

System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 1 of 3

Distribution Panel Location/ID: Panel TC1

Project Information

Control System

Control System ID: 1 of 3

Control System Type: Control-Link® Control and Monitoring System

Communication Type: PowerLine-ST

Power Requirements

Control cabinet(s):

Control voltage (phase to neutral) 120/60

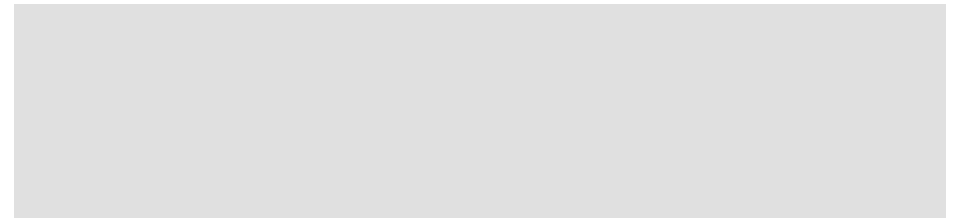
VA loading - Inrush 2043.0

VA loading - Sealed 232.0

Lighting Circuits:

Voltage/Hertz/Phase 240/60/1

Project Notes:



Equipment Listing

Description	Qty	Size (in)
Control and monitoring cabinet - primary	1	24 X 48
Contactors, 30 amperes	5	-
Contactors, 60 amperes	1	-
Off/On/Auto switches	5	-

Important Notes:

1. Please confirm that the lighting circuit voltage listed above is accurate for this facility. This is the voltage/phase being connected and utilized at each lighting pole's electrical components enclosure disconnect. Inaccurate voltage/phase can result in additional costs and delays. Contact your Musco sales representative to confirm this item.
2. In a 3 phase design, all 3 phases are to be run to each pole location. Musco's single phase luminaires come pre-wired to utilize all 3 phases across the entire facility.
3. One contactor is required for each circuit at each pole location. Contactors are 3 pole and 100% rated for the published continuous load.
4. If the lighting system will be fed from more than one distribution location, additional equipment may be required. Contact your Musco sales representative.
5. Size overcurrent devices using the full load amps column of the Circuit Summary by Switch chart (Minimum power factor is 0.9). Size conduit per code unless otherwise specified as larger to allow for harness connectors.
6. Avoid use of in-ground junction/pull boxes when possible. If used, all wire connectors must be UL listed for Wet Locations to prevent leakage current.
7. Control power wiring must be in separate conduit from line or load power wiring. Communication cables must be in separate conduit from any power wiring.
8. Refer to Installation Instructions for more details on equipment information and the installation requirements.

Sales Representative: Jason Frucht | Project Engineer: Joe Nicholson | Scan: 227818D | Document ID: 227818P1V2C2-0501155626

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Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

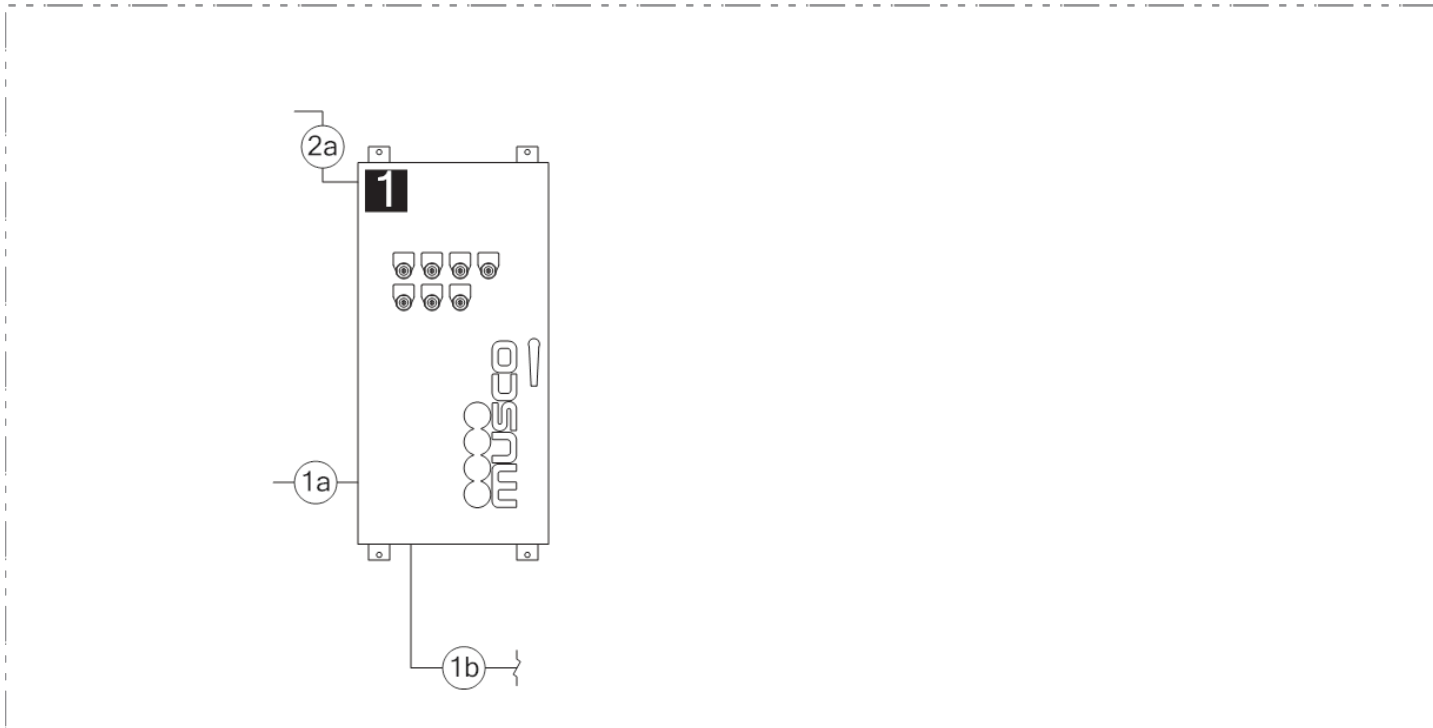
Control System ID: 1 of 3

Distribution Panel Location/ID: Panel TC1

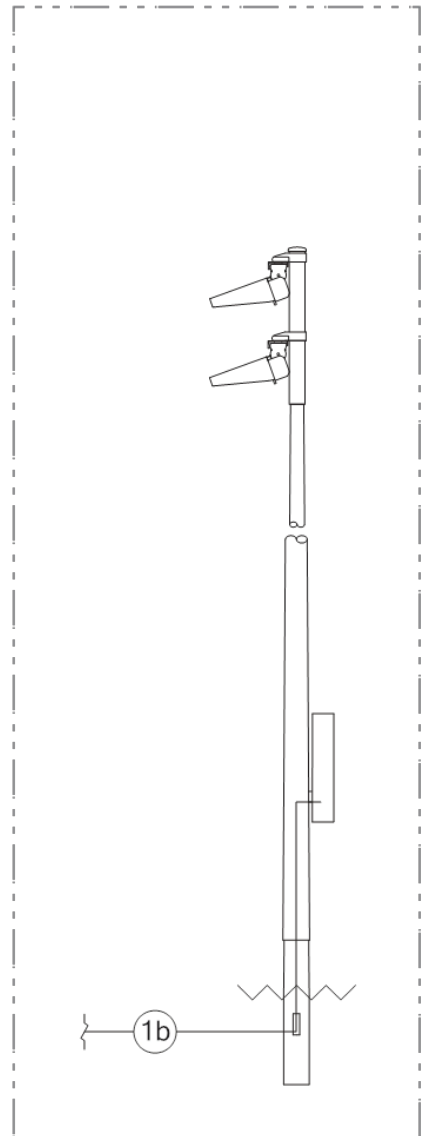
Equipment Layout and Connection Details



Control cabinet location



Lighting system



Connection Details

ID	Description
1a	Line power to contactors, and equipment grounding conductor. Requires one circuit per contactor, size wiring per load and voltage drop.
1b	Load power from contactors, and equipment grounding conductor. Requires one circuit per contactor, size wiring per load and voltage drop.
2a	Control power with equipment ground to control cabinet. Requires dedicated 20 A circuit. Provide transformer if control voltage not present.

Equipment

ID	Description
1	Control and monitoring cabinet - primary

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Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 1 of 3

Distribution Panel Location/ID: Panel TC1

Circuit Summary

Switching Schedule

Field/Switch Description	Switches
Tennis 1 USTA	1
Tennis 2-3 USTA	2
Tennis 4 USTA	3
Tennis 5 USTA	4
Tennis 20 USTA	5

Control Module ID: 1

Lighting Circuit Voltage: 240/60/1

Circuit Summary by Switch

Switch	Zone Description	Pole ID	Qty of Fixtures	Full load amperes	Contactor Size (Amps)	Cabinet #	Contactor ID
1	Tennis 1 USTA	T1, T2, T3, T4	8	22.16	30	1	C1
2	Tennis 2 USTA	T10, T5	6	20.12	30	1	C2
	Tennis 2 USTA	T6, T7	6	20.12	30	1	C3
3	Tennis 4 USTA	T10, T7, T8, T9	8	22.16	30	1	C4
4	Tennis 5 USTA	T10, T11, T12, T9	8	22.16	30	1	C5
5	Tennis 20 USTA	T22, T23, T24, T25	16	44.32	60	1	C6

System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 2 of 3

Distribution Panel Location/ID: Panel TC2

Project Information

Control System

Control System ID: 2 of 3

Control System Type: Control-Link® Control and Monitoring System

Communication Type: PowerLine-ST

Power Requirements

Control cabinet(s):

Control voltage (phase to neutral) 120/60

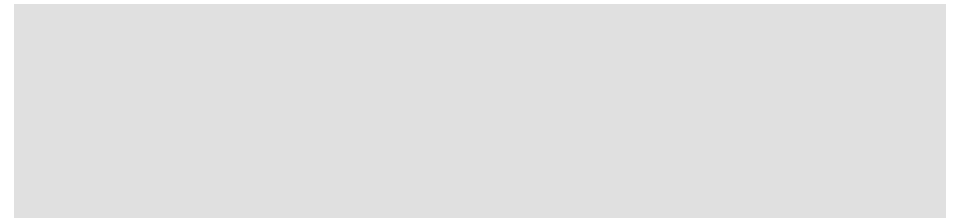
VA loading - Inrush 2043.0

VA loading - Sealed 232.0

Lighting Circuits:

Voltage/Hertz/Phase 240/60/1

Project Notes:



Equipment Listing

Description	Qty	Size (in)
Control and monitoring cabinet - primary	1	24 X 48
Contactors, 30 amperes	4	-
Contactors, 60 amperes	2	-
Off/On/Auto switches	2	-

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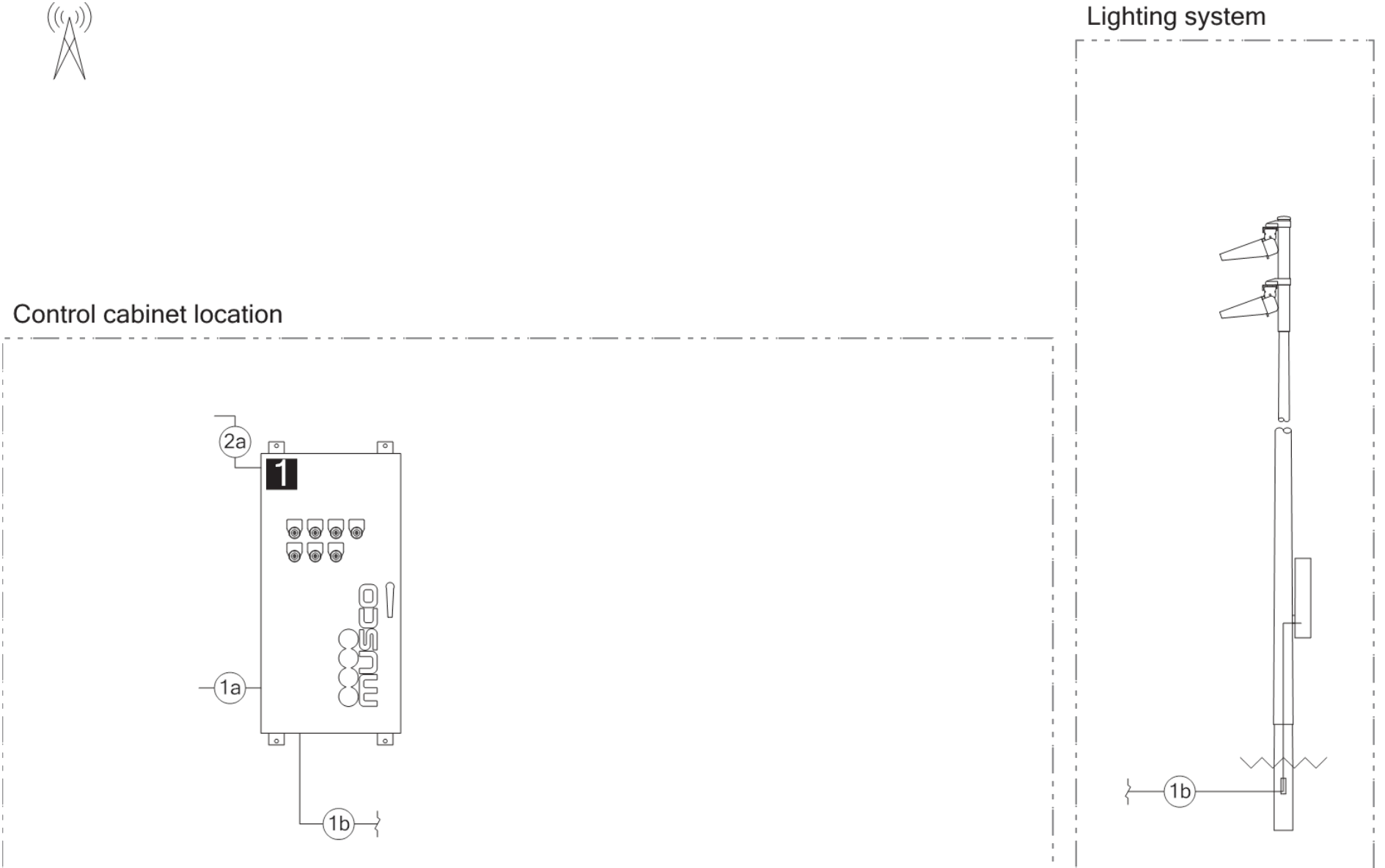
System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 2 of 3

Distribution Panel Location/ID: Panel TC2

Equipment Layout and Connection Details



Connection Details

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1a	Line power to contactors, and equipment grounding conductor. Requires one circuit per contactor, size wiring per load and voltage drop.
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2a	Control power with equipment ground to control cabinet. Requires dedicated 20 A circuit. Provide transformer if control voltage not present.

Equipment

ID	Description
1	Control and monitoring cabinet - primary

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Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 2 of 3

Distribution Panel Location/ID: Panel TC2

Circuit Summary

Switching Schedule

Field/Switch Description	Switches
Tennis 6 USTA	1
Tennis 9-10 USTA	2

Control Module ID: 2

Lighting Circuit Voltage: 240/60/1

Circuit Summary by Switch

Switch	Zone Description	Pole ID	Qty of Fixtures	Full load amperes	Contactor Size (Amps)	Cabinet #	Contactor ID
1	Tennis 6 USTA	T13, T14	8	32.66	60	2	C1
	Tennis 6 USTA	T17, T18	8	32.66	60	2	C2
2	Tennis 10 USTA	T14	4	21.04	30	2	C3
	Tennis 10 USTA	T15	4	21.04	30	2	C4
	Tennis 10 USTA	T16	4	21.04	30	2	C5
	Tennis 10 USTA	T17	4	21.04	30	2	C6

System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 3 of 3

Distribution Panel Location/ID: Panel TC3

Project Information

Control System

Control System ID: 3 of 3

Control System Type: Control-Link® Control and Monitoring System

Communication Type: PowerLine-ST

Power Requirements

Control cabinet(s):

Control voltage (phase to neutral) 120/60

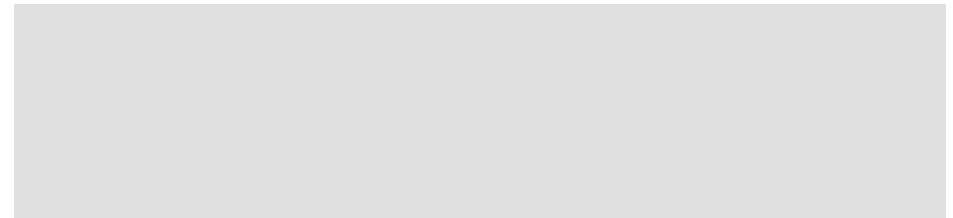
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Lighting Circuits:

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Project Notes:



Equipment Listing

Description	Qty	Size (in)
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Contactors, 60 amperes	2	-
Off/On/Auto switches	2	-

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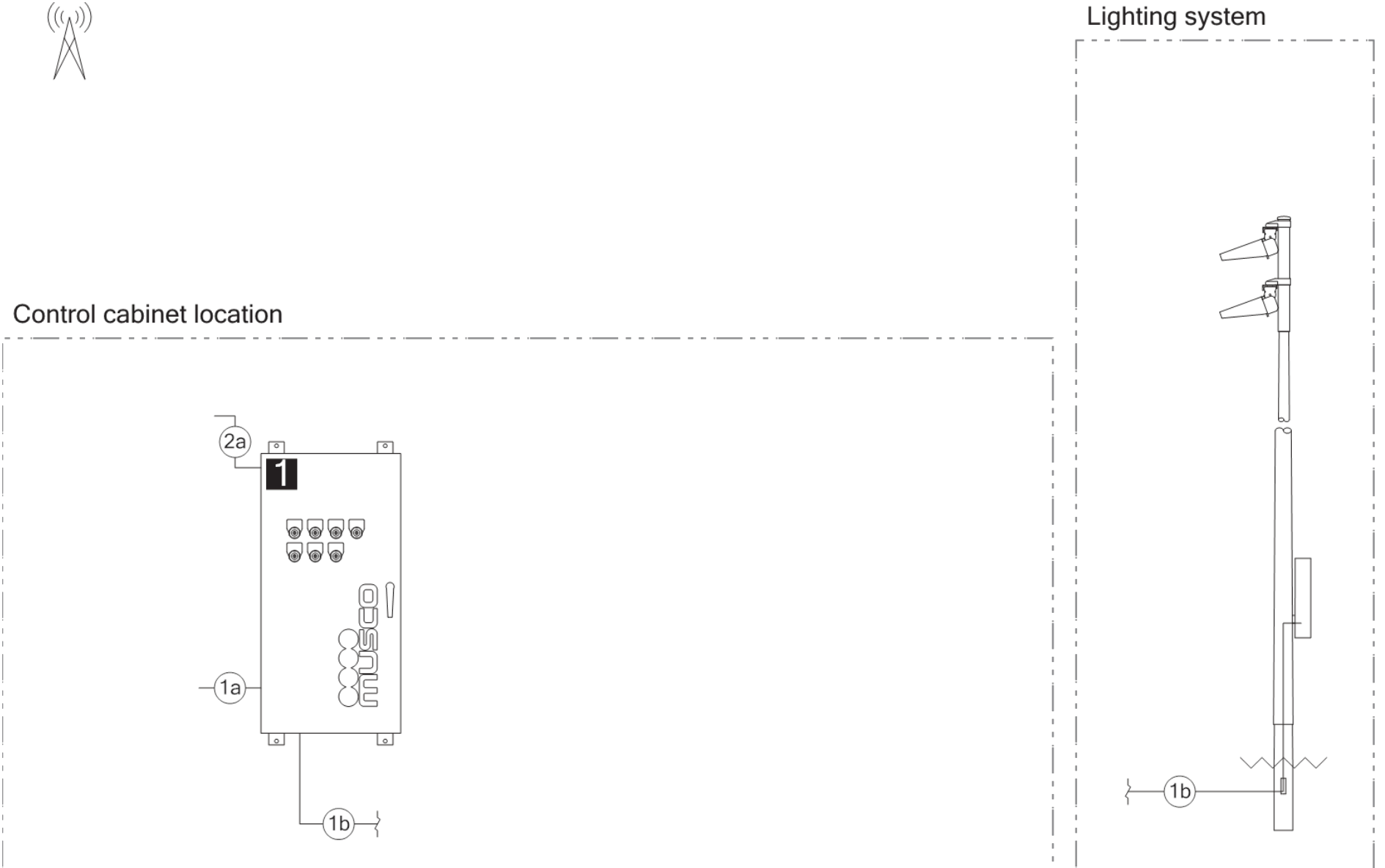
System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 3 of 3

Distribution Panel Location/ID: Panel TC3

Equipment Layout and Connection Details



Connection Details

ID	Description
1a	Line power to contactors, and equipment grounding conductor. Requires one circuit per contactor, size wiring per load and voltage drop.
1b	Load power from contactors, and equipment grounding conductor. Requires one circuit per contactor, size wiring per load and voltage drop.
2a	Control power with equipment ground to control cabinet. Requires dedicated 20 A circuit. Provide transformer if control voltage not present.

Equipment

ID	Description
1	Control and monitoring cabinet - primary

System Requirements: Control System Summary

Project Name: Holiday Park Tennis And Pickleball | Project #: 227818

Control System ID: 3 of 3

Distribution Panel Location/ID: Panel TC3

Circuit Summary

Switching Schedule

Field/Switch Description	Switches
Tennis 14-15 USTA	1
Tennis 18-19 USTA	2

Control Module ID: 3

Lighting Circuit Voltage: 240/60/1

Circuit Summary by Switch

Switch	Zone Description	Pole ID	Qty of Fixtures	Full load amperes	Contactor Size (Amps)	Cabinet #	Contactor ID
1	Tennis 13 USTA	T17, T18	8	32.66	60	3	C1
	Tennis 13 USTA	T20, T26	8	32.66	60	3	C2
2	Tennis 16 USTA	T16	4	21.04	30	3	C3
	Tennis 16 USTA	T17	4	21.04	30	3	C4
	Tennis 16 USTA	T26	4	21.04	30	3	C5
	Tennis 16 USTA	T28	4	21.04	30	3	C6