

ELECTRICAL LOAD CALCULATION
METRO PARK

	LOAD	DF	DEMAND
PARKING LOT/AREA LIGHTS (EXISTING) 15 X 460VA =	6900 VA	1.25	8,625 VA
STANDARD RESTROOM BUILDING (3,020 SF) (EXISTING) LIGHTING: 3,020SF X 3.0VA/SF = POWER: 3,020 SF X 2.0VA/SF = HVAC: 3,020 SF/250 SF PER TON = 12 TONS X 2160VA =	9060 VA 6020 VA 28020 VA	1.25 1.00 1.00	11,325 VA 6,020 VA 28,020 VA
IRRIGATION PUMPS (460V, 3 PH) (EXISTING) (1) 20HP, 27.0 FLA = 25% OF LARGEST MOTOR =	22500 VA 22500 VA	1.00 0.25	22,500 VA 5,625 VA
TENNIS COURTS 8 X 1625VA =	18000 VA	1.25	16,250 VA
ROLLER HOCKEY COURT 6 X 1625VA =	9750 VA	1.25	12,188 VA
SKATEBOARD PARK 6 X 1625VA =	9750 VA	1.25	12,188 VA
BASKETBALL COURT 4 X 1625VA =	6500 VA	1.25	8,125 VA
PATHWAY LIGHTS 51 X 200VA =	10200 VA	1.25	12,750 VA
HEX 16 SHELTER 5 X 240VA =	1200 VA	1.25	1,500 VA
HEX 28 SHELTER 3 X 480VA =	1440 VA	1.25	1,800 VA
			146,915 VA

146,915 / (480*1.732) = 177 AMPS
44 25% FUTURE
221 AMPS

USE 400 AMP SERVICE

LIGHTING FIXTURE SCHEDULE

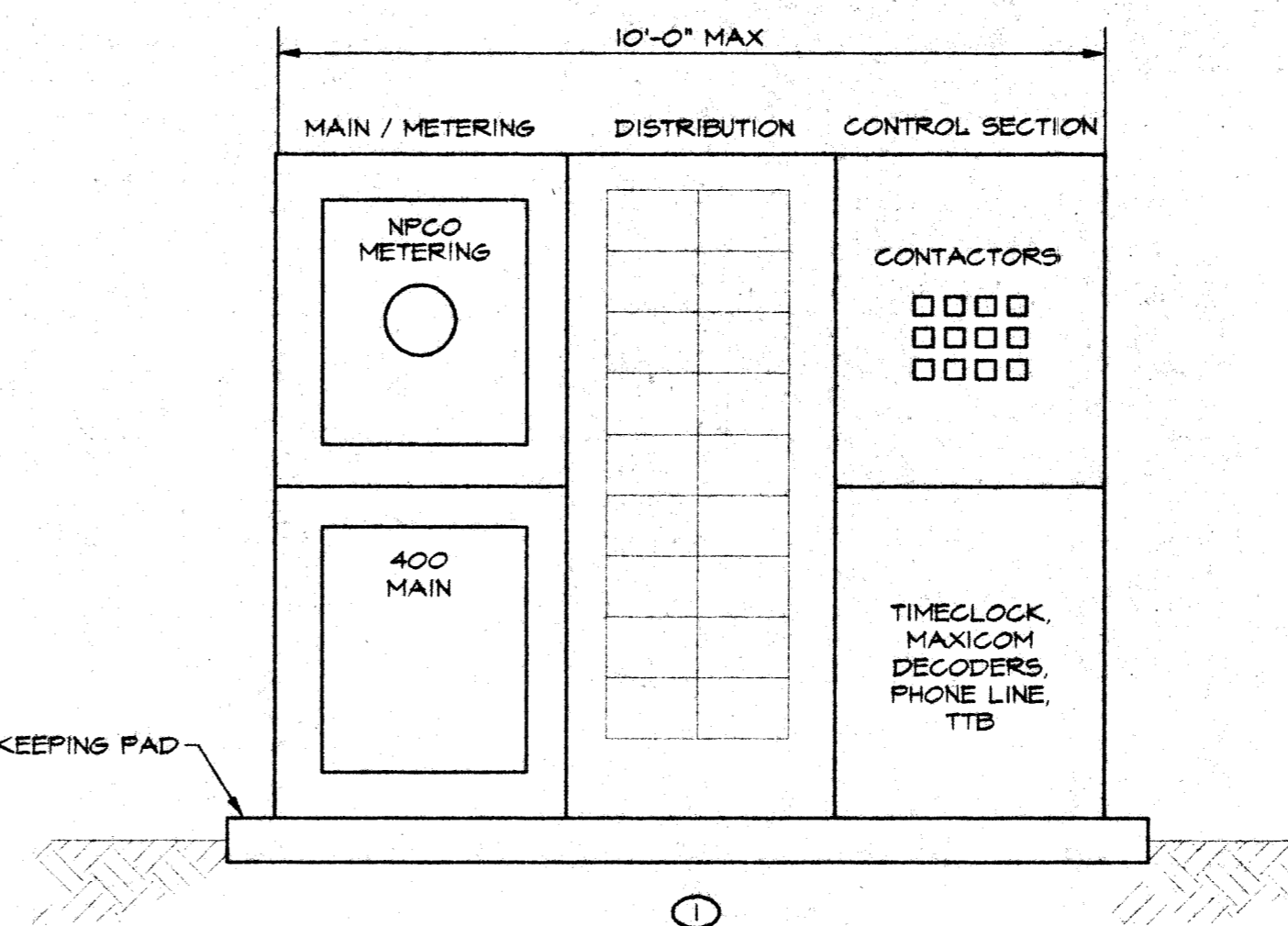
FIXT ID	TYPE	MANUFACTURER AND CATALOG NO.	NO.	WATT	LAMPS	TYPE	CTKT	REMARKS AND MOUNTING
F1	SINGLE FIXTURE	KIM	1	400	U	MH400/	480	PROVIDE POLE - 25' SAL25-64250A/DB-P
F2	DOUBLE FIXTURE	KIM	2	400	U	MH400/	480	PROVIDE POLE - 25' SAL25-64250B/DB-P
F3	SINGLE FIXTURE	KIM	1	175	U	MH175/	480	PROVIDE POLE - 16' SAS16-534188A/DB-P FUSE IN FIXT HEAD
F4	COURT LIGHTING	GARDCO	1	1500	SPORT 60	MH1500/	480	PROVIDE 30' POLE CSTRS-30-11-DI-BRP
F5	NOT USED							
F6	NOT USED							
F7	VANDAL FLUORESCENT SURFACE MOUNTED	MORLITE	2	32	F237B/	885	271	

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR	GND	GROUND
AFG	ABOVE FINISHED GRADE	J-BOX	JUNCTION BOX
AL	ALUMINUM	KVA	KILOVOLT AMPS
ADD ALT	ADDITIVE ALTERNATE	KW	KILOWATT
BKR	BREAKER	LTS	LIGHTING
C	CONDUIT	PNL	PANEL
CKT	CIRCUIT	PWR	POWER
C.O.	CONDUIT ONLY	TYP	TYPICAL
CU	COPPER	UNO	UNLESS NOTED OTHERWISE
DWS	DRAINING	V	VOLTS
ELEC	ELECTRICAL	VA	VOLT AMPS
EXIST	EXISTING	WP	WEATHER PROOF
GFI	GROUND FAULT INTERRUPT	XF	TRANSFORMER

LEGEND:

- ☐ COURT LIGHTING CONTROL PANEL
- ▬ PANELBOARD SURFACE MOUNTED
- ☐ SWITCHBOARD
- ☐ TRANSFORMER
- ☐ CONTACTOR
- ☐ FULLBOX
- ☐ DISCONNECT (F INDICATES FUSED)
- TTB TELEPHONE TERMINAL BOARD 4 X 8 X 3/4" FIRE TREATED PLYWOOD
- F PARKING / COURT / AREA FIXTURE
- F HID OR INCANDESCENT FIXTURE - LETTER DENOTES TYPE
- ⊥ TELEPHONE OUTLET 18" AFF UNO
- ⊕ DUPLEX RECEPTACLE 18" AFF UNLESS NOTED OTHERWISE
- ⊕ GFI DUPLEX RECEPTACLE 18" AFF UNLESS NOTED OTHERWISE
- S SINGLE POLE SWITCH 48" AFF UNO
- ② ELECTRIC SHEET NOTE DESIGNATION
- ⊙ PHOTOELECTRIC CELL
- ⊙ TC TIMELOCK
- ⊙ F2 PILOT RELAY
- ⊙ C2 CONTACTOR (CONTROL DIAGRAM)
- ⊗ FIELD CONNECTION
- ⌒ BRANCH CIRCUIT CONSISTING OF 2#12 IN MINIMUM SIZE CONDUIT NOT INCLUDING GROUND WIRE
- ⌒ HOME RUN TO PANELBOARD OR DEVICE - NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS
- ⌒ BRANCH CIRCUIT - SHORT SLASHES INDICATE NUMBER OF PHASE OR SWITCH LESS LONG SLASHES INDICATE NUMBER OF NEUTRALS. LONG SLASH W/ A DOT INDICATES A SEPARATE ISOLATED GROUND WIRE.
- CONDUIT IN SLAB OR UNDERGROUND
- ⌒ INTERRUPTER SWITCH
- ⌒ FUSE
- ⌒ CIRCUIT BREAKER
- ⊙ M METERING
- ⊙ TRANSFORMER
- ⊙ JUNCTION BOX (USED FOR CLARITY ONLY)
- ⊙ RELAY OR CONTROL DEVICE. NUMBER REPRESENTS STANDARD DEVICE FUNCTION
- ⊙ IRRIGATION FIELD SATELLITE UNIT CONTROLLER (FSU)
- ⊙ IRRIGATION CLUSTER CONTROL UNIT (CCU)
- ☐ LIGHTING CONTROL PANEL (TESCO)

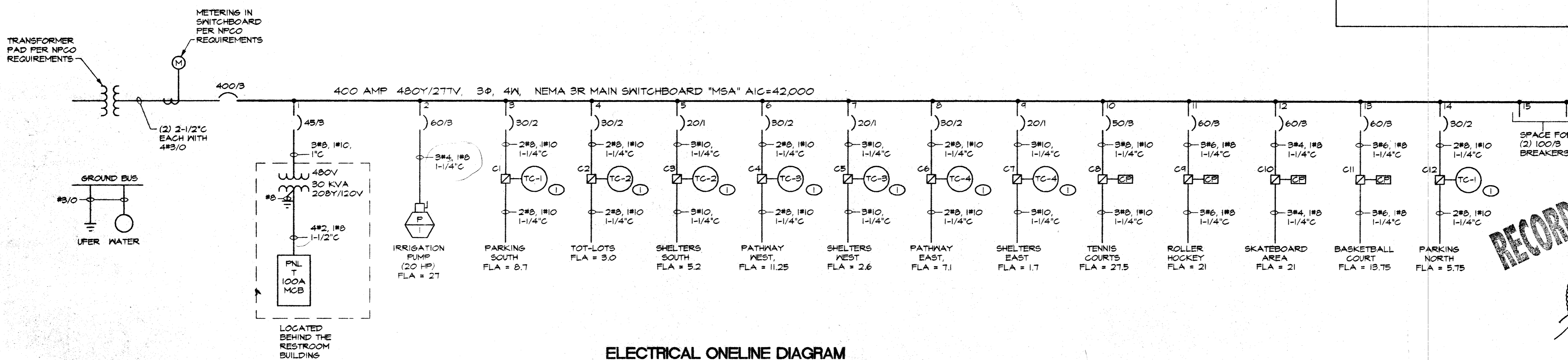


1 SWITCHBOARD ELEVATION

46 NOT TO SCALE
NOTES:
① SWITCHBOARD SHOWN WITHOUT NEMA 3R DOORS FOR CLARITY.

CONTACTOR SCHEDULE

ID	TYPE	DESCRIPTION	SIZE	POLES	CIRCUITS CONTROLLED	PRIMARY CONTROL	SECONDARY CONTROL
C1	ELEC.	PARKING SOUTH	30	2	MSA-3	PHOTOCELL	TIMELOCK TC-1
C2	ELEC.	TOT-LOTS	30	2	MSA-4	PHOTOCELL	TIMELOCK TC-2
C3	ELEC.	SHELTERS SOUTH	30	2	MSA-5	PHOTOCELL	TIMELOCK TC-2
C4	ELEC.	PATHWAY WEST	30	2	MSA-6	PHOTOCELL	TIMELOCK TC-3
C5	ELEC.	SHELTERS WEST	30	2	MSA-7	PHOTOCELL	TIMELOCK TC-3
C6	ELEC.	PATHWAY EAST	30	2	MSA-8	PHOTOCELL	TIMELOCK TC-4
C7	ELEC.	SHELTERS EAST	30	2	MSA-9	PHOTOCELL	TIMELOCK TC-4
C8	ELEC.	TENNIS COURTS	30	2	MSA-10	MAXICOM	SWITCH @ POLE
C9	ELEC.	ROLLER HOCKEY	30	2	MSA-11	MAXICOM	SWITCH @ POLE
C10	ELEC.	SKATEBOARD AREA	30	2	MSA-12	MAXICOM	SWITCH @ POLE
C11	ELEC.	BASKETBALL COURT	30	2	MSA-13	MAXICOM	SWITCH @ POLE
C12	ELEC.	PARKING NORTH	30	2	MSA-14	PHOTOCELL	TIMELOCK TC-1



ELECTRICAL ONELINE DIAGRAM

SCALE: NONE

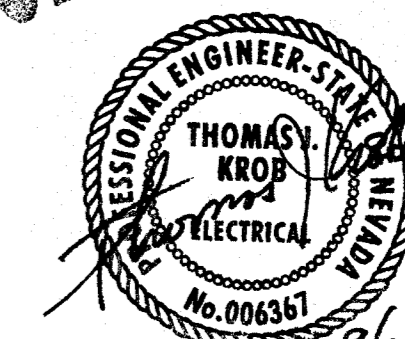
NOTES:
① TIMELOCK TO BE AN INTERMATIC #ET1018C OR C.L.V. EQUIVALENT.
PHOTOCELL TO BE AN TORK #2007 OR C.L.V. EQUIVALENT.

PLANS APPROVED
ELECTRICAL
Building & Safety Dept.
City of Las Vegas, Nevada

EDS SEP 13 2000

Does Not Include Structural, Architectural, Plumbing/Mechanical or Oil-Gas Improvements Make No Change Without Approval Plan is Not a Permit to Violate Any Ordinance

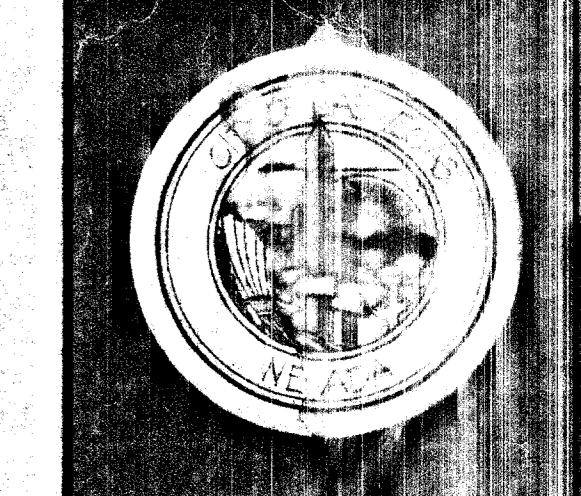
RECORD DOCUMENTS



TJKROB CONSULTING ENGINEERS, INC.

7151 CASLADE VALLEY COURT SUITE 200
LAS VEGAS, NEVADA 89128
(702) 871-3621

ELECTRICAL ENGINEERING



CONSULTANT
901 N. Green Valley Pkwy.
Suite 100
Las Vegas, NV 89118
Telephone: 702/386-8994
Facsimile: 702/386-7295
Fax: 702/386-7280

PBS&J
ENGINEERING · PLANNING · SURVEYING
CONSTRUCTION SERVICES

CITY OF LAS VEGAS
METRO PARK
3250 ACADEMY WAY
LAS VEGAS, NEVADA 89129

ELECTRICAL LEGEND AND ONELINE

DEPARTMENT OF PUBLIC WORKS
ARCHITECTURAL SERVICES

400 EAST STEWART AVENUE
LAS VEGAS, NEVADA 89101
PHONE: (702) 228-2233
FAX: (702) 382-3232
TDD: (702) 386-9108

PROJECT MANAGER
CLAIR M. LENIS, ASLA

DRAWN
JDI

FILE
000161.ELEGEND

DATE
4-1-00

SCALE
VARIES

PROJECT
METRO PARK

SHEET NO
30

46