Rancho Potrero Community Equestrian Center

Newbury Park, CA

Lighting System

| Pole / Fixture | Summary | | | | | |
|----------------|-------------|------------|-------------|----------------|---------|---------|
| Pole ID | Pole Height | Mtg Height | Fixture Qty | Luminaire Type | Load | Circuit |
| P1-P4 | 30' | 30' | 1 | TLC-LED-400 | 0.40 kW | Α |
| | | 30' | 2 | TLC-LED-600 | 1.16 kW | Α |
| P5-P6 | 30' | 30' | 3 | TLC-LED-400 | 1.20 kW | Α |
| 6 | | | 18 | | 8.64 kW | |

| Circuit Summ | ary | | |
|--------------|-------------|---------|-------------|
| Circuit | Description | Load | Fixture Qty |
| Α | Arena 1 | 8.64 kW | 18 |

| Fixture Type Summary | | | | | | | |
|----------------------|--------------------|---------|--------|----------|----------|----------|----------|
| Туре | Source | Wattage | Lumens | L90 | L80 | L70 | Quantity |
| TLC-LED-600 | LED 5700K - 75 CRI | 580W | 65,600 | >120,000 | >120,000 | >120,000 | 8 |
| TLC-LED-400 | LED 5700K - 75 CRI | 400W | 46,500 | >120,000 | >120,000 | >120,000 | 10 |

Light Level Summary

| Calculation Grid Summar | У | | | | | | | |
|-------------------------|---------------------------------|------|------|-------------|----------|----------|----------|-------------|
| Grid Name | Calculation Metric | | | llumination | | | Circuits | Fixture Qty |
| Ond Name | Odiculation Metric | Ave | Min | Max | Max/Min | Ave/Min | Oncuits | Tixture Qty |
| Arena 1 Blanket Grid | ena 1 Blanket Grid Horizontal | | 0 | 47 | 3754.23 | | Α | 18 |
| Arena 1 | Horizontal Illuminance | 22.9 | 10 | 46 | 4.40 | 2.29 | Α | 18 |
| Property Line Spill | Horizontal | 0.03 | 0 | 0.15 | 0.00 | | A,B | 18 |
| Property Line Spill | Max Candela (by Fixture) | 9408 | 0 | 31896 | 0.00 | | A,B | 18 |
| Property Line Spill | Max Vertical Illuminance Metric | 0.25 | 0 | 1.25 | 0.00 | | A,B | 18 |
| Spill @ Houses | Horizontal | 0 | 0 | 0.01 | 0.00 | | A,B | 18 |
| Spill @ Houses | Max Candela (by Fixture) | 7198 | 0.46 | 21652 | 46823.63 | 15647.74 | A,B | 18 |
| Spill @ Houses | Max Vertical Illuminance Metric | 0.04 | 0 | 0.19 | 0.00 | | A,B | 18 |
| Spill @ Street | Horizontal | 0.01 | 0 | 0.03 | 0.00 | | A,B | 18 |
| Spill @ Street | Max Candela (by Fixture) | 8250 | 0 | 22393 | 0.00 | | A,B | 18 |
| Spill @ Street | Max Vertical Illuminance Metric | 0.11 | 0 | 0.39 | 0.00 | | A,B | 18 |

From Hometown to Professional











| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | | |
|-----|--------------------------------|------|--------------------|--------------------|-------------------|---------------|--------------|----------------|--|--|--|--|--|
| | Pole Luminaires | | | | | | | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE Type | QTY / POLE | THIS GRID | OTHER GRIDS | | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | | |
| 6 | | | 18 | 18 | 0 | | | | | | | | |



| Name: Arena 1 | Size: 300' x 120' | Spacing: 20.0' x 20.0' | Height: 3.0' above grade

ILLUMINATION SUMMARY Guaranteed Average: Scan Average: 22.94 Maximum: Minimum: Avg / Min: 2.20 Guaranteed Max / Min: Max / Min: 4.40 2.28 UG (adjacent pts): CU: No. of Points: 90 Applied Circuits: A No. of Luminaires: 18 Total Load: 8.64 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.

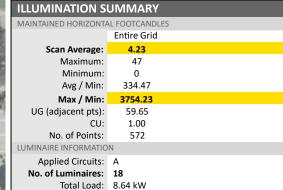


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| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | | |
|-----|--------------------------------|------|--------------------|--------------------|-------------------|---------------|--------------|----------------|--|--|--|--|--|
| | Pole Luminaires | | | | | | | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE Type | QTY / POLE | THIS GRID | OTHER GRIDS | | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | | |
| 6 | | | 18 | 18 | 0 | | | | | | | | |



Rame: Arena 1 Blanket Grid Size: 300' x 120' Spacing: 20.0' x 20.0' 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.



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to 0,0 reference point(s) \otimes

SCALE IN FEET 1:80

| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | |
|-----|--|-----|----|-----|-------------|---|---|----------------|--|--|--|--|
| | P | ole | | | Luminaires | | | | | | | |
| QTY | QTY LOCATION SIZE GRADE MOUNTING LUMINAIRE ELEVATION HEIGHT TYPE | | | | | | | OTHER GRIDS | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |



RID SUMMARY

Name: Property Line Spill
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY HORIZONTAL FOOTCANDLES Entire Grid Scan Average: 0.0256 Maximum: 0.15 Minimum: 0.00 No. of Points: 109 LUMINAIRE INFORMATION Applied Circuits: A, B No. of Luminaires: 18 Total Load: 8.64 kW

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

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.



| EQI | JIPMENT LI | ST FOR | AREAS SH | IOWN | | | | | | | | |
|-----|-----------------|--------|--------------------|--------------------|-------------------|---------------|--------------|----------------|--|--|--|--|
| | Pole Luminaires | | | | | | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE Type | QTY / POLE | THIS GRID | OTHER GRIDS | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |



GRID SUMMARY

Name: Property Line Spill

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

Entire Grid

 Scan Average:
 0.2457

 Maximum:
 1.25

 Minimum:
 0.00

 No. of Points:
 109

Applied Circuits: A, B
No. of Luminaires: 18

in accordance with IESNA RP-6-15.

Total Load: 8.64 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

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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| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | |
|-----|--|-----|----|-----|-------------|---|---|----------------|--|--|--|--|
| | P | ole | | | Luminaires | | | | | | | |
| QTY | QTY LOCATION SIZE GRADE MOUNTING LUMINAIRE ELEVATION HEIGHT TYPE | | | | | | | OTHER GRIDS | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |



GRID SUMMARY

Name: Property Line Spill

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY

CANDELA (PER FIXTURE)

Scan Average: 9407.5381
Maximum: 31895.57
Minimum: 0.00

No. of Points: 109
LUMINAIRE INFORMATION

Applied Circuits: A, B

No. of Luminaires: 18

Total Load: 8.64 kW

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

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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| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | |
|-----|--|-------------------|---------------|--------------|----------------|---|---|---|--|--|--|--|
| | Pole Luminaires GRADE MOUNTING LUMINAIRE OTY / THIS OTHER | | | | | | | | | | | |
| QTY | LOCATION | LUMINAIRE Type | QTY / POLE | THIS GRID | OTHER GRIDS | | | | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |



GRID SUMMARY Name: Spill @ Street Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY HORIZONTAL FOOTCANDLES **Entire Grid** Scan Average: 0.0081 Maximum: Minimum: 0.00 No. of Points: 109 LUMINAIRE INFORMATION Applied Circuits: A, B No. of Luminaires: 18 Total Load: 8.64 kW

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

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.



| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | |
|-----|--|-------------------|---------------|--------------|----------------|---|---|---|--|--|--|--|
| | Pole Luminaires GRADE MOUNTING LUMINAIRE OTY / THIS OTHER | | | | | | | | | | | |
| QTY | LOCATION | LUMINAIRE Type | QTY / POLE | THIS GRID | OTHER GRIDS | | | | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |

ENGINEERED DESIGN By: C.Hensley · File #201822G · 04-Nov-21



Rancho Potrero Community Equestrian Center Newbury Park, CA

Rame: Spill @ Street Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY MAX VERTICAL FOOTCANDLES Entire Grid Scan Average: 0.1113 Maximum: 0.39 Minimum: 0.00 No. of Points: 109 LUMINAIRE INFORMATION Applied Circuits: A, B No. of Luminaires: 18 Total Load: 8.64 kW

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

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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| EQI | EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | | | |
|-----|--|-----|----|-----|-------------|---|---|----------------|--|--|--|--|
| | P | ole | | | Luminaires | | | | | | | |
| QTY | QTY LOCATION SIZE GRADE MOUNTING LUMINAIRE ELEVATION HEIGHT TYPE | | | | | | | OTHER GRIDS | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | | | |
| 6 | | 18 | 18 | 0 | | | | | | | | |



GRID SUMMARY

Name: Spill @ Street
Spacing: 30.0'

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY

CANDELA (PER FIXTURE)

Scan Average: Entire Grid 8249.9053 Maximum: 22393.21 Minimum: 0.00 No. of Points: 109

LUMINAIRE INFORMATION

Applied Circuits: A, B

No. of Luminaires: 18

Total Load: 8.64 kW

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

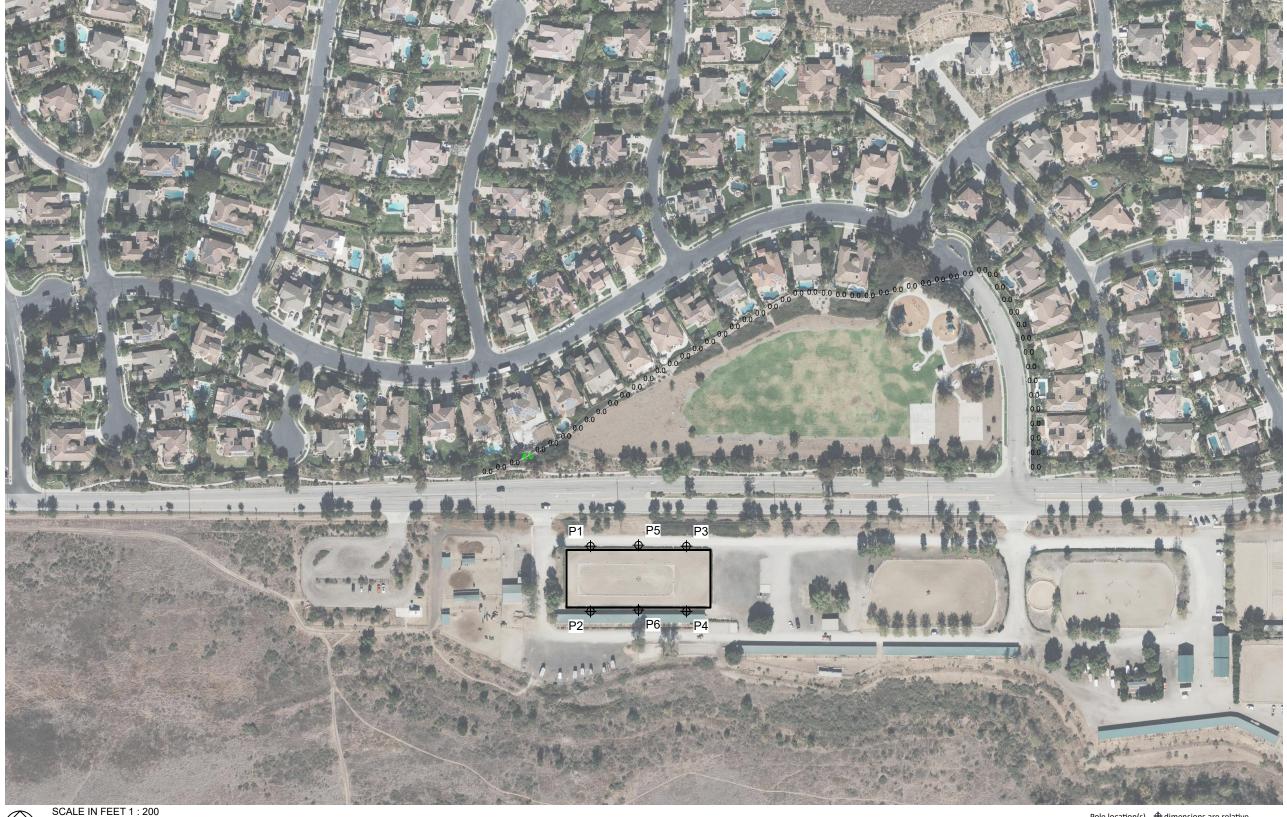
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 MOUNTING LUMINAIRE Q ELEVATION HEIGHT TYPE P | | | | | | | OTHER GRIDS | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | |
| | | 30' TLC-LED-600 | | | | 2 | 2 | 0 | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | |
| 6 | TOTALS | | | | | 18 | 18 | 0 | |



Name: Spill @ Houses Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY HORIZONTAL FOOTCANDLES Entire Grid 0.0021 Maximum: 0.01 Minimum: 0.00 No. of Points: 54 LUMINAIRE INFORMATION Applied Circuits: No. of Luminaires: 18 Total Load: 8.64 kW

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

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) \bigoplus dimensions are relative to 0,0 reference point(s) \bigotimes

| EQUIPMENT LIST FOR AREAS SHOWN | | | | | | | | | |
|--------------------------------|---|-----------------|---|-----|-------------|----|----|----------------|--|
| Pole Luminaires | | | | | | | | | |
| QTY | LOCATION SIZE GRADE MOUNTING LUMINAIRE Q ELEVATION HEIGHT TYPE P | | | | | | | OTHER GRIDS | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | |
| | | 30' TLC-LED-600 | | | | 2 | 2 | 0 | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | |
| 6 | TOTALS | | | | | 18 | 18 | 0 | |



GRID SUMMARY

Name: Spill @ Houses
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

Entire Grid
Scan Average: 0.0366
Maximum: 0.19

Minimum: 0.00
No. of Points: 54

UMINAIRE INFORMATION

Applied Circuits: A, B

No. of Luminaires: 18

Total Load: 8.64 kW

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

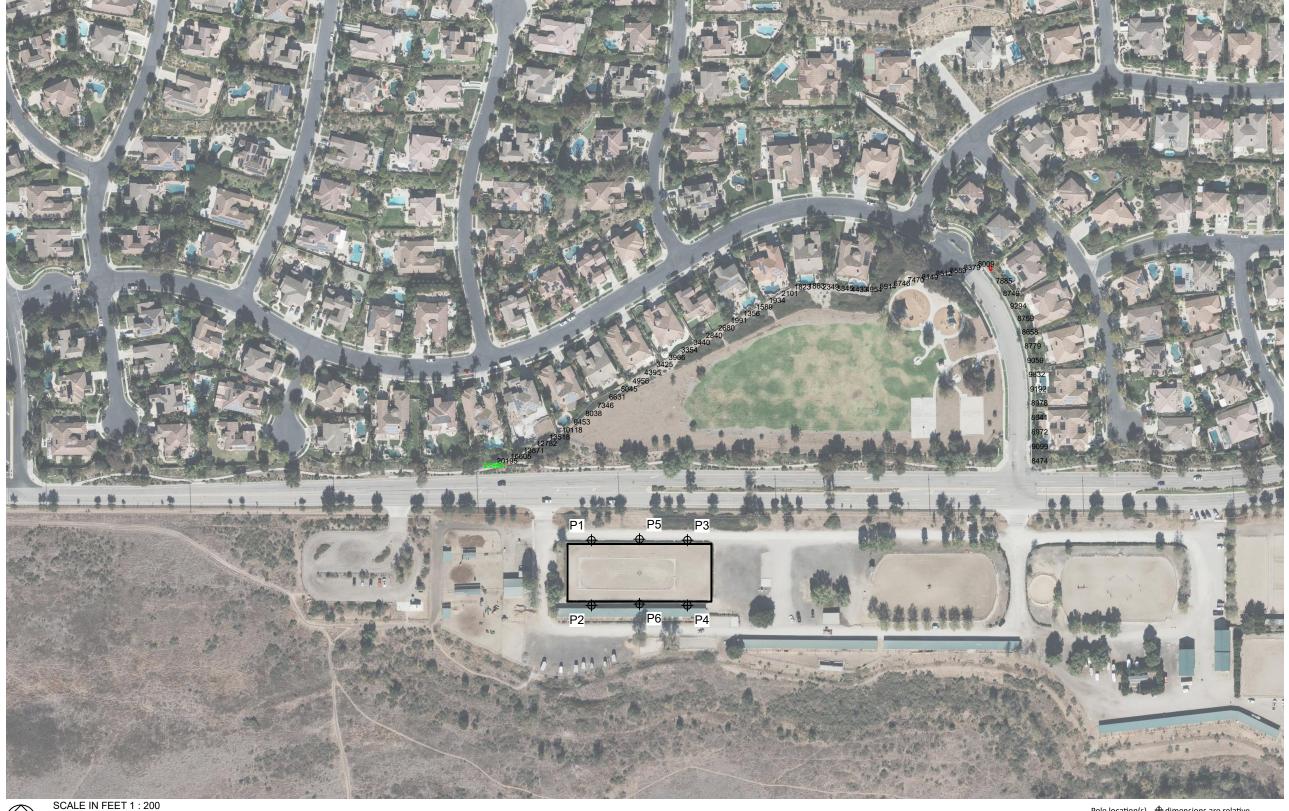
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

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 | LOCATION SIZE GRADE MOUNTING LUMINAIRE QTY / THIS ELEVATION HEIGHT TYPE POLE GRID | | | | | | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | 1 | 0 | | |
| | | | | 30' | TLC-LED-600 | 2 | 2 | 0 | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | 3 | 0 | | |
| 6 | TOTALS | | | | | 18 | 18 | 0 | | |



GRID SUMMARY Name: Spill @ Houses Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY CANDELA (PER FIXTURE) Entire Grid Scan Average: 7197.9595 Maximum: 21652.07 Minimum: 0.46 No. of Points: UMINAIRE INFORMATION Applied Circuits: A, B No. of Luminaires: 18

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

Total Load: 8.64 kW

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

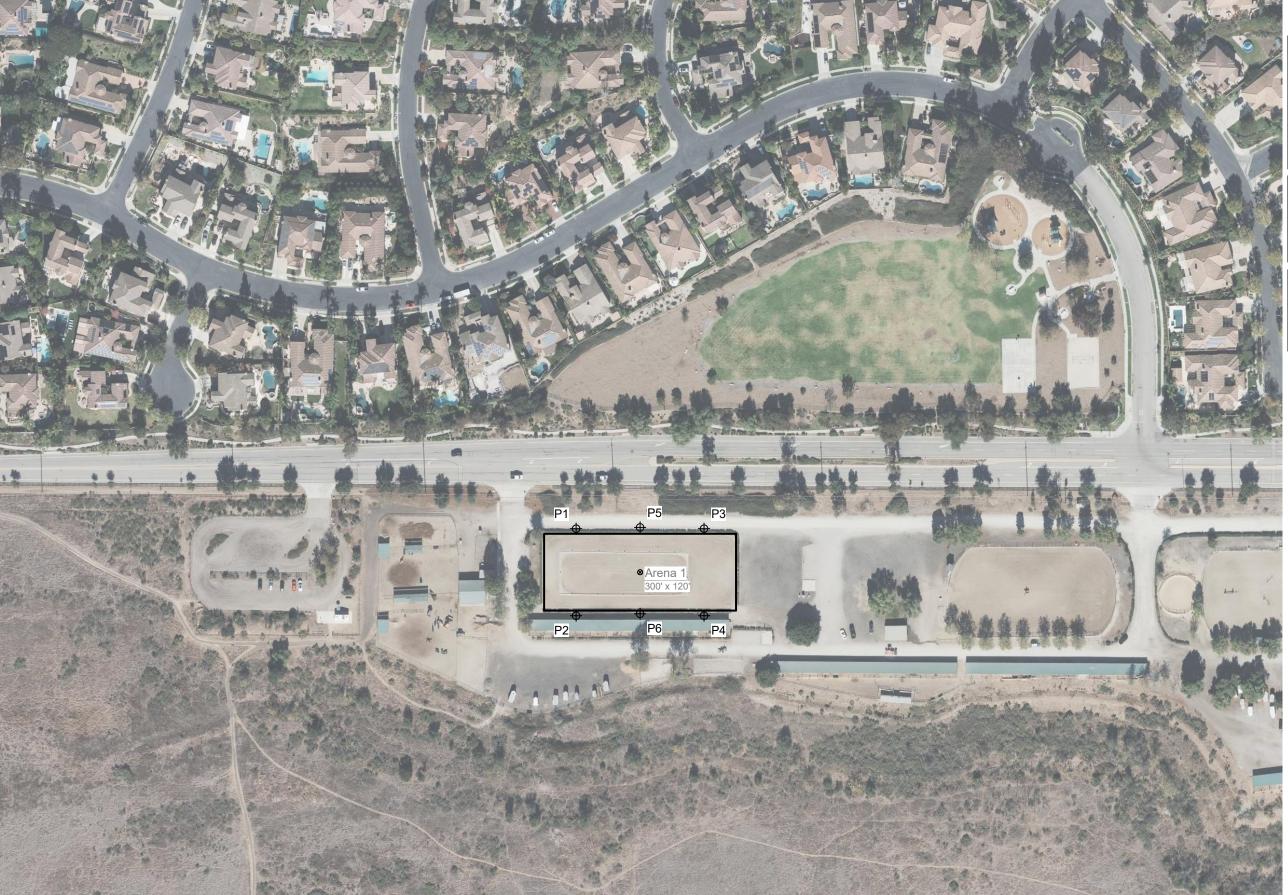
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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



Pole location(s) \oplus dimensions are relative

to 0,0 reference point(s) \otimes



EQUIPMENT LAYOUT

INCLUDES:

· Arena 1

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 | | | | | | | | |
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE Type | QTY / POLE | | | |
| 4 | P1-P4 | 30' | - | 30' | TLC-LED-400 | 1 | | | |
| | | | | 30' | TLC-LED-600 | 2 | | | |
| 2 | P5-P6 | 30' | - | 30' | TLC-LED-400 | 3 | | | |
| 6 | TOTALS | | | | | | | | |

| SINGLE LUMINAIRE AMPERAGE DRAW CHART | | | | | | | | | | |
|--|---|-----|-------------|-------------|-------------|-----|-------------|--|--|--|
| Ballast Specifications (.90 min power factor) | Line Amperage Per Luminaire (max draw) | | | | | | | | | |
| Single Phase Voltage | 208 | 220 | 240 (60) | 277 (60) | 347 (60) | 380 | 480 (60) | | | |
| TLC-LED-600 | 3.4 | 3.2 | 3.0 | 2.6 | 2.0 | 1.9 | 1.5 | | | |
| TLC-LED-400 | 2.3 | 2.2 | 2.0 | 1.7 | 1.4 | 1.3 | 1.0 | | | |

relative

Pole location(s) \bigoplus dimensions are relative to 0,0 reference point(s) \bigotimes

