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**East Las Vegas Community Center**  
 Eastern and Stewart

**HARRIS**  
 PROJECT NO. 202008-00  
 DRAWN BY: J. HARRIS  
 CHECKED BY: J. HARRIS  
 DATE: 08/02/01

OWNER: CITY OF LAS VEGAS  
 DEPARTMENT OF PUBLIC WORKS  
 ARCHITECTURAL SERVICES

RECORD DRAWINGS  
 Date: 5/21/03 This record drawing has been prepared in part, based upon information furnished by others. While this information is believed to be reliable, Harris Consulting Engineers P.C. cannot ensure its accuracy, and is not responsible for the accuracy of this record drawing or for any errors or omissions which may have been incorporated into it as a result. Those relying on this record drawing are advised to obtain independent verification of its accuracy before applying it for any purpose.

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DATE: August 2, 2001  
 SCALE: NO SCALE  
 SHEET NO: 01.15301.22  
 DRAWING NO: 521-288

**E5.01**

**SHEET NOTES**

- UTILITY COMPANY PAD MOUNT TRANSFORMER, 480Y/277V, 3Φ, 4 W. SECONDARY. PROVIDE CONCRETE EQUIPMENT PAD PER UTILITY REQUIREMENTS.
- PROVIDE METERING CABINET AND SECONDARY METERING CT'S PER N.P.Co. REQUIREMENTS. MOUNT METER ON EXTERIOR OF BUILDING IN LOCATION AS DIRECTED BY N.P.Co.
- PROVIDE CONCRETE ENCASED GROUNDING ELECTRODE CONSISTING OF MIN. 20' #3/0 B.C. INSTALLED PER N.E.C. ARTICLE 250-50 (c).
- PROVIDE WP REMOTE SHUNT TRIP IN WP ENCLOSURE.
- PANEL TO BE SERVICE ENTRANCE RATED.
- 1" - 1 #2 TO GROUND PER N.E.C. ARTICLE 250-81 (c).

CIRCUIT BREAKERS SHALL BE FULLY RATED. THE USE OF SERIES RATED DEVICES IS NOT ACCEPTABLE.

**SHORT CIRCUIT AND VOLTAGE DROP ANALYSIS**

BUS	DESCRIPTION	I <sub>sc</sub> (AT BUS)	VOLTAGE DROP	% DROP
B1	UTILITY	21479	-	-
B2	MSA	18761	3.46	0.72%
B3	PANEL 1HP1	18205	0.16	0.03%
B4	PANEL 1HP2	14555	2.91	0.61%
B5	PANEL 1HP3	10520	4.20	0.87%
B6	PANEL 1LP1	5568	0.07	0.03%
B7	PANEL 1LP2	5454	0.07	0.03%
B8	PANEL 1KP1	5454	0.11	0.05%
B9	PANEL 1KP2	5422	0.02	0.01%
B10	PANEL 1LP3	4194	0.09	0.04%
B11	PANEL 1LP3A	4050	0.07	0.03%
B12	PANEL 1LP4	3096	0.52	0.25%

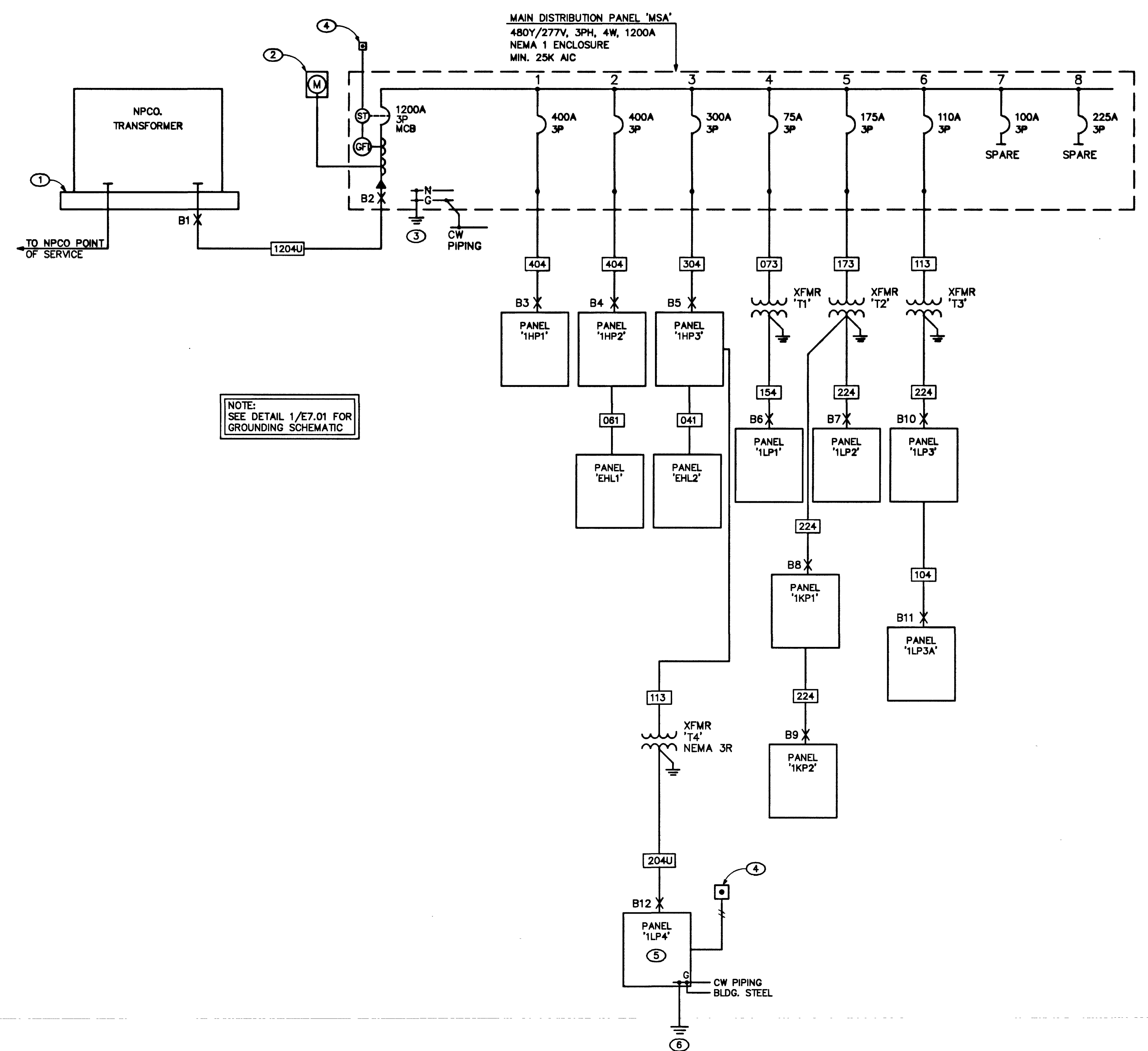
**FEEDER SCHEDULE - Cu** 6/4/01 10:59 AM

Feeder Tag	Conduit and THHN/THWN Wire (75 Deg C Cu)
021	3/4" - 2 #12 @ 1 #12 GND
023	3/4" - 3 #12 @ 1 #12 GND
031	3/4" - 2 #10 @ 1 #10 GND
041	3/4" - 2 #8 @ 1 #10 GND
043	1" - 3 #8 @ 1 #10 GND
053	1-1/4" - 3 #8 @ 1 #10 GND
061	1" - 2 #4 @ 1 #10 GND
073	1-1/4" - 3 #4 @ 1 #8 GND
104	1-1/2" - 4 #2 @ 1 #8 GND
204U	2" - 4 #3/0
113	1-1/2" - 3 #1 @ 1 #8 GND
154	2" - 4 #1/0 @ 1 #8 GND
173	2" - 3 #2/0 @ 1 #8 GND
224	2-1/2" - 4 #4/0 @ 1 #4 GND
304	3" - 4 #350KCMIL @ 1 #4 GND
404	4" - 4 #500KCMIL @ 1 #3 GND
1204U	(4) 3-1/2" - 4 #350KCMIL

**THREE-PHASE TRANSFORMER SCHEDULE**

TAG	KVA RATING	VOLTAGE HIGH	VOLTAGE LOW	FLA HIGH	FLA LOW	GROUNDING ELECTRODE NEC 250-84	NOTES
T1	45	480	208/120	54	125	#6 AWG	115
T2	112.5	480	208/120	135	312	#1/0 AWG	115
T3	75	480	208/120	90	208	#2 AWG	115
T4	75	480	208/120	90	208	#2 AWG	NEMA 3R

**NOTES TO TRANSFORMER SCHEDULE**  
 115 TRANSFORMER SHALL BE RATED 115 DEGREES C RISE



NOTE: SEE DETAIL 1/E7.01 FOR GROUNDING SCHEMATIC

**SINGLE LINE DIAGRAM**  
 NO SCALE

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