ELECTRICAL LEGEND

LIGHTING FIXTURES AND OUTLETS (LETTER INDICATES FIXTURE TYPE)

- CEILING FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT STRIP LIGHT FIXTURE
- POLE AND POLE MOUNTED LIGHT FIXTURES NUMBER OF HEADS AS SHOWN
- BOLLARD LIGHT
- TRACK LIGHT NUMBER OF FIXTURE HEADS AS SHOWN
- FLOOD LIGHT
- WALL WASHER, NON-SHADED AREA LIGHT SIDE
- EXIT SIGN, SHADING INDICATES FACE
- BATTERY PACK, NUMBER OF HEADS AS SHOWN
- EMERGENCY FIXTURE SWITCHED
- NL = NIGHT LIGHT (CONNECT TO UNSWITCHED LEG OF CIRCUIT)

SWITCHES (ALL SWITCHES AT +44" UNLESS NOTED OTHERWISE)

- S — SINGLE POLE SWITCH
- S_2 — TWO POLE SWITCH
- S_3 — THREE-WAY SWITCH
- S_4 — FOUR-WAY SWITCH
- S_P — SWITCH & PILOT LIGHT
- S_K — KEY OPERATED SWITCH
- S_D — DIMMER SWITCH
- S_M — THERMAL OVERLOAD SWITCH
- S_T — TIMER SWITCH
- S_c — LOWER CASE LETTER INDICATES SWITCHING

RECEPTACLES (MOUNTED AT +18" TO CENTER UNLESS NOTED OTHERWISE)

- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE \ SWITCHED
- CTR — DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - VERIFY MOUNTING HEIGHT
- GFI — GFI RECEPTACLE
- IG — ISOLATED GROUND (ORANGE) TYPE RECEPTACLE
- SPECIAL PURPOSE OUTLET (TYPE AS NOTED)
- H — CLOCK OUTLET AT +90"
- CLG — CEILING DUPLEX RECEPTACLE
- FLR — FLOOR OUTLET WITH DEVICE AS INDICATED
- POWER COMMUNICATIONS POLE
- MULTIOUTLET ASSEMBLY

PANELS AND RELATED ITEMS

- PB — PULLBOX - EXTERIOR
- J — PULLBOX - INTERIOR
- TELEPHONE TERMINAL CABINET AT +72" TO TOP
- TELEPHONE BACKBOARD
- PANELBOARD - SURFACE AT +72" TO TOP
- PANELBOARD - RECESSED AT +72" TO TOP
- SWITCHBOARD OR DISTRIBUTION BOARD NUMBER OF SECTIONS REQUIRED BY SINGLE LINE

ANNOTATION TAGS AND NOMENCLATURE

- MECHANICAL EQUIPMENT CROSS REFERENCE
- 1 — NOTE SYMBOL
- 1 — REVISION SYMBOL
- 123 — ROOM NUMBERS
- 2/E-2 — TOP NUMBER DESIGNATES DETAIL, BOTTOM NUMBER DESIGNATES SHEET ON WHICH DETAIL IS LOCATED
- (3) 1-1/2"C = 3 SETS OF ONE AND ONE HALF INCH CONDUITS

BUS DUCT AND WIREWAY (SIZE AS INDICATED ON PLAN DRAWING)

- O—P— UNDERFLOOR DUCT (P-POWER, T-TEL, C-COMPUTER)
- HEADER DUCT
- TRENCH DUCT
- BUS DUCT
- CABLE TRAY

GENERAL

- J — JUNCTION BOX
- T — THERMOSTAT
- CIRCUIT BREAKER IN SINGLE ENCLOSURE
- R — RELAY
- TC — TIME CLOCK
- CONTACTOR
- BUZZER
- BELL
- PUSHBUTTON AT +44"
- T — TRANSFORMER
- M — POWER METER
- PC — PHOTOCELL
- HORN
- MOTOR
- SOLENOID VALVE
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- MOTOR CONTROLLER OR STARTER
- MOTOR CONTROLLER OR STARTER FURNISHED BY OTHERS
- COMBINATION CONTROLLER/DISCONNECT SWITCH
- START/STOP SWITCH
- LC — LIGHTING CONTACTOR
- CEILING FAN

RACEWAYS

- CONDUIT CONCEALED ABOVE CEILING OR IN WALL
- CONDUIT IN OR BELOW FLOOR
- CONDUIT EXPOSED
- RACEWAY TURNED UP
- RACEWAY TURNED DOWN
- CONDUIT UP AND DOWN PASSING THRU LEVEL
- HOMERUN CONDUIT LONG STROKES INDICATE NEUTRAL CONDUCTOR SHORT STROKES INDICATE PHASE OR SWITCHED WIRES LONG STROKES WITH DOT INDICATES GROUNDING CONDUCTOR
- EXPANSION JOINT
- SEAL-OFF
- CAP-OFF
- E — SPECIALTY CONDUIT
  - E = EMERGENCY
  - F = FIRE
  - T = TELEPHONE

COMMUNICATIONS

- TELEPHONE OUTLET AT +18"
- W — WALL TELEPHONE OUTLET AT +54"
- DATA OUTLET AT +18"
- COMBINATION TELE/DATA OUTLET AT +18"
- MICROPHONE OUTLET AT +18"
- IC — INTERCOM UNIT
- ICM — INTERCOM MASTER UNIT
- V — VOLUME CONTROL AT +46"
- TV — TELEVISION OUTLET AT +18"
- TELEVISION CAMERA (CCTV)

ONE LINE DIAGRAM

- ARRESTOR PLUS GROUND (SURGE ARRESTOR)
- CABLE TERMINATION (OVER 600 VOLTS)
- CAPACITOR
- CIRCUIT BREAKER
- BREAKER WITH DRAWOUT FEATURE
- MV BREAKER WITH DRAWOUT FEATURE
- CONTACT (NORMALLY OPEN)
- CONTACT (NORMALLY CLOSED)
- C — OPERATING COIL
- FUSE
- FUSED DISCONNECT SWITCH (UNDER 600 VOLTS)
- SWITCH
- POWER TRANSFORMER
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- V — VOLTMETER
- A — AMMETER
- VS — VOLTMETER SWITCH
- AS — AMMETER SWITCH
- DM — DIGITAL METER
- PL — PILOT LIGHT
- G — GENERATOR
- GROUND
- N, E, L — AUTOMATIC TRANSFER SWITCH

FIRE ALARM SYSTEM

- FACP — FIRE ALARM PANEL
- FAA — FIRE ALARM ANNUNCIATOR
- F — MANUAL FIRE ALARM PULL STATION AT +44"
- FIRE ALARM HORN AT +80"
- FIRE ALARM HORN AND STROBE AT +80"
- FIRE ALARM BELL AT +80"
- FIRE ALARM BELL AND LIGHT AT +80"
- FIRE ALARM STROBE
- D — MAGNETIC DOOR HOLDER
- FS — FLOW SWITCH
- TS — TAMPER SWITCH
- S — SMOKE DETECTOR
- H — HEAT DETECTOR
- JUNCTION BOX FOR DUCT SMOKE DETECTOR
- S_D — 120 VOLT SMOKE DETECTOR (SELF CONTAINED)

PANELBOARD NUMBERING METHOD

1 H L 2

FLOOR LEVEL (MULTISTORY BUILDINGS ONLY)
- B - BASEMENT
- G - GROUND
- M - MAIN
- 1 - FIRST
- 2 - SECOND
- ETC.

VOLTAGE
- H - 277/480V, 3PH, 4W
- L - 120/208V, 3PH, 4W OR 120/240V, 1PH, 3W

PANEL PURPOSE
- D - DISTRIBUTION PANEL
- P - POWER
- L - LIGHTING
- K - KITCHEN
- E - EMERGENCY LIFE SAFETY
- H - HOUSE
- M - MEDICAL EQUIPMENT

PANEL NUMBER PER TYPE PER FLOOR
- 1 - FIRST
- 2 - SECOND
- 3 - THIRD
- ETC.

MOUNTING HEIGHTS GIVEN ARE STANDARD. WHERE DIMENSIONAL NUMBERS ARE SHOWN AT SYMBOL, THIS SHALL BE THE MOUNTING HEIGHT OF THIS DEVICE. MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE, UNLESS INDICATED OTHERWISE.

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT.

WHERE INDICATED, ALL 120/208V, 3ø PANELBOARDS TO BE PROVIDED WITH AN ISOLATED GROUNDING BUS. PANELBOARDS WITH ISOLATED GROUND BUSSES SHALL HAVE FEEDERS INSTALLED WITH TWO GROUND CONDUCTORS, ISOLATED GROUND CONDUCTOR TO BE IN ACCORDANCE WITH NEC.

SHEET NUMBERING METHOD

E 0 .01

DISCIPLINE
- E- ELECTRICAL

DRAWING TYPE
- 0 - SPECS, ABBREV, LEGENDS, ETC.
- 1 - SITE PLAN
- 2 - LIGHTING PLANS
- 3 - POWER OR POWER & AUXILIARY PLANS
- 4 - AUXILIARY PLANS
- 5 - RISER AND SINGLE LINE DIAGRAMS
- 6 - SCHEDULES
- 7 - DETAILS

DRAWING NUMBER
- 01 TO 99 - DRAWING NUMBER PER DRAWING TYPE

FEEDER SCHEDULE NOMENCLATURE

074

AMPACITY
- CIRCUIT AMPACITY CODE

WIRE COUNT
- 1 - SINGLE PHASE (2WIRE CIRCUIT + GROUND)
- 3 - THREE WIRE CIRCUIT + GROUND
- 4 - FOUR WIRE CIRCUIT + GROUND

ABBREVIATIONS

A,AMP	AMPERE(S)
AC	ALTERNATING CURRENT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
ALT	ALTERNATE
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
CTR	COUNTER
CU	COPPER
CW	COLD WATER
DISC	DISCONNECT
DN	DOWN
DP	DOUBLE POLE
DT	DOUBLE THROW
DWG	DRAWING
E.C.	ELECTRICAL CONTRACTOR
EA	EACH
EC	EMPTY CONDUIT
ELEC	ELECTRICAL OR ELECTRIC
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EOL	END OF LINE RESISTOR
EWC	ELECTRICAL WATER COOLER
F	FUSE
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOT CANDLE
FLR	FLOOR
FT	FOOT OR FEET
G.C.	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HZ	FREQUENCY CYCLES PER SECOND
IC	INTERCOM
IG	ISOLATED GROUND CONDUCTOR
IMC	INTERMEDIATE METALLIC CONDUIT
IN	INCH
J-BOX	JUNCTION BOX
K	KIRK KEY INTERLOCKED
KCM	THOUSAND CIRCULAR MIL(S)
KV	KILOVOLT
KVA	KILOVOLT AMPERE(S)
KVAR	KILOVAR(S)
KW	KILOWATT(S)
KWHR	KILOWATT HOUR
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MH	MANHOLE
MIN	MINIMUM
MTD	MOUNTED
MTR	MOTOR
MTS	MANUAL TRANSFER SWITCH
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NF	NON FUSED
N.O.	NORMALLY OPEN
#	NUMBER
NTS	NOT TO SCALE
NIC	NOT IN THIS CONTRACT
OC	ON CENTER
OL	OVERLOAD ELEMENT
PB	PUSH BUTTON
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RMS	ROOT MEAN SQUARE
SHT	SHEET
SMR	SURFACE METAL RACEWAY
SP	SINGLE POLE
SPEC	SPECIFICATIONS
ST	SINGLE THROW
SW	SWITCH
SWBD	SWITCHBOARD
TEL	TELEPHONE
TEMP	TEMPORARY
TSTAT	THERMOSTAT
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UPS	UNINTERRUPTED POWER SUPPLY
V	VOLT(S)
VA	VOLT AMP(S)
VAR	REACTIVE VOLT AMPERES
VP	VAPOR PROOF
W/	WITH
W/O	WITHOUT
W	WATT(S)
WP	WEATHERPROOF
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

LIGHTING FIXTURE SCHEDULE

TAG	MANUFACTURER	SERIES	LAMPS NO.	LAMPS TYPE	VOLTS	VA	MOUNTING	DESCRIPTION/OPTIONS
A	COLUMBIA	CL12G	2/4'	F032/T8	277	70/4'	RECESS GYPBOARD	2 LAMP FLUORESCENT CONTINUOUS ROW FIXTURE WITH PRISMATIC LENS. PROVIDE IN LENGTHS AS SHOWN ON PLANS
B	COLUMBIA	P4 PARABOLIC	3	F032/T8	277	105	RECESS LAY-IN TILE	2'x4', 3 LAMP FLUORESCENT DOUBLE DOOR FIXTURE WITH 3" - 18 CELL LOW IRRIDESCENT PARABOLIC LOUVER
B1	COLUMBIA	P4 PARABOLIC	3	F032/T8	277	105	RECESS LAY-IN TILE	SAME AS TYPE "B" EXCEPT FURNISHED WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST
C	COLUMBIA	LUN8	4	F032/T8	277	140	PENDANT	8', 4 LAMP ENCLOSED AND GASKETED FLUORESCENT FIXTURE WITH FIBERGLASS HOUSING
C1	COLUMBIA	LUN8	4	F032/T8	277	140	PENDANT	SAME AS TYPE "C" EXCEPT FURNISHED WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST
D	COLUMBIA	SPS14	2	F032/T8	277	70	RECESS GYPBOARD	1'x4', 2 LAMP FLUORESCENT STATIC TROFFER WITH .125" PRIMATIC LENS
D1	COLUMBIA	SPS14	2	F032/T8	277	70	RECESS GYPBOARD	SAME AS TYPE "D" EXCEPT FURNISHED WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST
F	PRESCOLITE	CFR826	2	PLQ26	277	90	RECESS	8" DIAMETER COMPACT FLUORESCENT DOWN-LIGHT WITH CLEAR ALZAK REFLECTOR AND H.P.F. ELECTRONIC BALLAST
F1	PRESCOLITE	CFR826EM	2	PLQ26	277	90	RECESS	SAME AS TYPE "F" EXCEPT FURNISHED WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST
G	COLUMBIA	LUN4	2	F032/T8	277	70	PENDANT	4', 2 LAMP ENCLOSED AND GASKETED FLUORESCENT FIXTURE WITH FIBERGLASS HOUSING
H	PRESCOLITE	91M5	1	MH50	277	65	RECESS	10" DIAMETER 50 WATT METAL HALIDE DOWNLIGHT WITH TEMPERED PRISMATIC LENS AND H.P.F. ELECTRONIC BALLAST
J	PRESCOLITE	8" HID CYLINDER	1	MH70	277	90	SURFACE	8" H.I.D. WALL MOUNTED CYLINDER WITH DOWNLIGHT ONLY. FINISH TO MATCH WALL SURFACE
K	REBELLE	HCU100MH-MG-CC	2	MH70	277	180	SURFACE	8" H.I.D. WALL MOUNTED CYLINDER WITH UP AND DOWNLIGHT. FINISH TO MATCH WALL SURFACE
L	COLUMBIA	WLT14	2	F032/T8	277	70	RECESS GYPBOARD	1'x4', 2 LAMP FLUORESCENT WET LOCATION TROFFER WITH .125" PRIMATIC LENS
L1	COLUMBIA	WLT14	2	F032/T8	277	70	RECESS GYPBOARD	SAME AS TYPE "L" EXCEPT FURNISHED WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST
M	COLUMBIA	SS2-2 SS2-3 SS2-4	2/2' 1/2' 2/4'	F017/T8 F025/T8 F032/T8	277	70/4'	SURFACE COVE	2 LAMP FLUORESCENT STAGGER STRIP FIXTURE. PROVIDE IN LENGTHS AS SHOWN ON PLANS
N	PRESCOLITE	TLV-3611B4WH	1	SOAR70/ 25/FL	277/12	50	SURFACE	50 WATT LOW VOLTAGE MR16 FLOOD LIGHT MOUNTED ON #152 2' SINGLE CIRCUIT WHITE TRACK
P	COLUMBIA	4PS	3	F032/T8	277	105	RECESS LAY-IN TILE	2'x4', 3 LAMP FLUORESCENT TROFFER WITH .125" PRISMATIC LENS
Q1	COLUMBIA	4PS	3	F032/T8	277	105	RECESS GYPBOARD	2'x4', 3 LAMP FLUORESCENT TROFFER WITH SELF-CONTAINED EMERGENCY BATTERY PACK BALLAST AND .125" PRISMATIC LENS
⊠	PRESCOLITE	LEDR	–	L.E.D.	277	10	UNIVERSAL	LED EXIT LIGHT WITH 6" RED LETTERS AND WHITE HOUSING. FURNISH WITH EMERGENCY BATTERY BACK-UP.

FIXTURE SCHEDULE NOTES:

1. FIXTURES INDICATED ABOVE SHALL BE USED AS BASIS FOR ALL BIDDING. ANY ALTERNATE LIGHT FIXTURE PACKAGES SHALL BE SUBMITTED AT TIME OF BID WITH ASSOCIATED LINE ITEM COST SAVINGS FOR EACH FIXTURE. IF ALTERNATE FIXTURE PACKAGE IS NOT SUBMITTED OR APPROVED, ADDITIONAL SUBSTITUTIONS WILL ONLY BE ACCEPTED AT THE ARCHITECT/ENGINEERS REQUEST.
2. MANUFACTURER'S SERIES SHOWN INDICATE BASIC FIXTURE TYPES REQUIRED FOR THIS PROJECT. VERIFY WITH MANUFACTURER TO INCLUDE ALL ACCESSORIES REQUIRED FOR ACTUAL INSTALLATION.
3. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FIXTURE LOCATIONS AND MOUNTING REQUIREMENTS PRIOR TO ORDERING FIXTURES. INCLUDE MOUNTING CLIPS, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION.
4. WHERE INDICATED ON DRAWINGS AS EMERGENCY FIXTURE, PROVIDE FACTORY INSTALL OPTIONAL EMERGENCY BATTERY PACK TO OPERATE OUTBOARD LAMPS. LAMPS ARE TO BE SWITCHED WITH REMAINING FIXTURES IN THIS AREA.
5. ALL EMERGENCY LIGHTING FIXTURES SHALL BE PROVIDED WITH 90 MINUTES OF BATTERY BACK UP WITH A MINIMUM 1100 LUMEN OUTPUT OPERATION IN THE EMERGENCY MODE. EXTEND AN UNSWITCHED LOCAL LIGHTING BRANCH CIRCUIT TO BATTERY BALLAST UNIT. FIXTURE SHALL OPERATE WITH LOCAL ROOM SWITCH AND UPON LOSS OF UTILITY POWER WILL OPERATE LAMPS ON BATTERY BACK UP EQUAL TO BODINE MODEL B50.

PLANS APPROVED
ELECTRICAL
Building & Safety Dept.
City of Las Vegas, Nevada
DRM: NOV 1999
Does Not Include Structural, Plumbing/Mechanical or Off-Site Improvements Called For Without Approved Plans or Not a Permit to Violate Any Ordinance

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LUCCHESI GALATI

STATE OF NEVADA — JAMES D. FLETCHER — ELECTRICAL ENGINEER — No. 12869

HARRIS CONSULTING ENGINEERS
PROJECT NO: 98240.10
DESIGNED BY: A. SCHAEFER
CHECKED BY: G. LARSON
DRAWN BY: D. FLETCHER

ELECTRICAL LEGEND
ABBREVIATIONS AND LIGHT FIXTURE SCHEDULE

SUMMERLIN ARBORS PARK
POOL AND POOL BUILDING

Revisions:

Date: 10-22-99
Project No: 98095.00
Scale: NO SCALE
Drawn By: KKK

Sheet Number: E0.01

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