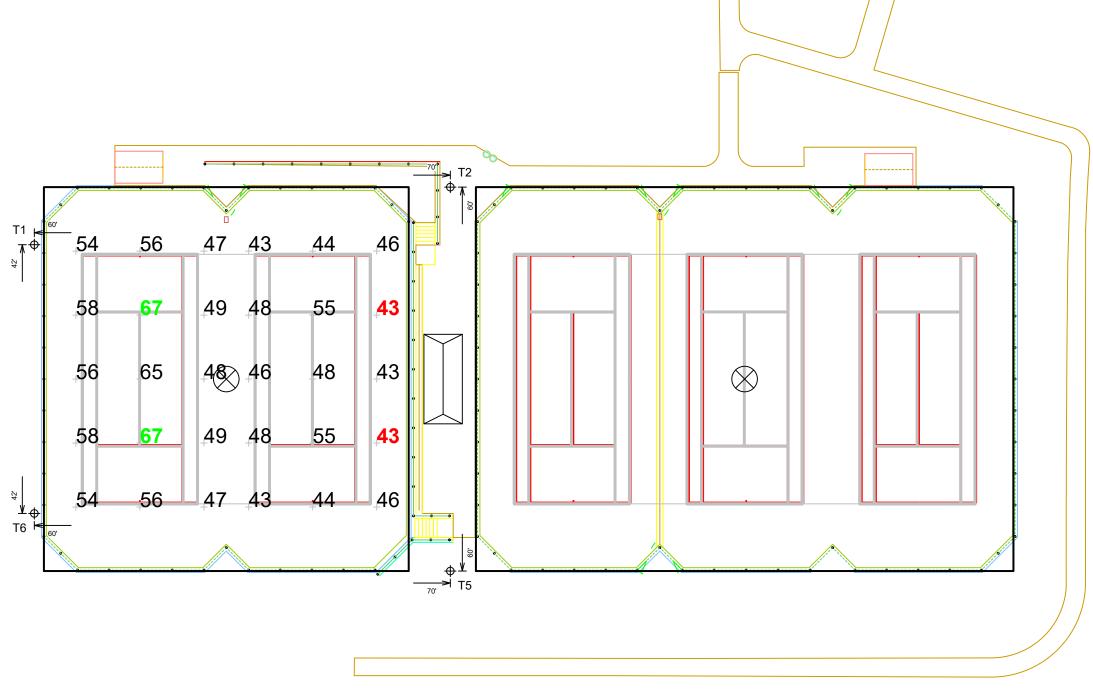






| Equipment List For Areas Shown | | | | | | | | | | | | |
|--------------------------------|----------|----------|--------------------|----------------------|-----------------|----------|--------------|----------------|--|--|--|--|
| | Pole | : | | | Luminaires | | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | ABOVE GRADE LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS GRID | OTHER GRIDS | | | | |
| 2 | T1 T6 | 40' | - | 40' | 40' TLC-LED-900 | | 2 | 0 | | | | |
| 2 | T2 T5 | 60' | - | 60' | 60' TLC-LED-900 | | 2 | 3 | | | | |
| 4 | Totals | | | | | 14 | 8 | 6 | | | | |

*Above Grade level relative to the field



SCALE IN FEET 1:30 O' ENGINEERED DESIGN By: T.Lanphier • File #241521A • 15-Jan-25

Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \boxtimes

Mt Hope High School Tennis

Bristol, RI

Grid Summary

Name Tennis 1-2 Size 2 Court - 18' Spacing Spacing 20.0' x 20.0' Height 3.0' above grade

| Illumination Summa | ry |
|-----------------------|-----------------------------------|
| | MAINTAINED HORIZONTAL FOOTCANDLES |
| | Entire Grid |
| Guaranteed Average | 50 |
| Scan Average | 50.84 |
| Maximum | 67 |
| Minimum | 43 |
| Avg/Min | 1.18 |
| Guaranteed Max/Min | 2 |
| Max/Min | 1.57 |
| UG (adjacent pts) | 0.00 |
| CU | 0.81 |
| No. of Points | 30 |
| LUMINAIRE INFORMATION | |
| Applied Circuits | A |
| No. of Luminaires | 8 |
| Total Load | 7.04 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.

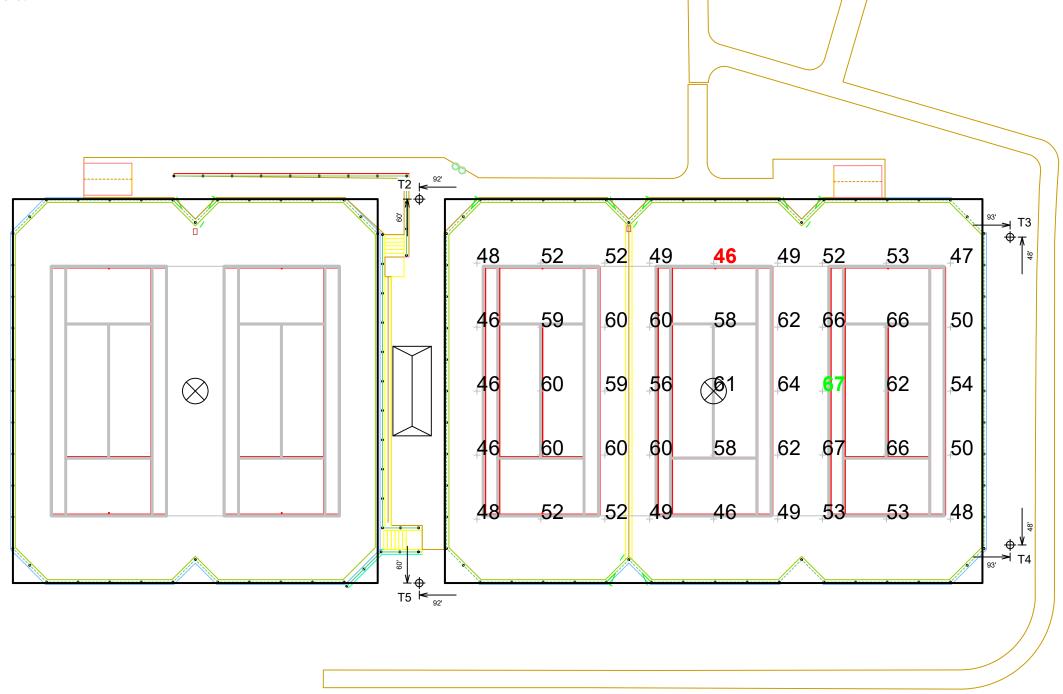
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Norther Chill, LC 24/Jan /2025



| Equipment List For Areas Shown | | | | | | | | | | | |
|--------------------------------|----------|----------|--------------------|----------------------|----------------|----------|--------------|----------------|--|--|--|
| | Pole | : | | | Luminaires | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | ABOVE GRADE LEVEL | LUMINAIRE TYPE | QTY/POLE | THIS GRID | OTHER GRIDS | | | |
| 2 | T2 T5 | 60' | - | 60' | TLC-LED-900 | 5 | 3 | 2 | | | |
| 2 | T3-T4 | 60' | - | 60' | TLC-LED-900 | 3 | 3 | 0 | | | |
| 4 | Totals | | | | | | 12 | 4 | | | |

*Above Grade level relative to the field





Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \boxtimes

Mt Hope High School Tennis

Bristol, RI

Grid Summary Name Tennis

Name Tennis 3-5
Size 3 Court - 18' Spacing
Spacing 20.0' x 20.0'
Height 3.0' above grade

| Illumination Summa | ry |
|-----------------------|-----------------------------------|
| | MAINTAINED HORIZONTAL FOOTCANDLES |
| | Entire Grid |
| Guaranteed Average | 50 |
| Scan Average | 55.12 |
| Maximum | 67 |
| Minimum | 46 |
| Avg/Min | 1.21 |
| Guaranteed Max/Min | 2 |
| Max/Min | 1.47 |
| UG (adjacent pts) | 0.00 |
| CU | 0.82 |
| No. of Points | 45 |
| LUMINAIRE INFORMATION | |
| Applied Circuits | В |
| No. of Luminaires | 12 |
| Total Load | 10.56 kW |

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

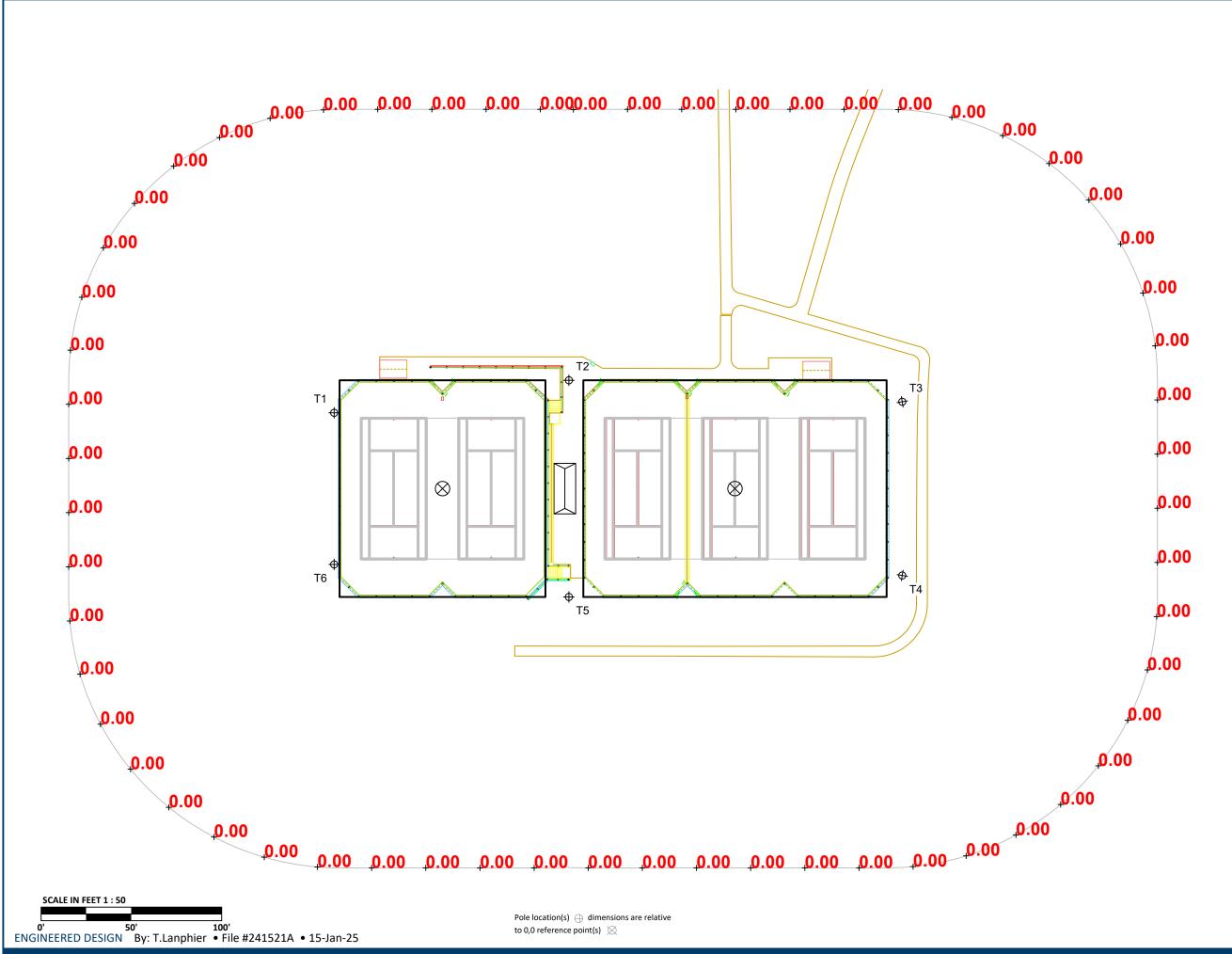
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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.

Norther Chill, LC 24/JAN /2025





Bristol, RI

Grid Summary

Name Project Spill @ 3ft. Spacing 30.0' Height 3.0' above grade

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

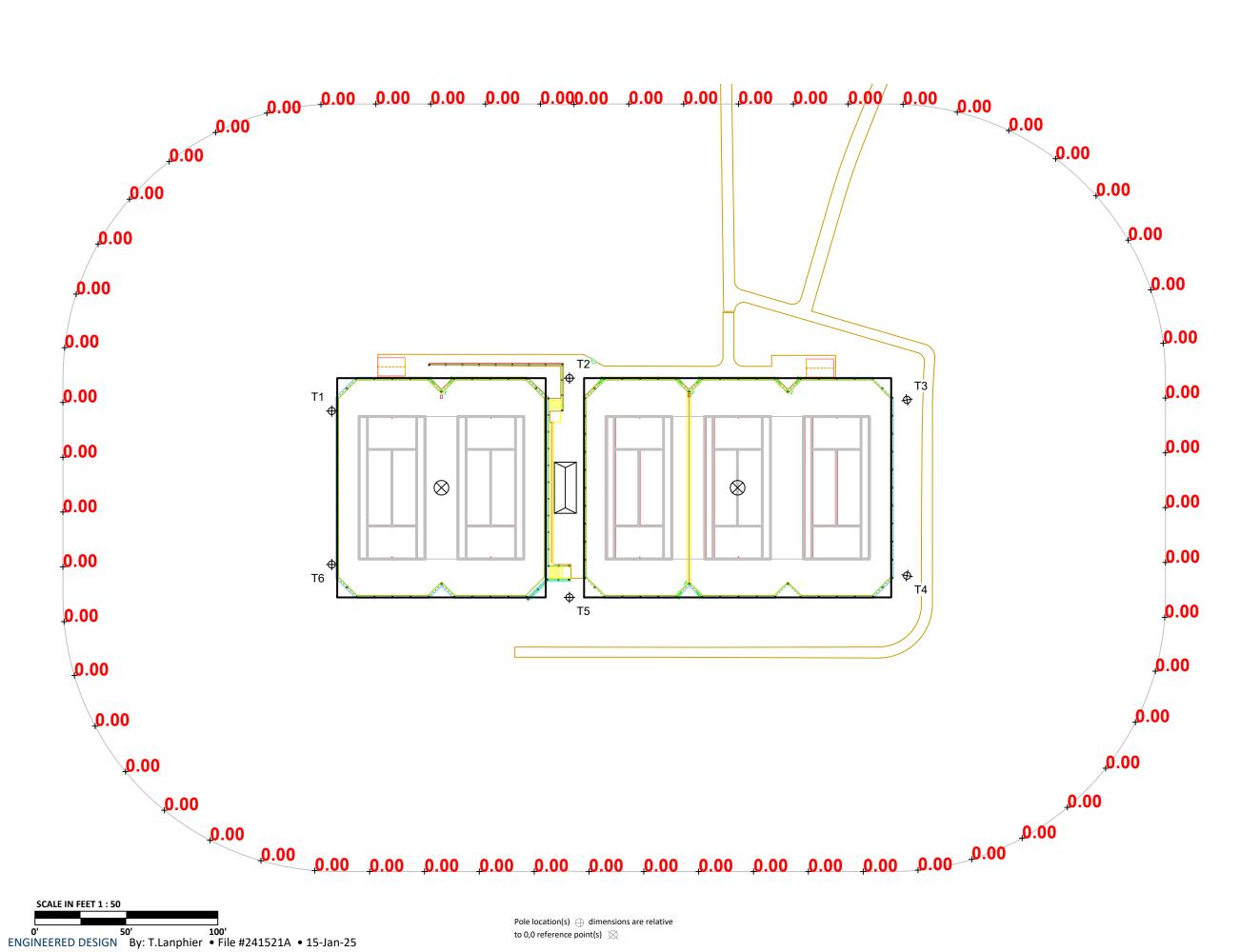
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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.







Bristol, RI

Grid Summary

Name Project Spill @ 5ft.
Spacing 30.0'
Height 5.0' above grade

Illumination Summary INITIAL MAX VERTICAL FOOTCANDLES Entire Grid Scan Average O.0000 Maximum Minimum No. of Points LUMINAIRE INFORMATION Applied Circuits No. of Luminaires Total Load 17.60 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

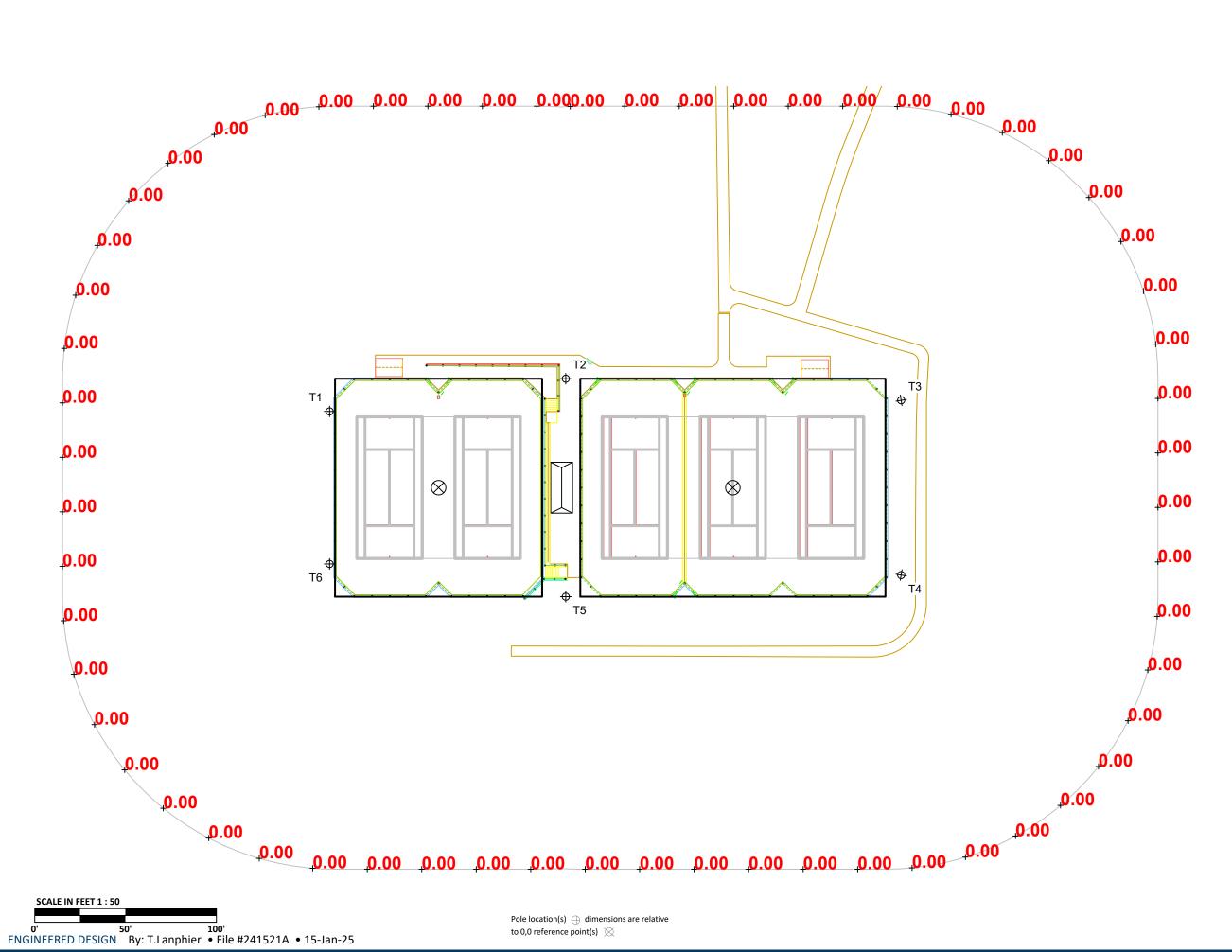
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

 $\label{localization} \begin{array}{ll} \textbf{Installation Requirements:} & \text{Results assume} \pm 3\% \\ \text{nominal voltage at line side of the driver and structures} \\ \text{located within 3 feet (1m) of design locations.} \end{array}$







Bristol, RI

Grid Summary

Name Project Spill @ 5ft.
Spacing 30.0'
Height 5.0' above grade

| Illumination Summa | ry | |
|-----------------------|-------------|-------------------------------|
| | | INITIAL CANDELA (PER FIXTURE) |
| | Entire Grid | |
| Scan Average | 0.0000 | |
| Maximum | 0.00 | |
| Minimum | 0.00 | |
| No. of Points | 60 | |
| LUMINAIRE INFORMATION | | |
| Applied Circuits | A,B | |
| No. of Luminaires | 20 | |
| Total Load | 17.60 kW | |

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

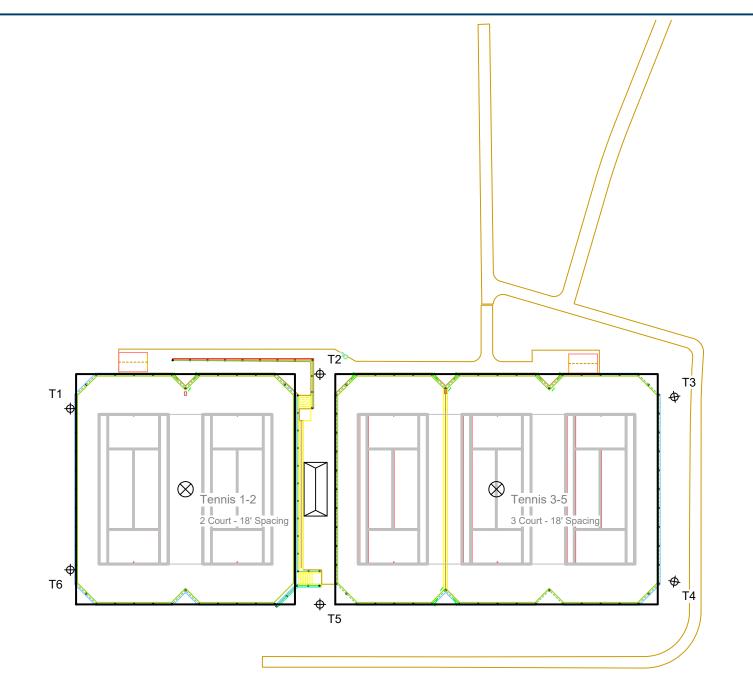
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

 $\label{localization} \begin{array}{ll} \textbf{Installation Requirements:} & \text{Results assume} \pm 3\% \\ \text{nominal voltage at line side of the driver and structures} \\ \text{located within 3 feet (1m) of design locations.} \end{array}$







Bristol, RI

Equipment Layout

INCLUDES: · Tennis 1-2 · Tennis 3-5

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

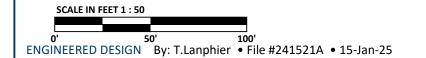
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

| Eq | Equipment List For Areas Shown | | | | | | | | | | |
|-----|--|-----------|----------|-----|-------------|---|--|--|--|--|--|
| | P | Pole | | | Luminaires | | | | | | |
| QTY | LOCATION SIZE GRADE LEVEL LUMINAIRE TYPE | | QTY/POLE | | | | | | | | |
| 2 | T1 T6 | 1 40' - | | 40' | TLC-LED-900 | 2 | | | | | |
| 2 | T2 T5 | 60' | 60' - | | TLC-LED-900 | 5 | | | | | |
| 2 | T3-T4 | 60' | - | 60' | TLC-LED-900 | 3 | | | | | |
| 6 | Totals | | | | | | | | | | |

| Single Luminaire Amperage Draw Chart | | | | | | | |
|--------------------------------------|---|------|------|------|------|------|------|
| Driver Specifications | 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-900 | 5.2 | 4.9 | 4.5 | 3.9 | 3.1 | 2.9 | 2.3 |

Nather Chill, LC 24/JAN /2025







National Council on Qualifications for the Lighting Professions

The National Council on Qualifications for the Lighting Professions certifies that

NATHAN W CHIZEK

has met all of the qualifications for the LC credential.



Bernard J. Erickson, LC 2020-2021 NCQLP President

CERTIFICATION EXPIRES DECEMBER 31, 2024