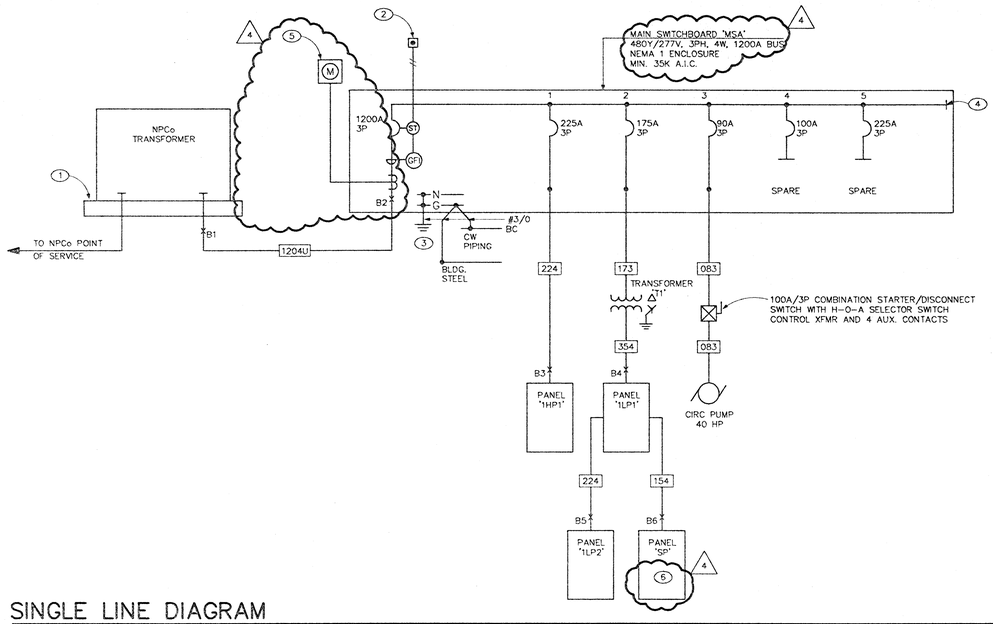
SHEET NOTES

1. UTILITY COMPANY PAD MOUNTED TRANSFORMER, 480Y/227V, 3ø, 4W SECONDARY. PROVIDE CONCRETE EQUIPMENT PAD PER UTILITY REQUIREMENTS.
2. PROVIDE REMOTE SHUNT TRIP IN WP ENCLOSURE PER BUILDING DEPARTMENT REGULATIONS. SEE SHEET E3.01 FOR LOCATION.
3. PROVIDE CONCRETE ENCASED GROUNDING ELECTRODE CONSISTING OF MIN. 20' #3 BC, INSTALLED PER NEC ARTICLE 250-81(c).
4. PROVIDE PROVISIONS FOR FUTURE BUS EXTENSION.
5. PROVIDE METERING CABINET AND SECONDARY METERING CT'S PER NPCO REQUIREMENTS. MOUNT METER ON EXTERIOR OF BUILDING IN LOCATION AS DIRECTED BY NPCO.
6. CONTRACTOR TO PROVIDE PANEL 'SP'. REFER TO AQUATIC DESIGN GROUP DRAWINGS FOR PANEL REQUIREMENTS.



SINGLE LINE DIAGRAM

NO SCALE

PANELBOARD 1HP1 SCHEDULE

(NEW) 1/25/01 6:38 AM

VOLTAGE: 277/480V,3Ph,4W | BUS RATING: 225 | MAINS: 225A MLO | TYPE: BOLT ON | LOCATION: ELECTRICAL ROOM | ENCLOSURE: NEMA 1 | MOUNTING: SURFACE | MIN. AIC: 35000

LOAD – VA

CIRCUIT DESCRIPTION	BKR	CKT NUM	PHASE A	PHASE B	PHASE C	CKT NUM	BKR	CIRCUIT DESCRIPTION
LIGHTS	20	1	3880			2	1	GP-1
		1	20415					
LIGHTS	20	3		2150		4		
		1		20415				
LIGHTS	20	5			2150	6		
		1			20415			
EXTERIOR LIGHTS	20	7	780			8	20	EXTERIOR LIGHTS
		1	1680					
LIGHTS	20	9		1830		10		EXTERIOR LIGHTS
		1		1680				
LIGHTS	20	11			2310	12	3	EXTERIOR LIGHTS
		1			1680			
SPARE	20	13	840			14	20	EXTERIOR LIGHTS
LIGHTS	20	15		300		16		EXTERIOR LIGHTS
		1		840				
SPARE	20	17			840	18	3	EXTERIOR LIGHTS
SPARE	20	19				20		SPACE
SPARE	20	21				22		SPACE
SPARE	20	23				24		SPACE
SPARE	20	25				26		SPACE
SPARE	20	27				28		SPACE
SPARE	20	29				30		SPACE
SPARE	20	31				32		SPACE
SPACE		33				34		SPACE
SPACE		35				36		SPACE
SPACE		37				38		SPACE
SPACE		39				40		SPACE
SPACE		41				42		SPACE
FEED THROUGH LOAD								
CONNECTED LOAD			27595	27215	27240	OPTIONS		
DEMAND LOAD			27595	27215	27240			
DESIGN LOAD			29380	28915	28946			
LINE AMPS			106.1	104.3	104.5			
DESIGN LOAD KVA				87.25				

PANELBOARD 1LP1 SCHEDULE

(NEW) 10/21/99 10:51 AM

VOLTAGE: 120/208V,3Ph,4W | BUS RATING: 400 | MAINS: 350A MCB | TYPE: BOLT ON | LOCATION: STORAGE 112 | ENCLOSURE: NEMA 1 | MOUNTING: SURFACE | MIN. AIC: 10000

LOAD – VA

CIRCUIT DESCRIPTION	BKR	CKT NUM	PHASE A	PHASE B	PHASE C	CKT NUM	BKR	CIRCUIT DESCRIPTION
RECEPTS – TELEPHONE	20	1	500			2	20	
		1		1000			1	VENDING
RECEPTS	20	3		900		4	20	
		1		1000			1	VENDING
RECEPTS	20	5			900	6	20	
		1			1000		1	VENDING
RECEPTS	20	7	900			8	20	
		1	1176				1	EF-4
RECEPTS	20	9		900		10	20	
		1		1620			1	EF-2,3
RECEPTS	20	11			900	12	20	
		1			595		1	EF-1
RECEPTS	20	13	720			14	20	
		1	1008				1	EVAP COOLER EC-1
RECEPTS	20	15		720		16	35	
		1		2361			1	AC-1
RECEPTS	20	17			900	18	2	
		1			2361			
RECEPTS	20	19	720			20	20	
		1	720				1	RECEPTS – ROOFTOP
RECEPTS	20	21		540		22	20	
		1		200			1	DUCT DETECTOR
ELECTRIC WALL HEATER	20	23			1500	24	20	
		1			1000		1	RECEPTS
WATER HEATER/CIRC PUMPS	20	25	1256			26	20	
		1	1000				1	RECEPTS
REFRIGERATOR	20	27		1000		28	20	
		1		1000			1	RECEPTS
FAX	20	29			1000	30	20	
		1			500		1	FIRE MONITORING PANEL
COPIER	20	31	1500			32	225	
		1	6828					PANEL 1LP2
RECEPTS	20	33		1000		34		
		1		5972				
RECEPTS	20	35			1000	36	3	
		1			6126			
RECEPTS	20	37	1000			38	150	
		1	13300					PANEL SP
REMOTE CHILLER	20	39		660		40		
		1		13000				
REMOTE CHILLERS (2)	20	41			1320	42	3	
		1			12075			
FEED THROUGH LOAD								
CONNECTED LOAD			31628	30873	31278	OPTIONS		
DEMAND LOAD			28688	28556	29397			
DESIGN LOAD			28688	28556	29397			
LINE AMPS			238.9	237.8	244.8			
DESIGN LOAD KVA				86.64				

* PROVIDE LOCKABLE CIRCUIT BREAKER

PANELBOARD 1LP2 SCHEDULE

(NEW) 10/21/99 10:53 AM

VOLTAGE: 120/208V,3Ph,4W | BUS RATING: 225 | MAINS: 225A MLO | TYPE: BOLT ON | LOCATION: STORAGE 112 | ENCLOSURE: NEMA 1 | MOUNTING: SURFACE | MIN. AIC: 10000

LOAD – VA

CIRCUIT DESCRIPTION	BKR	CKT NUM	PHASE A	PHASE B	PHASE C	CKT NUM	BKR	CIRCUIT DESCRIPTION
SWIMSUIT EXTRACTOR	20	1	1000			2	20	
		1	1352					HP-1
SWIMSUIT EXTRACTOR	20	3		1000		4		
		1		1352			2	
RECEPTS	20	5			500	6	20	
		1			826			FC-1
RECEPTS	20	7	500			8	2	
		1	826					
RECEPTS	20	9		500		10	20	
		1		720			1	RECEPTS
HAND DRYER	30	11			2400	12	15	
		1			1113		1	EF-5
HAND DRYER	30	13	2400			14		SPACE
		1						
HAND DRYER	30	15		2400		16		SPACE
		1						
HAND DRYER	30	17			2400	18		SPACE
		1						
EWC	20	19	750			20		SPACE
		1						
SPARE	20	21				22		SPACE
		1						
SPARE	20	23				24		SPACE
		1						
SPARE	20	25				26		SPACE
		1						
SPARE	20	27				28		SPACE
		1						
SPARE	20	29				30		SPACE
		1						
SPARE	20	31				32		SPACE
		1						
SPARE	20	33				34		SPACE
		1						
SPARE	20	35				36		SPACE
		1						
SPARE	20	37				38		SPACE
		1						
SPARE	20	39				40		SPACE
		1						
SPARE	20	41				42		SPACE
		1						
FEED THROUGH LOAD								
CONNECTED LOAD			6828	5972	6239	OPTIONS		
DEMAND LOAD			6828	5972	6239			
DESIGN LOAD			6828	5972	6239			
LINE AMPS			56.9	49.7	52.0			
DESIGN LOAD KVA				19.04				

THREE-PHASE TRANSFORMER SCHEDULE

TAG	KVA RATING	VOLTAGE HIGH	VOLTAGE LOW	FLA HIGH	FLA LOW	GROUNDING ELECTRODE NEC 250-94	NOTES
T1	112.5	480	208/120	135	312	#1/0 AWG	115

NOTES TO TRANSFORMER SCHEDULE

115 TRANSFORMER SHALL BE RATED 115 DEGREES C RISE

MAIN SWITCHBOARD "MSA" LOAD CALC

DISCRIPTION	VOLT AMPS	QUANTITY	DEMAND	TOTAL
LIGHTING	3.0	34,350 SF	125%	128,812.50
RECEPTACLE	1.5	34,350 SF	100%	51,525.00
MISCELLANEOUS	5.0	34,350 SF	100%	171,750.00
HVAC	12.0	34,350 SF	100%	412,200.00
SIGN	1500.0	1 LS	100%	1,500.00
25% LARGEST MOTOR	10806.0	1 LS	100%	10,806.00
480 VOLTS 3PH, 4W				
TOTAL VOLT AMPS =				776,594
TOTAL KVA =				777
TOTAL AMPERES =				934.10

APPROVAL IS FOR CLOUDED AREAS OR LATEST REVISIONS ONLY. SEE ORIGINALS FOR OTHER REQUIREMENTS.

PLANS APPROVED
ELECTRICAL
Building & Safety Dept.
City of Las Vegas, Nevada
DATE: JUN 0 6 2001
Does Not Include Structural, Architectural, Plumbing/Mechanical or Off-Site Improvements. Make No Change Without Approval From Is Not a Permit to Violate Any Ordinance

10/21/99 9:12 AM

FEEDER SCHEDULE

Feeder Tag	Conduit and THHN/THWN Wire (90 Deg C Cu)
021	3/4"C – 2 #12 & 1 #12 GND
031	3/4"C – 2 #10 & 1 #10 GND
033	3/4"C – 3 #10 & 1 #10 GND
083	1-1/4"C – 3 #3 & 1 #8 GND
103	1-1/2"C – 3 #2 & 1 #8 GND
154	2"C – 4 #1/0 & 1 #6 GND
173	2"C – 3 #2/0 & 1 #6 GND
224	2-1/2"C – 4 #4/0 & 1 #4 GND
354	(2) 2"C – 4 #2/0 & 1 #3 GND
1204U	(4) 3-1/2"C – 4 #350KCMIL & (1) 3-1/2"C Spare

SHORT CIRCUIT AND VOLTAGE DROP ANALYSIS

BUS	DESCRIPTION	Isc (AT BUS)	VOLTAGE DROP	% DROP
B1	UTILITY	30070	–	–
B2	MSA	27514	1.52	0.32%
B3	1HP1	25500	0.12	0.05%
B4	1LP1	6238	0.08	0.04%
B5	1LP2	6154	0.09	0.04%
B6	SP	5692	0.36	0.17%

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CITY OF LAS VEGAS
CENTRAL PERMITS

LUCCHESI GALATI

HARRIS

PROJECT NO: 98220.00
DESIGNED BY: A. SCHAEFER
CHECKED BY: G. LASSOIL
DRAWN BY: D. FLETCHER

SINGLE LINE DIAGRAM AND SCHEDULES

SUMMERLIN ARBORS PARK
POOL AND POOL BUILDING

Revisions:
1 11-3-99 PLAN CHECK COMMENTS
2 02-08-01 ADDENDUM #2

Date: 10-22-99
Project No. 98220.00
Scale: NO SCALE
Drawn By: <<<

Sheet Number: E5.01