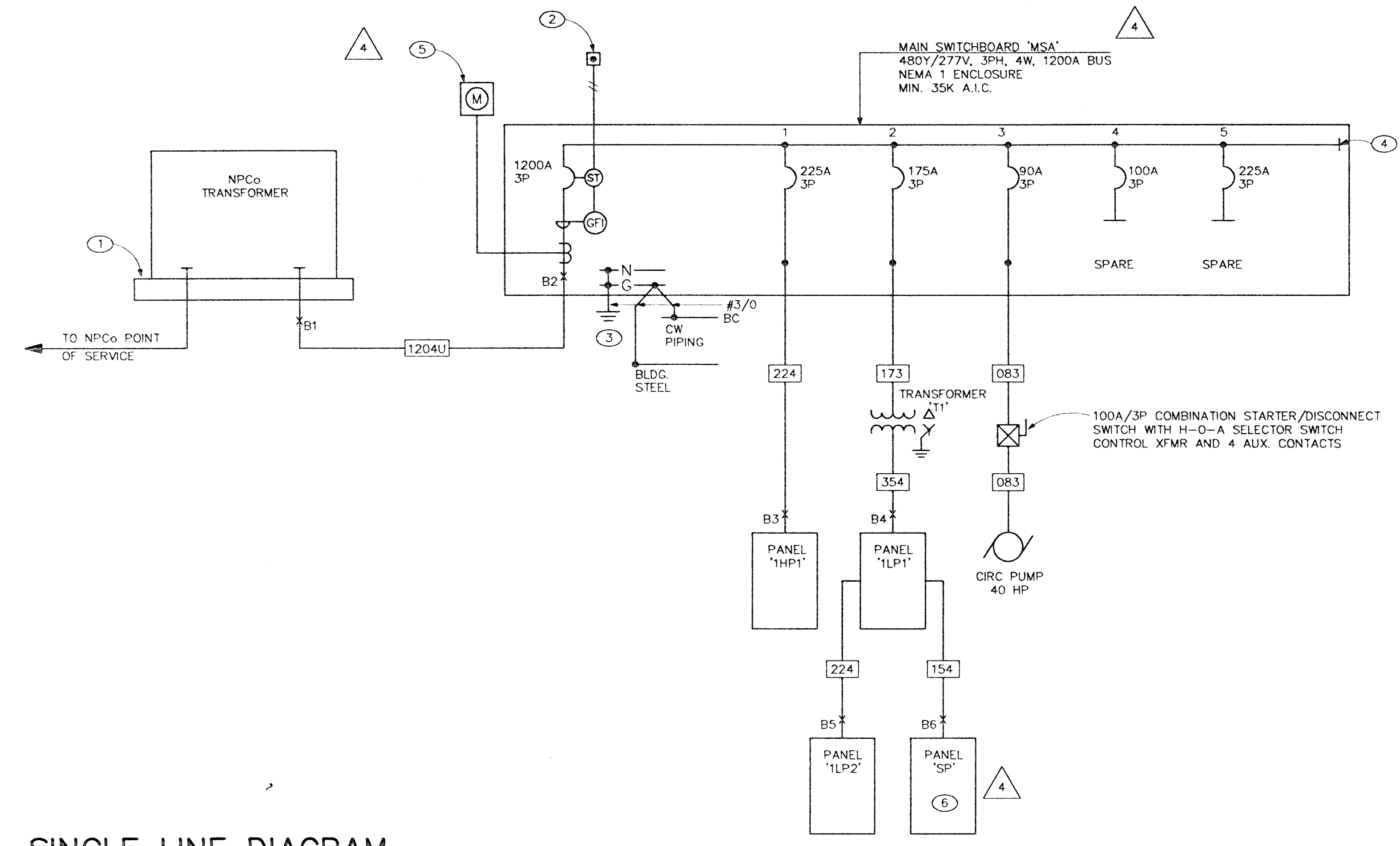


**SHEET NOTES**

- ① UTILITY COMPANY PAD MOUNTED TRANSFORMER, 480Y/277V, 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

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

PANELBOARD 1HP1 SCHEDULE				PANELBOARD 1LP1 SCHEDULE			
CIRCUIT DESCRIPTION		BKR NUM	PHASE	CIRCUIT DESCRIPTION		BKR NUM	PHASE
LIGHTS	20	1	3850	RECEPTS - TELEPHONE	20	1	500
LIGHTS	20	3	20415	RECEPTS	20	3	1000
LIGHTS	20	5	20415	RECEPTS	20	5	1000
EXTERIOR LIGHTS	20	7	780	RECEPTS	20	7	900
LIGHTS	20	9	1680	RECEPTS	20	9	1176
LIGHTS	20	11	1680	RECEPTS	20	11	900
SPARE	20	13	1680	RECEPTS	20	13	720
LIGHTS	20	15	840	RECEPTS	20	15	1008
SPARE	20	17	840	RECEPTS	20	17	2361
SPARE	20	19		RECEPTS	20	19	720
SPARE	20	21		RECEPTS	20	21	720
SPARE	20	23		ELECTRIC WALL HEATER	20	23	1000
SPARE	20	25		WATER HEATER/CIRC PUMPS	20	25	1256
SPARE	20	27		REFRIGERATOR	20	27	1000
SPARE	20	29		FAX	20	29	1000
SPARE	20	31		COPIER	20	31	1500
SPARE	20	33		RECEPTS	20	33	6828
SPARE	20	35		RECEPTS	20	35	5972
SPARE	20	37		RECEPTS	20	37	1000
SPARE	20	39		REMOTE CHILLER	20	39	13300
SPARE	20	41		REMOTE CHILLERS (2)	20	41	650
SPARE	20	43			20	43	1300
SPARE	20	45			20	45	12075
SPARE	20	47			20	47	42
SPARE	20	49			20	49	3

FEED THROUGH LOAD: 27595, 27215, 27240  
 DEMAND LOAD: 27595, 27215, 27240  
 DESIGN LOAD: 28628, 29064, 29355  
 LINE AMPS: 106.1, 104.3, 104.5  
 DESIGN LOAD KVA: 87.04

10/9/01 3:26 PM (NEW)

PANELBOARD 1LP1 SCHEDULE				PANELBOARD 1LP2 SCHEDULE			
CIRCUIT DESCRIPTION		BKR NUM	PHASE	CIRCUIT DESCRIPTION		BKR NUM	PHASE
RECEPTS - TELEPHONE	20	1	500	SWIMSUIT EXTRACTOR	20	1	1000
RECEPTS	20	3	1000	SWIMSUIT EXTRACTOR	20	3	1352
RECEPTS	20	5	1000	RECEPTS	20	5	500
RECEPTS	20	7	900	RECEPTS	20	7	826
RECEPTS	20	9	1176	RECEPTS	20	9	826
RECEPTS	20	11	900	RECEPTS	20	11	2400
RECEPTS	20	13	720	HAND DRYER	30	13	2400
RECEPTS	20	15	1008	HAND DRYER	30	15	2400
RECEPTS	20	17	2361	HAND DRYER	30	17	2400
RECEPTS	20	19	720	EWC	20	19	750
RECEPTS	20	21	720	SPARE	20	21	
ELECTRIC WALL HEATER	20	23	1000	SPARE	20	23	
WATER HEATER/CIRC PUMPS	20	25	1256	SPARE	20	25	
REFRIGERATOR	20	27	1000	SPARE	20	27	
FAX	20	29	1000	SPARE	20	29	
COPIER	20	31	1500	SPARE	20	31	
RECEPTS	20	33	6828	SPARE	20	33	
RECEPTS	20	35	5972	SPARE	20	35	
RECEPTS	20	37	1000	SPARE	20	37	
REMOTE CHILLER	20	39	13300	SPARE	20	39	
REMOTE CHILLERS (2)	20	41	650	SPARE	20	41	
	20	43	1300	SPARE	20	43	
	20	45	12075	SPARE	20	45	
	20	47	42	SPARE	20	47	
	20	49	3	SPARE	20	49	

FEED THROUGH LOAD: 31628, 31673, 31278  
 DEMAND LOAD: 28628, 29064, 29355  
 DESIGN LOAD: 28628, 29064, 29355  
 LINE AMPS: 236.1, 242.0, 244.4  
 DESIGN LOAD KVA: 87.04

\* PROVIDE LOCKABLE CIRCUIT BREAKER

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

PANELBOARD 1LP2 SCHEDULE				THREE-PHASE TRANSFORMER SCHEDULE			
CIRCUIT DESCRIPTION		BKR NUM	PHASE	TAG	KVA RATING	VOLTAGE HIGH	VOLTAGE LOW
SWIMSUIT EXTRACTOR	20	1	1000	T1	112.5	480	208/120
SWIMSUIT EXTRACTOR	20	3	1352				
RECEPTS	20	5	500				
RECEPTS	20	7	826				
RECEPTS	20	9	826				
RECEPTS	20	11	2400				
HAND DRYER	30	13	2400				
HAND DRYER	30	15	2400				
HAND DRYER	30	17	2400				
EWC	20	19	750				
SPARE	20	21					
SPARE	20	23					
SPARE	20	25					
SPARE	20	27					
SPARE	20	29					
SPARE	20	31					
SPARE	20	33					
SPARE	20	35					
SPARE	20	37					
SPARE	20	39					
SPARE	20	41					
SPARE	20	43					
SPARE	20	45					
SPARE	20	47					
SPARE	20	49					

DISCUSSION: 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

880 VOLTS 3PH, 4W  
 TOTAL VOLT AMPS = 776,594  
 TOTAL KVA = 777  
 TOTAL AMPERES = 934.10

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

DISCUSSION	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
880 VOLTS 3PH, 4W				
TOTAL VOLT AMPS =				776,594
TOTAL KVA =				777
TOTAL AMPERES =				934.10

FEEDER SCHEDULE

Feeder Tag	Conduit and THHN/THWN Wire (90 Deg C Cu)
021	3/4" - 2 #12 & 1 #12 GND
031	3/4" - 2 #10 & 1 #10 GND
033	3/4" - 3 #10 & 1 #10 GND
083	1-1/4" - 3 #3 & 1 #8 GND
103	1-1/2" - 3 #2 & 1 #8 GND
154	2" - 4 #1/0 & 1 #6 GND
173	2" - 3 #2/0 & 1 #6 GND
224	2-1/2" - 4 #4/0 & 1 #4 GND
254	(2) 2" - 4 #2/0 & 1 #3 GND
1204U	(4) 3-1/2" - 4 #350KCMIL & (1) 3-1/2" Spare

SHORT CIRCUIT AND VOLTAGE DROP ANALYSIS

BUS	DESCRIPTION	Isc (AT BUS)	VOL. TAGE DRGP	%
B1	UTILITY	32070		
B2	MSA	27514	1.52	0.32%
B3	1HP1	25500	0.12	0.03%
B4	1LP1	6238	0.08	0.04%
B5	1LP2	6154	0.09	0.04%
B6	SP	5692	0.36	0.17%

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: OCT 09 2001

Does Not Include Structural, Architectural, Plumbing/Mechanical or Civil Improvements. Scale Not Change Without Approval. Plan is Not a Permit to Violate Any Ordinance.

SINGLE LINE DIAGRAM AND SCHEDULES

SUMMERLIN ARBORS PARK POOL AND POOL BUILDING

Revisions:

NO.	DATE	DESCRIPTION
1	11-1-99	PLAN CHECK COMMENTS
2	02-09-01	ADDED/REMOVED #2 MISCELLANEOUS
3	10/01/01	REVISIONS

Sheet Number: 10-22-93  
 Project No: 38035-00  
 Scale: NO SCALE  
 Drawn By: KKK

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 GENERAL PERMITS

E5.01

# 387023