

# ELECTRICAL SYMBOLS AND ABBREVIATIONS

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN DRAWINGS AND MAY NOT APPLY TO CURRENT PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED ON DRAWINGS.

## ELECTRICAL ABBREVIATIONS

1P	- ONE POLE	KVAR	- KILOVOLT AMPERE REACTIVE
2P	- TWO POLE	KW	- KILOWATT
3P	- THREE POLE	LTG	- LIGHTING
1P,1W	- ONE POLE, ONE WIRE	MCB	- MAIN CIRCUIT BREAKER
1P,2W	- ONE POLE, TWO WIRE	MC	- MECHANICAL CONTRACTOR
2P,2W	- TWO POLE, TWO WIRE	MISC	- MISCELLANEOUS
2P,3W	- TWO POLE, THREE WIRE	MH	- MANHOLE
A	- AMPERE	MLO	- MAIN LUGS ONLY
AC	- ALTERNATING CURRENT	MTD	- MOUNTED
AFF	- ABOVE FINISHED FLOOR	MTG	- MOUNTING
AFG	- ABOVE FINISHED GRADE	N/A	- NOT APPLICABLE
AIC	- AMPERE INTERRUPTING CAPACITY	NEC	- NATIONAL ELECTRIC CODE
ARCH	- ARCHITECT	NIC	- NOT IN CONTRACT
ATS	- AUTOMATIC TRANSFER SWITCH	#	- NUMBER
BFF	- BELOW FINISHED FLOOR	NTS	- NOT TO SCALE
BFG	- BELOW FINISHED GRADE	P	- POLE
BLDG	- BUILDING	PB	- PULL BOX
C	- CONDUIT	PC	- PLUMBING SYSTEM CONTRACTOR
CAT	- CATALOG	PH	- PHASE
CB	- CIRCUIT BREAKER	PNL	- PANEL OR PANELBOARD
CKT	- CIRCUIT	PP	- POWER PANEL
CLG	- CEILING MOUNTED	PR	- PAIR
CT	- CURRENT TRANSFORMER	PRI	- PRIMARY
CU	- COPPER	PVC	- POLYVINYL CHLORIDE
CL	- CENTERLINE	REC	- RECESSED
D	- DEDICATED DEVICE	RSC	- REFRIGERATOR
DC	- DIRECT CURRENT	SEC	- SECONDARY
Δ	- DELTA	SN	- SOLID NEUTRAL
DISC	- DISCONNECT	SP	- SPARE
DWG	- DRAWING	SS	- STAINLESS STEEL
E	- ELECTRICAL CONTRACTOR	ST	- SHUNT TRIP
EC	- ELECTRIC METALLIC TUBING	STP	- SHIELDED TWISTED PAIR
EMT	- ELECTRIC METALLIC TUBING	SUSP	- SUSPENDED
FLA	- FULL LOAD AMPS	T	- TAMPER RESISTANT SAFETY RECEPTACLE
GC	- GENERAL CONTRACTOR	TP	- TWISTED PAIR
GFI	- GROUND FAULT INTERRUPTER	TYP	- TYPICAL
GFPE	- GROUND FAULT PROTECTION EQUIPMENT	UG	- UNDERGROUND
GND	- GROUND	UTP	- UNSHIELDED TWISTED PAIR
GRC	- GALVANIZED RIGID CONDUIT	UOI	- UNLESS OTHERWISE INDICATED
HH	- HANDHOLE	V	- VOLT
HP	- HORSEPOWER	W	- WATT
HVAC	- HEATING, VENTILATING, AND AIR CONDITIONING	WP	- WEATHERPROOF
HZ	- HERTZ (CYCLE) PER SECOND	XFMR	- TRANSFORMER
JB	- JUNCTION BOX	Y	- WYE
KVA	- KILOVOLT AMPERE	ZAM	- ZONE ADAPTER MODULE

## ELECTRICAL SYMBOLS

	○ SURFACE MOUNTED		X ○ OS OCCUPANCY SENSOR - CEILING MOUNTED
	□ WALL MOUNTED		C CONTACTOR
	○ SUSPENDED, PENDENT, CHAIN, STEM, OR CABLE HUNG		T TIME CLOCK
	△ LIGHT FIXTURE DESIGNATION - (A) INDICATES FIXTURE TYPE (SEE SCHEDULE) - (1) INDICATES CIRCUIT NUMBER (PANEL BOUNDS AS INDICATED ON DRAWINGS) - (b) INDICATES CONTROL DESIGNATION (IF NOT INDICATED, CONTROLLED VIA SWITCH AT ROOM ENTRY)		PC PHOTOCELL
	SWITCH - MOUNTED 3'-6" AFF, UOI - (a) INDICATES SWITCH DESIGNATION - SINGLE POLE, UOI - (X) INDICATES SWITCH TYPE: (2) TWO POLE (3) THREE WAY (4) FOUR WAY (DLS) DUAL LEVEL SWITCH (K) KEY OPERATED (P) WITH PILOT LIGHT		DS DAYLIGHT SENSOR
	TRANSFORMER - PAD MOUNTED		X ○ SPECIAL PURPOSE OUTLET - (X) INDICATES DEVICE IDENTIFICATION (SEE SPECIAL OUTLET SCHEDULE)
	PANELBOARD - SURFACE MOUNTED - (SEE SCHEDULE)		X ○ MOTOR CONNECTION - (X) INDICATES MOTOR IDENTIFICATION (SEE MOTOR STARTER SCHEDULE)
	X xxx EQUIPMENT REFERENCE - TOP DESIGNATES EQUIPMENT TYPE: (LP) LIGHTING PANEL (RP) RECEPTACLE PANEL - BOTTOM DESIGNATES EQUIPMENT ID		Y ○ DUPLEX RECEPTACLE - MOUNTED 1'-6" AFF, UOI - (X) INDICATES CIRCUIT NUMBER - (Y) INDICATES TYPE: (GFCI) GROUND FAULT INTERRUPTING (WP) WEATHERPROOF

## ELECTRICAL SHEET INDEX

E100	ELECTRICAL SYMBOLS, ABBREVIATIONS, SHEET INDEX, & SITE PLAN
E101	ELECTRICAL SITE PLAN
E200	ELECTRICAL FLOOR PLAN & SCHEDULES
E300	ELECTRICAL SCHEDULES



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## Waukesha County Parks Minooka and Mukwonago Park Restrooms

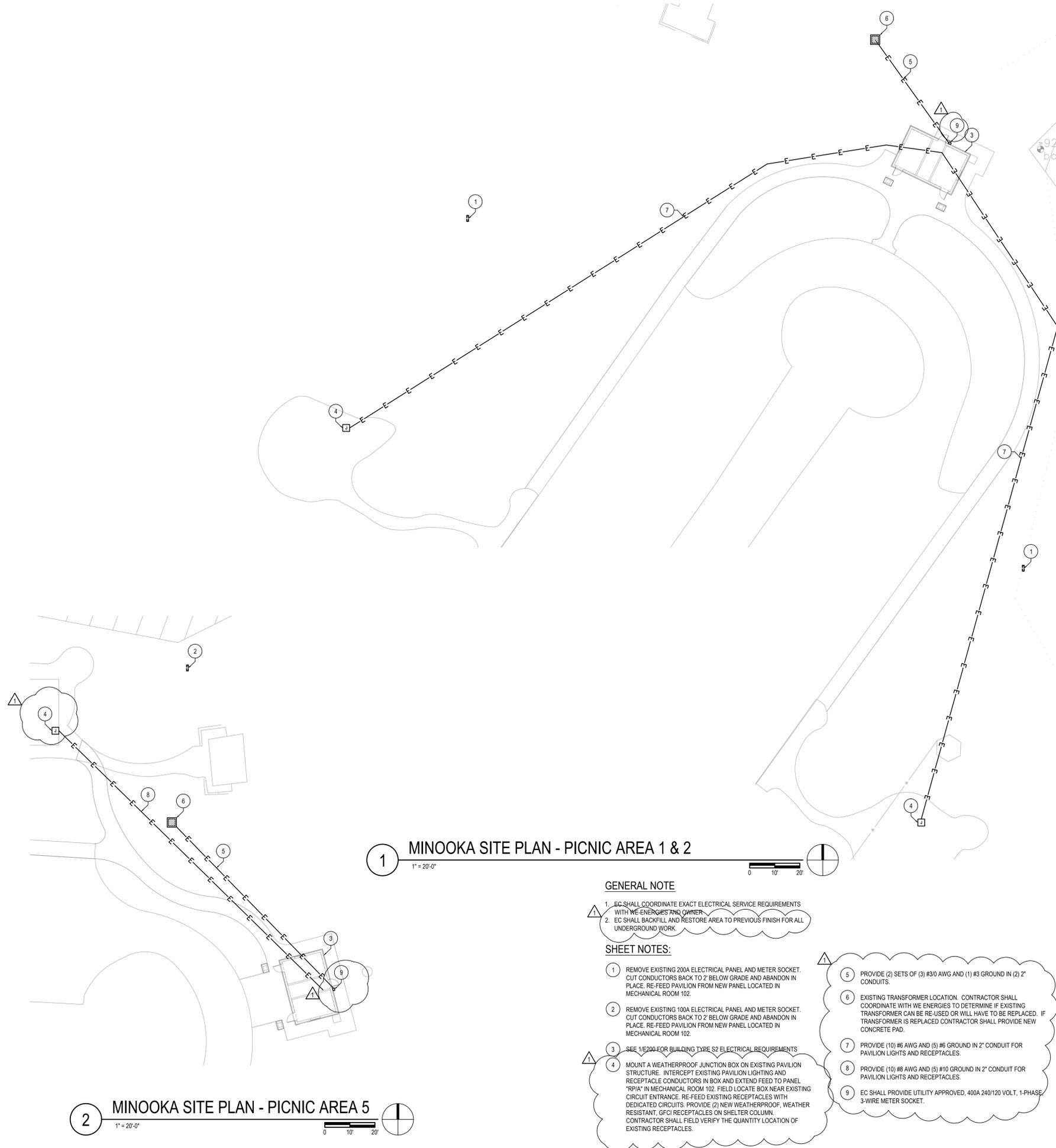
Minooka Park | Mukwonago Park  
1927 E. Sunset Dr. | S100 W31900 County Hwy L0  
Waukesha, WI 53186 | Mukwonago, WI 53149

Owner  
Waukesha County Parks & Land Use  
515 West Moreland Boulevard  
Waukesha, Wisconsin 53188

Project No. 122219.00

Issued For:

No.	Description	Date
01	Issued for Bidding	02-04-2014
02	Addendum 1	02-19-2014



1 MINOOKA SITE PLAN - PICNIC AREA 1 & 2  
1" = 20'-0"

### GENERAL NOTE

- EC SHALL COORDINATE EXACT ELECTRICAL SERVICE REQUIREMENTS WITH WE ENERGIES AND OWNER.
- EC SHALL BACKFILL AND RESTORE AREA TO PREVIOUS FINISH FOR ALL UNDERGROUND WORK.

### SHEET NOTES:

- REMOVE EXISTING 200A ELECTRICAL PANEL AND METER SOCKET. CUT CONDUCTORS BACK TO 2' BELOW GRADE AND ABANDON IN PLACE. RE-FEED PAVILION FROM NEW PANEL LOCATED IN MECHANICAL ROOM 102.
- REMOVE EXISTING 100A ELECTRICAL PANEL AND METER SOCKET. CUT CONDUCTORS BACK TO 2' BELOW GRADE AND ABANDON IN PLACE. RE-FEED PAVILION FROM NEW PANEL LOCATED IN MECHANICAL ROOM 102.
- SEE 1/E200 FOR BUILDING TYPE S2 ELECTRICAL REQUIREMENTS
- MOUNT A WEATHERPROOF JUNCTION BOX ON EXISTING PAVILION STRUCTURE. INTERCEPT EXISTING PAVILION LIGHTING AND RECEPTACLE CONDUCTORS IN BOX AND EXTEND FEED TO PANEL "RPIA" IN MECHANICAL ROOM 102. FIELD LOCATE BOX NEAR EXISTING CIRCUIT ENTRANCE. RE-FEED EXISTING RECEPTACLES WITH DEDICATED CIRCUITS. PROVIDE (2) NEW WEATHERPROOF, WEATHER RESISTANT, GFCI RECEPTACLES ON SHELTER COLUMN. CONTRACTOR SHALL FIELD VERIFY THE QUANTITY LOCATION OF EXISTING RECEPTACLES.
- PROVIDE (2) SETS OF (3) #3/0 AWG AND (1) #3 GROUND IN (2) 2" CONDUITS.
- EXISTING TRANSFORMER LOCATION. CONTRACTOR SHALL COORDINATE WITH WE ENERGIES TO DETERMINE IF EXISTING TRANSFORMER CAN BE RE-USED OR WILL HAVE TO BE REPLACED. IF TRANSFORMER IS REPLACED CONTRACTOR SHALL PROVIDE NEW CONCRETE PAD.
- PROVIDE (10) #6 AWG AND (5) #6 GROUND IN 2" CONDUIT FOR PAVILION LIGHTS AND RECEPTACLES.
- PROVIDE (10) #8 AWG AND (5) #10 GROUND IN 2" CONDUIT FOR PAVILION LIGHTS AND RECEPTACLES.
- EC SHALL PROVIDE UTILITY APPROVED, 400A 240/120 VOLT, 1-PHASE, 3-WIRE METER SOCKET.

2 MINOOKA SITE PLAN - PICNIC AREA 5  
1" = 20'-0"

Drawn by HMC  
Checked by AW  
File

## ELECTRICAL SYMBOLS, ABBREVIATIONS, SHEET INDEX, & SITE PLANS

# E100