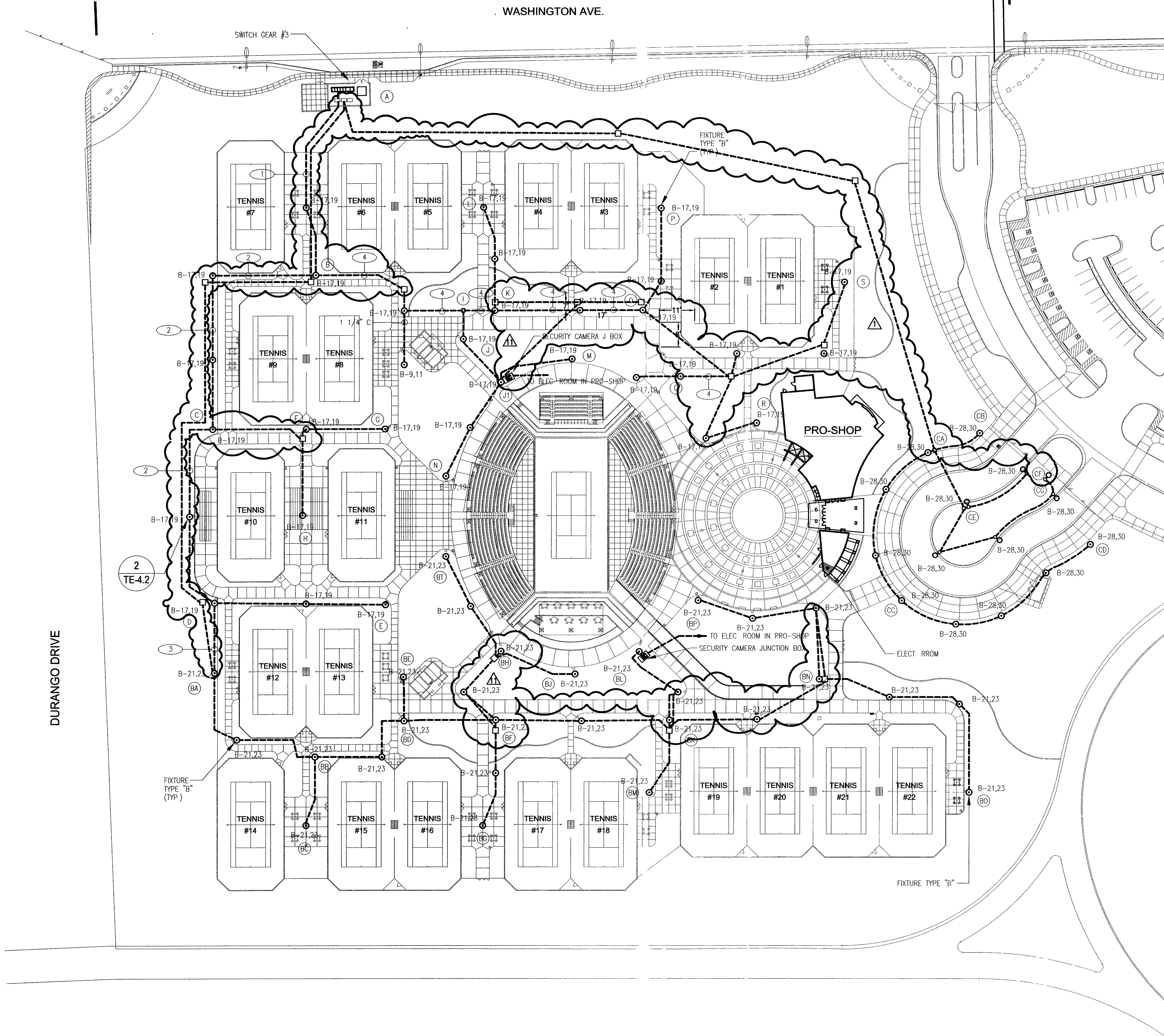




WALKWAY LIGHTING LAYOUT
SCALE: 1" = 50'-0"

VOLTAGE DROP CALCULATION										
TENNIS COURTS FACILITY										
CIRCUIT NUMBER	POINT TO	LENGTH IN FEET	LOAD CURRENT	WIRE SIZE & TYPE	CONDUIT SIZE	SOURCE VOLTAGE	VOLTAGE DROP	VOLTAGE DROP, %	VOLTAGE @ POLE	
B-17,19	A-B	166'	16.5A	#8 THW + GND	REFER TO DWG.	480	4.19	0.87	475.81	
B-17,19	B-C	231'	5A	#10 THW + GND	REFER TO DWG.	475.81	2.80	0.59	473.01	
B-17,19	C-D	191'	2A	#10 THW + GND	REFER TO DWG.	473.01	0.92	0.20	472.09	
B-17,19	D-E	155'	1A	#10 THW + GND	1 1/4"	472.09	0.38	0.08	471.71	
B-17,19	C-F	82'	1.5A	#10 THW + GND	1 1/4"	473.01	0.30	0.06	472.71	
B-17,19	F-G	66'	0.5A	#10 THW + GND	1 1/4"	472.71	0.08	0.02	472.63	
B-17,19	F-H	74'	0.5A	#10 THW + GND	1 1/4"	472.71	0.09	0.02	472.62	
B-17,19	B-I	152'	10.5A	#10 THW + GND	1 1/2"	475.81	3.86	0.81	471.95	
B-17,19	I-J	22'	2.5A	#10 THW + GND	1 1/4"	471.95	0.13	0.03	471.82	
B-17,19	J-K	50'	2A	#10 THW + GND	1 1/4"	471.82	0.24	0.05	471.58	
B-17,19	J-L	69'	0.5A	#10 THW + GND	1 1/4"	471.58	0.08	0.02	471.50	
B-17,19	J-M	100'	1A	#10 THW + GND	1 1/4"	471.58	0.24	0.05	471.34	
B-17,19	I-K	25'	7A	#10 THW + GND	1 1/2"	471.95	0.42	0.09	471.53	
B-17,19	K-L	96'	1A	#10 THW + GND	1 1/4"	471.53	0.23	0.05	471.30	
B-17,19	K-O	132'	5.5A	#10 THW + GND	1 1/2"	471.53	1.76	0.37	469.77	
B-17,19	O-P	96'	1A	#10 THW + GND	1 1/4"	469.77	0.23	0.05	469.54	
B-17,19	O-Q	103'	3.5A	#10 THW + GND	1 1/2"	469.77	0.87	0.19	468.90	
B-17,19	Q-R	107'	1A	#10 THW + GND	1 1/4"	468.90	0.26	0.06	468.64	
B-17,19	Q-S	228'	1.5A	#10 THW + GND	REFER TO DWG.	468.90	0.83	0.18	468.07	
B-21,23	A-BA	790'	14A	#2 THW + GND	REFER TO DWG.	480	4.29	0.89	475.71	
B-21,23	BA-BB	152'	14A	#2 THW + GND	1 1/4"	475.71	0.83	0.17	474.88	
B-21,23	BB-BC	58'	0.5A	#10 THW + GND	1 1/4"	474.88	0.07	0.01	474.81	
B-21,23	BB-BD	108'	11.5A	#8 THW + GND	1 1/4"	474.88	1.90	0.40	472.98	
B-21,23	BD-BE	41'	0.5A	#10 THW + GND	1 1/4"	472.98	0.05	0.01	472.93	
B-21,23	BD-BF	84'	10.5A	#8 THW + GND	1 1/4"	472.98	1.35	0.28	471.63	
B-21,23	BF-BG	95'	1A	#10 THW + GND	1 1/4"	471.63	0.23	0.05	471.40	
B-21,23	BF-BH	89'	2.5A	#10 THW + GND	1 1/4"	471.63	0.54	0.11	471.09	
B-21,23	BH-BI	101'	1A	#10 THW + GND	1 1/4"	471.09	0.24	0.05	470.85	
B-21,23	BH-BJ	72'	0.5A	#10 THW + GND	1 1/4"	471.09	0.09	0.02	471.00	
B-21,23	BI-BK	153'	6.5A	#10 THW + GND	1 1/4"	471.63	2.41	0.51	469.22	
B-21,23	BK-BL	81'	1A	#10 THW + GND	1 1/4"	469.22	0.20	0.04	469.02	
B-21,23	BK-BM	68'	0.5A	#10 THW + GND	1 1/4"	469.22	0.08	0.02	469.14	
B-21,23	BK-BN	168'	4A	#10 THW + GND	1 1/4"	469.22	1.63	0.35	467.59	
B-21,23	BN-BO	217'	1.5A	#10 THW + GND	1 1/4"	467.59	0.79	0.17	466.80	
B-21,23	BN-BP	173'	1.5A	#10 THW + GND	1 1/4"	467.59	0.63	0.13	466.96	
B-28,30	A-CA	880'	9.5A	#6 THW + GND	REFER TO DWG.	480	8.21	1.71	471.79	
B-28,30	CA-CB	52'	5A	#10 THW + GND	1 1/4"	471.79	0.06	0.01	471.73	
B-28,30	CA-CC	155'	4A	#10 THW + GND	1 1/4"	471.79	1.50	0.32	470.29	
B-28,30	CC-CD	205'	2.5A	#10 THW + GND	1 1/4"	470.29	1.24	0.26	469.05	
B-28,30	CA-CE	60'	5A	#10 THW + GND	1 1/4"	470.29	0.73	0.15	469.56	
B-28,30	CE-CF	75'	2A	#10 THW + GND	1 1/4"	469.56	0.36	0.08	469.20	
B-28,30	CE-CG	185'	3A	#10 THW + GND	1 1/4"	469.56	1.34	0.29	468.22	

CONDUIT AND WIRE LEGEND - TENNIS COURT LIGHTING		
KEY NOTE	CONDUIT SIZE	NUMBER OF WIRES AND TYPE
1	1 1/2" C	2 - #2 THW + 2 - #8 THW + GND
2	1 1/2" C	2 - #2 THW + 2 - #10 THW + GND
3	1 1/4" C	2 - #2 THW + GND
4	1 1/2" C	2 - #6 THW + 2 - #10 THW + GND

GENERAL NOTE
1 PROVIDE AND INSTALL SCHEDULE 40 PVC CONDUIT FOR ALL UNDERGROUND RUNS

SYMBOL LEGEND

(XX) DISTANCE POINTS

(SC) DOUBLE COMPARTMENT JUNCTION BOX FOR FUTURE SECURITY LIGHTING PROVIDE (2) 2" SCHEDULE 40 PVC CONDUIT FROM JUNCTION BOX TO THE ELECTRICAL ROOM IN THE PRO-SHOP STUB AND IN IN THE ELECT ROOM

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REVISIONS
1/27/06 - RECORD DRAWING

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WASHINGTON/BUFFALO PARK - PHASE 1A
WASHINGTON & BUFFALO, LAS VEGAS, NV

WALKWAY LIGHTING LAYOUT - VOLTAGE DROP CALCULATION

STAMP

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

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DRAWN: ES
FILE: TE-1.2
DATE: 7/03
SCALE: 1" = 50'-0"
SHEET NO: 03/15/04/01
CLV DWG NO: 65016 1A

SHEET NO: TE-1.2