GENERAL REQUIREMENTS

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, THE CITY OF RIVERSIDE STANDARD PLANS AND SPECIFICATIONS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, A.P.W.A. 1976 EDITION AND ALL AMENDMENTS (CITY, STATE).

2. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL UNDERGROUND UTILITY STRUCTURES AND FACILITIES PRIOR TO DOING WORK (INCLUDING THOSE NOT SHOWN) AND TO TAKE PRECAUTIONARY MEASURES IN THE AREA OF WORK TO PREVENT DAMAGE. THE COST OF ALL REPAIRS SHALL BE BORNE BY THE CONTRACTOR.

3. IF ANY DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE DIRECTOR PRIOR TO COMMENCEMENT OF WORK.

4. LOCATION OF ALL FACILITIES NOTED AS EXISTING ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO STARTING ANY AFFECTED WORK.

5. PROTECT ALL EXISTING TREES AND FACILITIES TO REMAIN.

6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER PRIME CONTRACTORS WHO MAY BE WORKING ON THE SAME SITE UNDER SEPARATE CONTRACT. AN ELECTRICAL CONTRACTOR MAY BE CONCURRENTLY INSTALLING PARK AND BALLFIELD LIGHTING AT BRYANT AND LA SIERRA PARKS. REFER TO GENERAL CONDITIONS OF THE CONTRACT, ARTICLES 32 & 33.

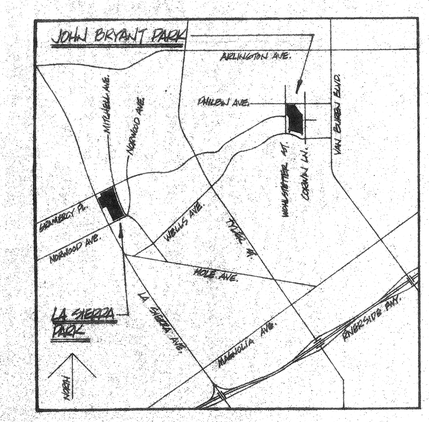
Copy in La Sierra File

city of riverside

park lighting program

portion of park development program

state park bond funds nos.: 33·0011 (bryant), 33·0012 (la sierra)



date

NOV 17, 1983

date revised

sheet index

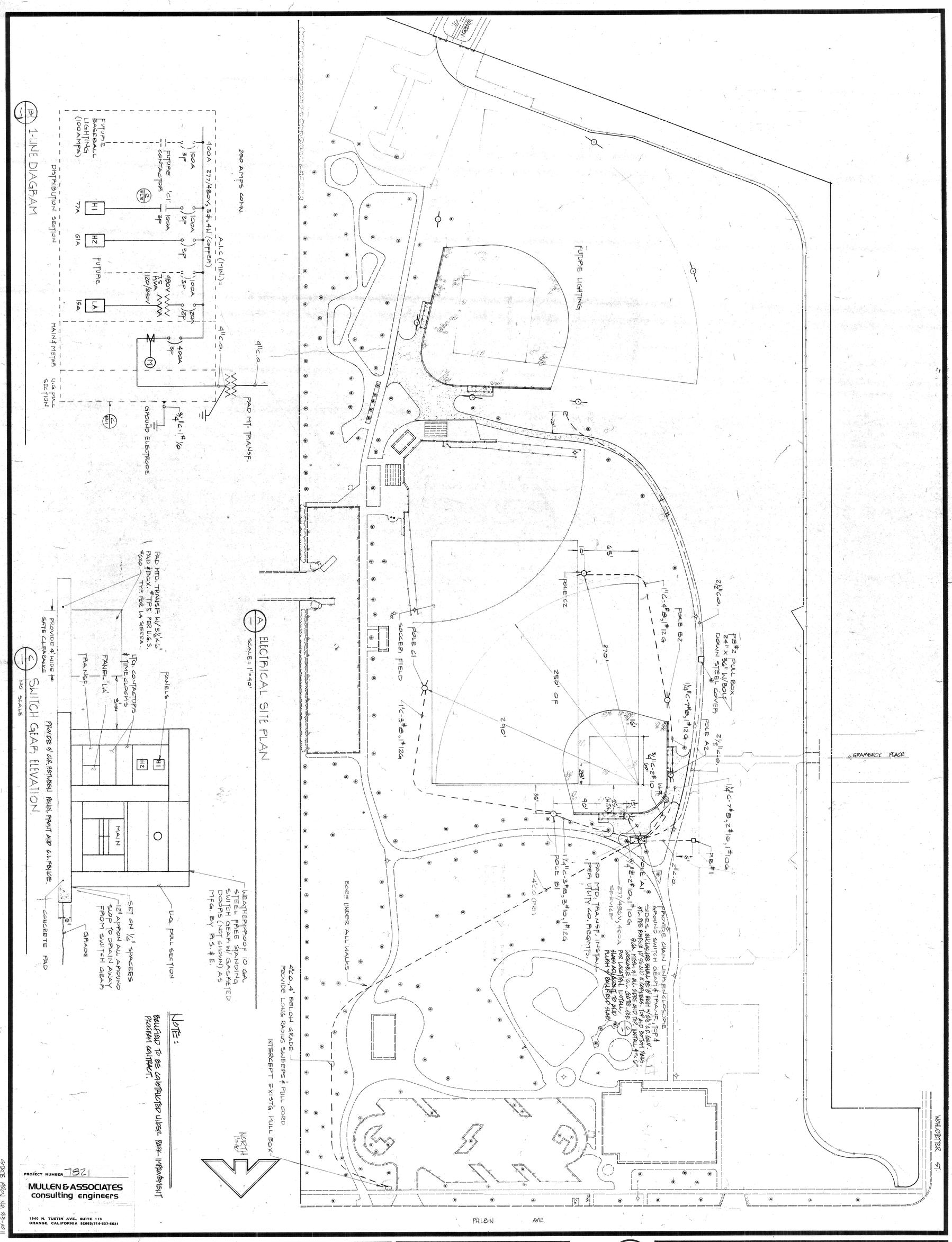
EL-1 BRYANT PARK - SITE ELECTRICAL PLAN
EL-2 LA SIERRA PARK - SITE ELECTRICAL PLAN
EL-3 PANEL SCHEDULES, MISC. DETAILS
EL-4 POLE DETAILS

recreation systems, incorporated
2500 east nutwood avenue, suite 28
fullerton, california
(714) 879·6373

consultants

LARRY MULLEN, ELECTRICAL ENGINEER
1940 N. TUSTIN AVE., SUITE 113, ORANGE, CA. 714/647 6621

approvals



PROJECT NUMBER 7821

MULLEN & ASSOCIATES
consulting engineers

1940 N. TUSTIN AVE., SUITE 113
ORANGE, CALIFORNIA 92665/714-637-6621

STATE PROJ NO 33-0011

sheet no.	revised	date		
EL 1		11-17-78	PARK LIGHTING PROGRAM CITY OF RIVERSIDE BRYANT PARK – SITE ELECTRICAL PLAN	

recreation systems incorporated
landscape architecture
park and environmental planning
2500 east nutwood ave · fullerton ca 714/879·6373

(LA SIERRA)

SURFACE M.L.O. 100A BUS

VOLTAGE 277/480V, 3φ, 4W **PANEL 'HA' SCHEDULE**

CKT NO.	CKT BKR. AMPS	POLE	LTG.	NO. OF OUTLETS REC.	MISC.	LOCATION	WATTS A	B	C
1	30	1	5			POLE A3	5700		
2	20	1	3			B3	3420		
3	30	1	5			A4		5700	
4	20	1	3			B3		3420	
5	|	|	|			B4			3420
6	|	|	|			B4			3420
7	—	—				SPACE	—		
8	20	1	3			C3	3420		
9	20	1	3			C4		3420	
10						SPACE		—	
11	20	1	3			C3			3420
12	20	1	3			C4			3420
13									
14									
15									
16									
17									
18									
TOTAL WATTS 99A							12540	17540	13680

LCL 99 X 1.25 = 61A KW =
OTHER LOAD KW =
TOTAL LOAD KW =

(LA SIERRA)

SURFACE M.L.O. 100A BUS

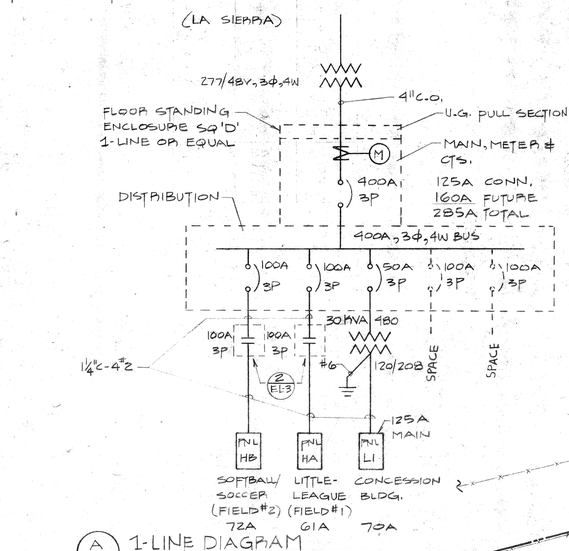
VOLTAGE 277/480V, 3φ, 4W **PANEL 'HB' SCHEDULE**

CKT NO.	CKT BKR. AMPS	POLE	NO. OF OUTLETS LTG.	REC.	MISC.	LOCATION	WATTS A	B	C
1									
2			5			POLE A4	5700		
3			5			A5		5700	
4			—					—	
5			3			B5			3420
6			5			C5			5700
7			3			B4	3420		
8			3			B5	3420		
9			4			C6		4560	
10			4			C7		4560	
11			5			C8			5700
12			—			SPACE			—
13									
14									
15									
16									
17									
18									
TOTAL WATTS 58A							15960	14820	14820

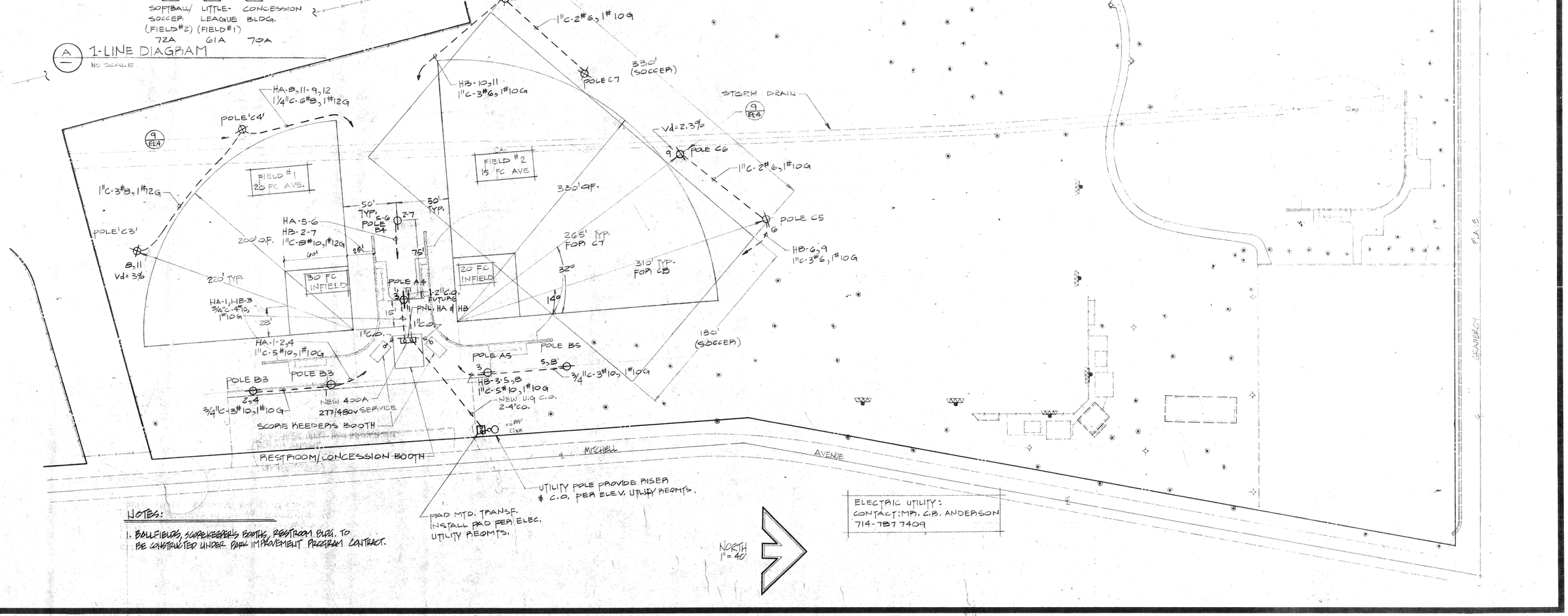
LCL 58 X 1.25 = 72A KW =
OTHER LOAD KW =
TOTAL LOAD KW =

* PROVIDE ENGRAVED NAMETAG-"PANEL HB CKT #5 FEED SAME POLE"

(LA SIERRA)



A 1-LINE DIAGRAM
NO SCALE



NOTES:

1. BALLFIELDS, SCOREKEEPER'S BOOTH, RESTROOM BLDG. TO BE CONSTRUCTED UNDER PARK IMPROVEMENT PROGRAM CONTRACT.

STATE PROJ. NO. 93-2012

PROJECT NUMBER 7321-1

MULLEN & ASSOCIATES
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recreation systems incorporated
landscape architecture
park and environmental planning
2500 east nutwood ave · fullerton ca 714/879-6373

PARK LIGHTING PROGRAM CITY OF RIVERSIDE

LA SIERRA PARK - SITE ELECTRICAL PLAN

date 11-17-78

revised

sheet no. EL 2

(BRYANT) M.L.a 100A BUS

PANEL 'H2' SCHEDULE

VOLTAGE 277/480V, 3φ, 4W

CKT. NO.	CKT BKR. AMPS	CKT BKR. POLE	NO. OF OUTLETS LTG.	NO. OF OUTLETS REC.	NO. OF OUTLETS MISC.	LOCATION	WATTS A	WATTS B	WATTS C
1						FUTURE TENNIS LTG	9000		
2									
3								9000	
4									
5									9000
6									
7									
8									
9						FUTURE MULTIPURPOSE CT.		9500	
10									
11									9500
12									
13						PARKING LTG. FUTURE	1500		
14						SECURITY LTG. FUTURE	3000		
15						SPACE			
16									
17									
18									
19									
20									
21									
22									
23									
24									
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26									
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30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
TOTAL WATTS							18500	3500	3510

LCL 48 X 1.25 = 61 KW =
OTHER LOAD KW =
TOTAL LOAD KW = 61 AMPS

(BRYANT) M.L.a. 100A BUS

PANEL H1 SCHEDULE

VOLTAGE 277/480V, 3φ, 4W

CKT. NO.	CKT BKR. AMPS	CKT BKR. POLE	NO. OF OUTLETS LTG.	NO. OF OUTLETS REC.	NO. OF OUTLETS MISC.	LOCATION	WATTS A	WATTS B	WATTS C
1	20	1	4			POLE A2 (1ST BASE)	4560		
2	20	1	3			〃 A2 〃	3420		
3	30	1	4			A1 (2ND BASE)		4560	
4	20	1	2			B2 (1ST BASE)		2280	
5	20	1	3			B1 (3RD BASE)			3420
6	20	1	3			C1 (LEFT FIELD)			3420
7	20	1	3			B1 (3RD BASE)	2280		
8	20	1	3			C1 (LEFT FIELD)	3420		
9	20	1	3			C2 (RIGHT FIELD)		3420	
10	20	1				SPARE		3000	
11	20	1	3			POLE C2 (RIGHT FIELD)			3420
12	20	1				SPARE			3000
13	20	1	3			POLE C2 (RIGHT FIELD)	3420		
14						SPARE			
15									
16									
17									
18									
19									
20									
21									
22									
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31									
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35									
36									
37									
38									
39									
40									
41									
42									
TOTAL WATTS							17100	3260	3260

LCL 61A X 1.25 = 77A KW =
OTHER LOAD KW =
TOTAL LOAD KW = 77 AMPS 3φ

BRYANT 60A BUS

PANEL LA SCHEDULE

VOLTAGE 120/240V, 1φ, 3W

CKT. NO.	CKT BKR. AMPS	CKT BKR. POLE	NO. OF OUTLETS LTG.	NO. OF OUTLETS REC.	NO. OF OUTLETS MISC.	LOCATION	WATTS A	WATTS B	WATTS C
1	20	1		1		RECEPACLE (BALL FIELD)	920		
2	15	1				SPACE HTR.			
3	15	1				SWITCH GEAR LTS.		80	
4	20	1				SPARE		600	
5						SPACE			
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
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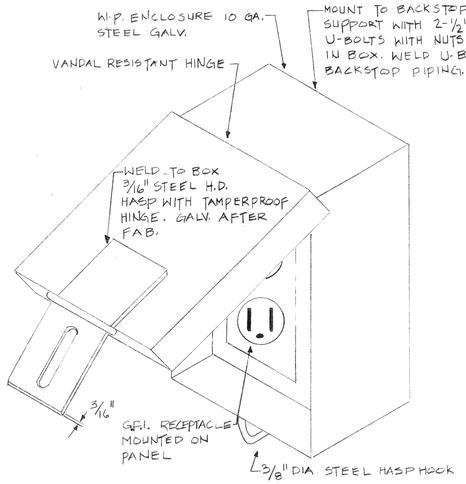
34									
35									
36									
37									
38									
39									
40									
41									
42									
TOTAL WATTS							920	680	

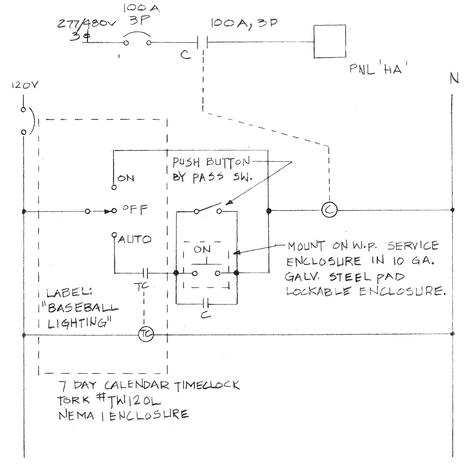
LCL X 1.25 = KW =
OTHER LOAD KW =
TOTAL LOAD KW =

FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	LAMP
A 1140	SPORTS FLOOD, 1000W METAL HALIDE, PROTECTIVE REFLECTOR HOUSING, GLARE HOOD, CALIBRATED AIMING INDICATOR) CROUSE-HINDS #GAF-D-10MHP97	MS-1000



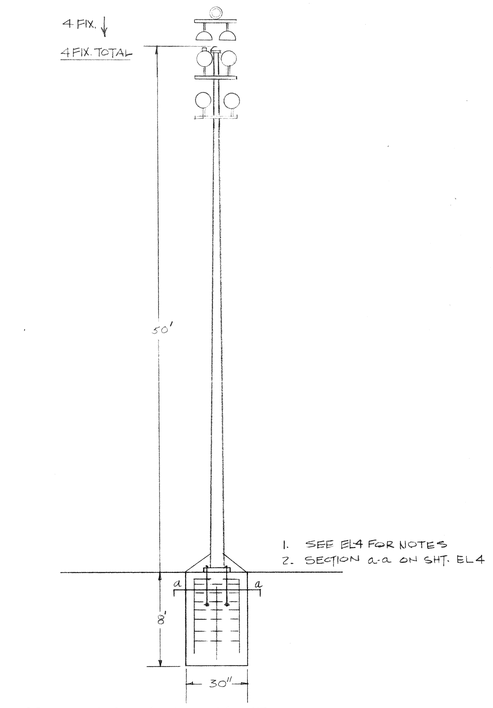
(1) RECEPTACLE ENCLOSURE
NO SCALE



(2) SOFTBALL FIELD LIGHTING CONTROL DIAGRAM
(DEVICES LOCATED IN SWITCH GEAR ENCLOSURE, UNLESS NOTED.)
(TYPICAL FOR PANELS H2 & H1)

ELECTRICAL SYMBOL LIST

- FLUORESCENT STRIP LIGHT
- FLUORESCENT FIXTURE
- RECESSED INCANDESCENT FIXTURE
- INCANDESCENT FIXTURE
- INCANDESCENT FIXTURE WALL MOUNTED
- EXIT LIGHT FIXTURE WALL MOUNTED
- EXIT LIGHT FIXTURE CEILING MOUNTED
- ARROW INDICATES DIRECTION
- FLOODLIGHT FIXTURE & OUTLET BOX
- JUNCTION BOX - CEILING MOUNTED
- JUNCTION BOX - WALL MOUNTED
- PARKING LOT STANDARD & LUMINAIRES
- DUPLEX CONVENIENCE OUTLET, WALL MOUNTED
- DUPLEX CONVENIENCE OUTLET ½ SWITCHED
- SPECIAL OUTLET AS NOTED
- DUPLEX CONVENIENCE OUTLET IN FLUSH FLOOR BOX
- CLOCK OUTLET - WALL MOUNTED
- THERMOSTAT OUTLET
- EXHAUST FAN
- MOTOR OUTLET
- S SINGLE POLE TOGGLE SWITCH
- S2 DOUBLE POLE TOGGLE SWITCH
- S3 THREE WAY TOGGLE SWITCH
- S4 FOUR WAY TOGGLE SWITCH
- Sk KEY OPERATED SWITCH
- SD DIMMER CONTROL
- Sa SUBSCRIPT INDICATES UNITS CONTROLLED
- SP PILOT LIGHT & TOGGLE SWITCH
- ST TIME CONTROLLED SWITCH
- SM MOTOR STARTER SWITCH
- CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS
- CONDUIT RUN CONCEALED IN OR UNDER SLAB OR BELOW GRADE
- CONDUIT RUN EXPOSED
- 2#12 ½"C. — 6#12-1"C.
- 3#12 ½"C. — 7#12-1"C.
- 4#12 ¾"C. — 8#12-1"C.
- 5#12 ¾"C. — 9#12-1 ⅛"C.
- OTHER WIRE & CONDUIT SIZES CALLED OUT ON PLAN (I.E.: 5#10-¾"C.)
- DENOTES 3 WIRE CIRCUIT 1 & 3 HOMERUN TO PANEL "A"
- CONDUIT UP
- CONDUIT DOWN
- DENOTES DETAIL A SHEET E-2
- DENOTES EQUIPMENT & DESCRIPTION (TAG NUMBER)
- PUSHBUTTON STATION START STOP
- MAGNETIC MOTOR STARTER
- DISCONNECT SWITCH
- COMBINATION STARTER DISCONNECT SWITCH
- LIGHTING PANEL RECESSED IN WALL
- LIGHTING PANEL SURFACE MOUNTED
- TERMINAL CABINET
- MAIN SWITCHBOARD
- TELEPHONE OUTLET BOX WITH COVER PLATE WALL MOUNTED
- TELEPHONE OUTLET BOX WITH COVER PLATE ON FLUSH FLOOR BOX
- TELEPHONE BACKBOARD
- —T— TELEPHONE CONDUIT - WITH PULL WIRE



1. SEE EL4 FOR NOTES
2. SECTION a-a ON SHT. EL4

(3) POLE DETAIL C6, C7
NO SCALE

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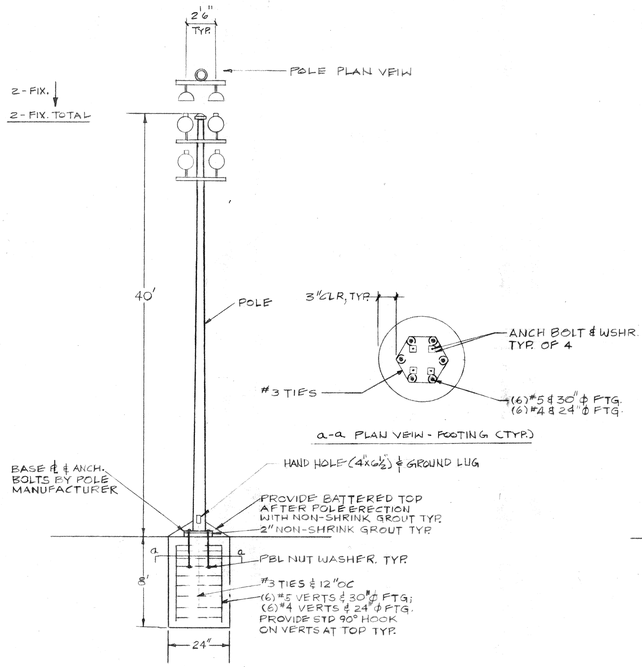
MULLEN & ASSOCIATES
consulting engineers

PROJECT NUMBER 7821

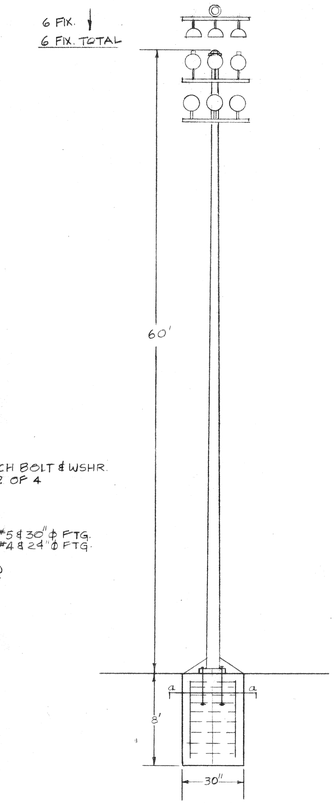
CITY OF RIVERSIDE
PARK LIGHTING PROGRAM
PANEL SCHEDULES, MISC. DETAILS

date 11-17-78
revised
sheet no. EL 3

STATE PROJ. NOS. 33-0011 / 33-0012



1 — POLE DETAIL 'A2, A1'
NO SCALE



2 — POLE DETAIL 'C1'
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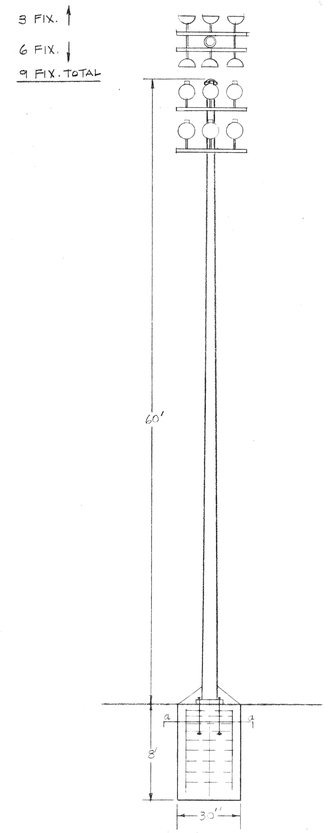
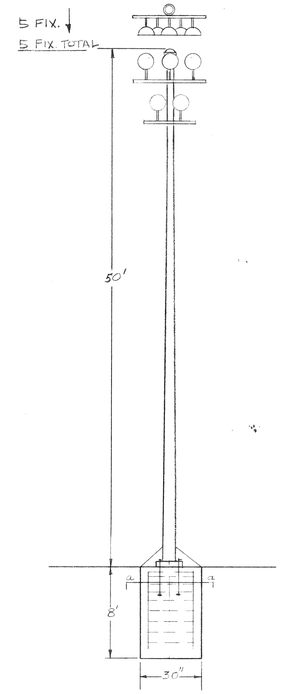
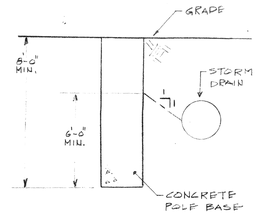


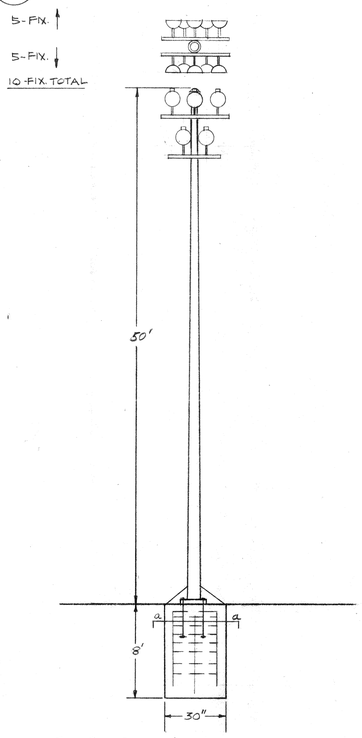
3 — POLE DETAIL 'C2'
NO SCALE



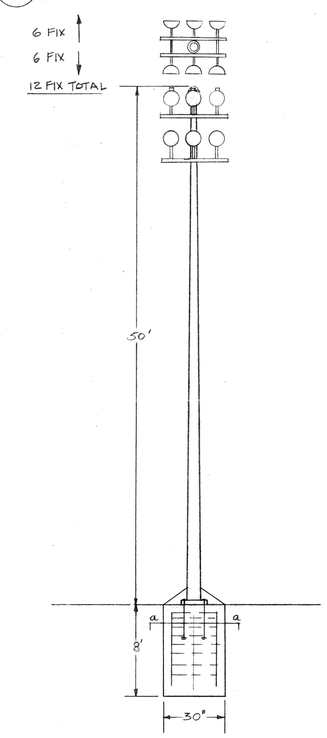
4 — POLE DETAILS 'B1, B2, A3, A5'
NO SCALE



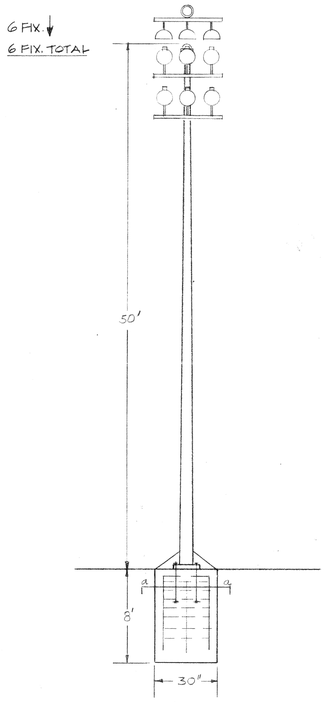
9/— FOOTING/DRAIN DETAIL
NO SCALE



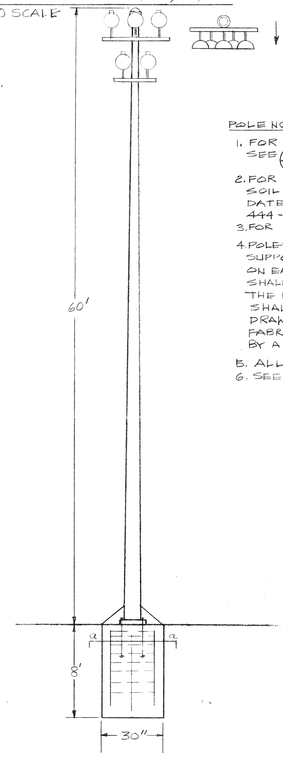
5 — POLE DETAIL 'A4'
NO SCALE



6 — POLE DETAIL 'B4'
NO SCALE



7 — POLE DETAIL 'C3, C4, B3, B5'
NO SCALE



8 — POLE DETAILS 'C5, C2'
NO SCALE

POLE NOTES:

1. FOR FOOTINGS ADJACENT TO STORM DRAIN, SEE 9/EL4
2. FOR FOOTING CASING REQMTS. SEE TWO SOIL REPORTS BY SLADDEN ENGINEERING DATED 8-29-78 FILE #'S 444-8140 & 444-8141.
3. FOR STEEL & CONCRETE REQMTS SEE SPEC.
4. POLES & MAST ARMS SHALL BE DESIGNED TO SUPPORT THE NUMBER OF LUMINARIES CALLED FOR ON EACH POLE. WIND LOADING & POLE DESIGN SHALL CONFORM TO THE LATEST EDITION OF THE UNIFORM BLDG. CODE. MANUFACTURER SHALL SUBMIT CALCULATIONS & SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. ALL CALCS TO BE SIGNED BY A CALIF. REG. PROFESSIONAL ENGINEER.
5. ALL FIXTURES (FIX.) SHALL HAVE HOODS.
6. SEE DETAIL 8/EL5

PROJECT NUMBER 7821

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CITY OF FAIRVIEW

PARK LIGHTING PROGRAM

POLE DETAILS

date 11-17-78

revised

sheet no. EL4

STATE PROJ NOS 52-2011 83-0012