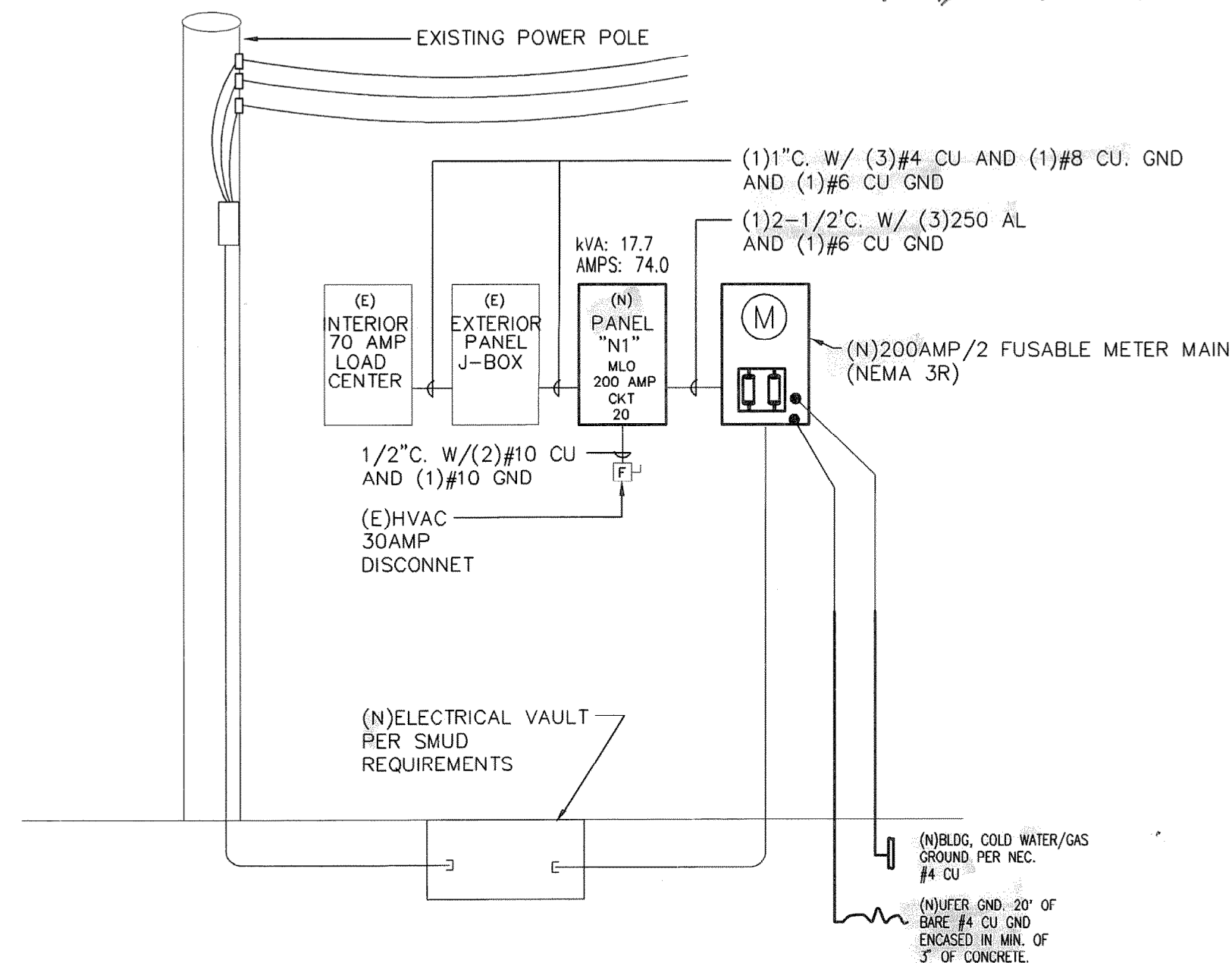


**ELECTRICAL SITE KEY PLAN**

NO SCALE.

**CARMICHAEL PARK ELECTRICAL SERVICE UPGRADE**

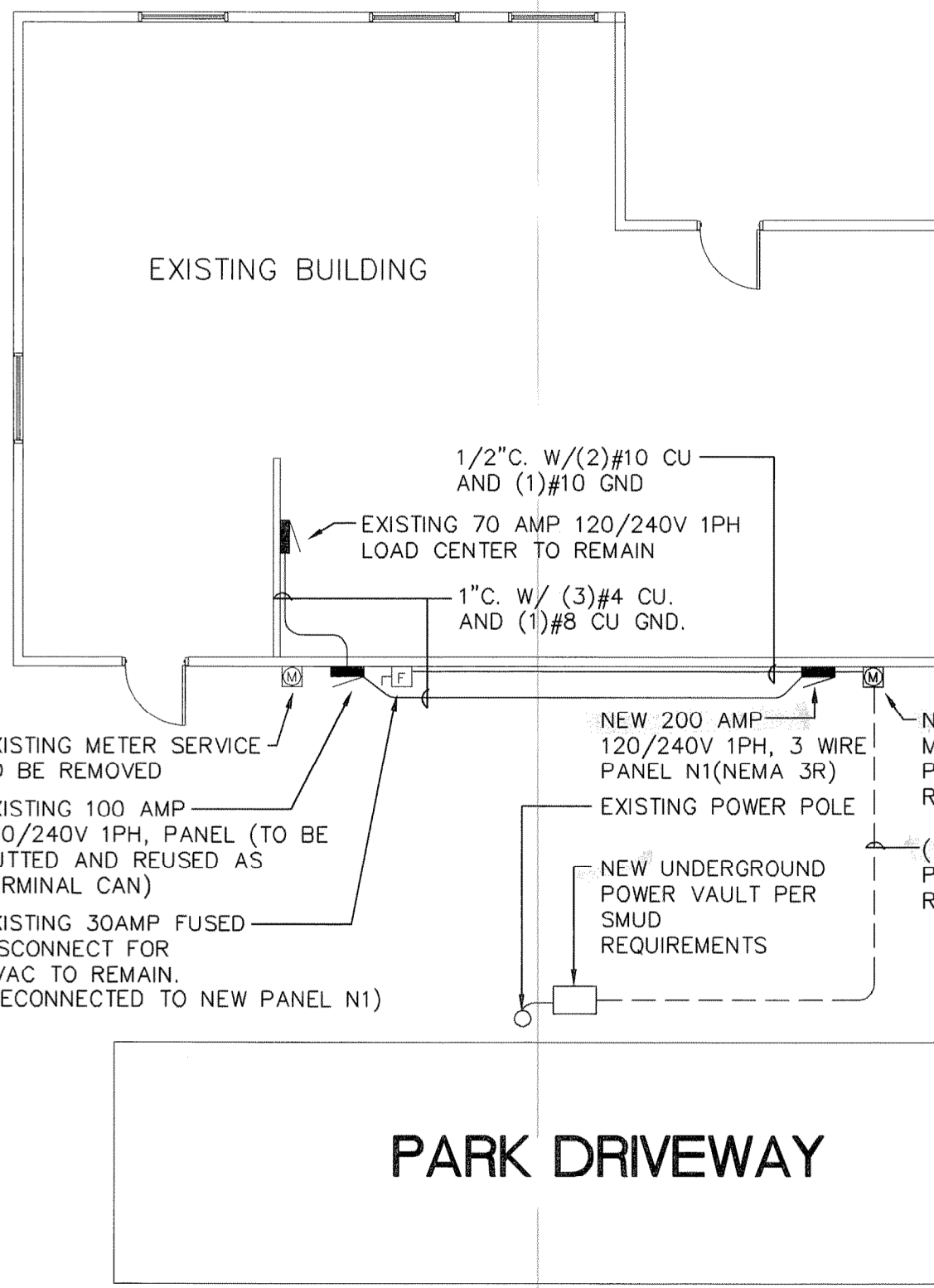
*Field Verify as Allowed to be used as 'J' Box*



**ELECTRICAL ONE-LINE DIAGRAM**

NO SCALE.

**CARMICHAEL PARK ELECTRICAL SERVICE UPGRADE**



**ELECTRICAL SERVICE UPGRADE PLAN**

SCALE: 1/8" = 1'-0"

**CARMICHAEL PARK**

The Electrical Work Shown On These Plans Is SUBJECT TO FIELD APPROVAL

**BUILDING INSPECTION APPROVAL FOR PERMIT**

The Division does not assume any liability for design. Permittee is responsible for ensuring all work is done during field inspection. Permittee is responsible for obtaining the local fire authority for their requirements and construction. All work shall comply with the latest edition of the U.S.C. UPC, UMC, and NEC as adopted and amended by the State of California in Title 24 B&E and this jurisdiction. These plans are NOT reviewed for ADA compliance. A separate permit is required for signs.

NAME: *[Signature]* DATE: *12/11/08* (5/93)

**PLAN REVIEW APPROVAL**

STRUCTURAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 MECHANICAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 ELECTRICAL: \_\_\_\_\_ DATE: *12-5-08*  
 FIRE/ISSUE: \_\_\_\_\_ DATE: \_\_\_\_\_

PANEL N1		VOLTAGE: 120/240V, 1P, 3W		BUS: 200A		MOUNT: SURFACE	
TYPE: PANELBOARD		AIC: SERIES RATED		MAIN: MLD		TYPE: NEMA 3R	
LOAD							
Future Exterior Lighting	C	1.3	20/1	1	A	2	PFB
Future Exterior Lighting	C	1.3	20/1	3	B	4	PFB
Future Exterior Lighting	C	1.3	20/1	5	A	6	PFB
relocated hvac load	M	3.1	30/1	7	B	8	PFB
Space	M	3.1	/2	9	A	10	PFB
Space				11	B	12	PFB
Space				13	A	14	PFB
Space				15	B	16	PFB
Space				17	A	18	PFB
Space				19	B	20	PFB
Space				21	A	22	PFB
Space				23	B	24	PFB
Space				25	A	26	PFB
Space				27	B	28	PFB
Space				29	A	30	PFB
Space				31	B	32	PFB
Space				33	A	34	PFB
Space				35	B	36	PFB
Space				37	A	38	70/ 2.4 P existing interior load center
Space				39	B	40	/2 2.7 P
Space				41	A	42	PFB
LOAD CALCULATIONS:							
3.9	kVA	Continuous Non-Motor					
1.0	kVA	25% Continuous Non-Motor					
0.0	kVA	Non-Continuous					
0.0	kVA	Receptacle (First 10kVA NEC 220-13)					
0.0	kVA	Receptacle (Balance at 50%)					
6.2	kVA	Motor Loads (NEC 430)					
1.6	kVA	25% of Largest Motor					
0.0	kVA	No Kitchen Equip.					
0.0	kVA	Hotel/Motel Demand (NEC 220-11)					
0.0	kVA	Arc Welders (NEC 630-11b, 21b FPN)					
0.0	kVA	Resistance Welders (NEC 630-31b)					
5.1	kVA	Subpanel(s)					
0.0	kVA	Thru fed Panel(s)					
17.7	Total kVA	74 Amps at VOLTAGE: 120/240V, 1P, 3W					

**LOAD CALCULATION**

**CARMICHAEL PARK ELEC. UPGRADE (PANEL N1)**

Total Load	Description
3.9	kVA Continuous Non-Motor
1.0	kVA 25% Continuous Non-Motor
0.0	kVA Non-Continuous
0.0	kVA Receptacle (First 10KVA)
0.0	kVA Receptacle (Balance at 50%)
6.2	kVA Motor Loads
1.6	kVA 25% of Largest Motor
5.1	kVA SUB PANEL
0.0	kVA Hotel/Motel Demand (NEC 220-11)
0.0	kVA Arc Welders (NEC 630-11b, 21b FPN)
0.0	kVA Resistance Welders (NEC 630-31b)
17.7	Load kVA (Per NEC)
74.0	Amps at 240 Volt 1 Phase

**SYMBOLS LIST**

**LIGHTING**

- LIGHTING FIXTURE, SURFACE OR PENDANT MOUNTED
- (NL) LIGHTING FIXTURE, SURFACE OR PENDANT MOUNTED
- FLUORESCENT LIGHTING FIXTURE, RECESSED MOUNTED
- (NL) FLUORESCENT LIGHTING FIXTURE, RECESSED MOUNTED
- LIGHTING FIXTURE, WALL MOUNTED
- FLUORESCENT LIGHTING FIXTURE, SURFACE MOUNTED
- LIGHTING FIXTURE, RECESSED MOUNTED
- FLUORESCENT STRIP FIXTURE, SURFACE MOUNTED
- EXIT LIGHT FIXTURE WITH BATTERY BACK-UP, WALL MOUNTED
- EXIT LIGHT FIXTURE, CEILING MOUNTED
- POLE MOUNTED FIXTURE
- EMERGENCY LIGHT WITH BATTERY BACK-UP
- SINGLE POLE TOGGLE SWITCH, 20A 120-277V @ +48" ABOVE FINISHED FLOOR @ CENTER OF DEVICE.
- THREE WAY TOGGLE SWITCH, 20A 120-277V @ +48" ABOVE FINISHED FLOOR @ CENTER OF DEVICE.
- SUBSCRIPT DENOTES OUTLET/FIXTURE CONTROLLED @ +48" ABOVE FINISHED FLOOR @ CENTER OF DEVICE.

**OUTLETS**

- FOURPLEX RECEPTACLE OUTLET 15A, 125V, +15" ABOVE FINISHED FLOOR @ BOTTOM OF DEVICE.
- DUPLEX RECEPTACLE OUTLET 15A, 125V, +15" ABOVE FINISHED FLOOR @ BOTTOM OF DEVICE.
- 208V, 3PH, 1PH RECEPTACLE OUTLET SIZE AS NOTED
- DUPLEX RECEPTACLE FLOOR OUTLET 20A, 125V FLUSH IN FINISH FLOOR COLOR AS NOTED.
- DUPLEX RECEPTACLE OUTLET WITH AN ISOLATED GROUND, 20A 125V, +15" ABOVE FINISHED FLOOR @ BOTTOM OF DEVICE.
- FOURPLEX RECEPTACLE OUTLET WITH AN ISOLATED GROUND, 20 125V, +15" ABOVE FINISHED FLOOR @ BOTTOM OF DEVICE.
- TELEPHONE OUTLET: FLOOR MOUNTED, 3/4" C. MOUNT TO ABOVE CEILING, WITH PULL ROPE, PROVIDE MUD RING.
- DATA OUTLET: FLOOR MOUNTED, 3/4" C. MOUNT TO ABOVE CEILING, WITH PULL ROPE, PROVIDE MUD RING.
- PUBLIC TELEPHONE OUTLET
- COMBINATION TELE/DATE OUTLET
- JUNCTION BOX, SIZE AND TYPE AS INDICATED OR REQUIRED

**EQUIPMENT**

- MAIN SWITCH BOARD "MSB" SEE ONE LINE DIAGRAM
- BRANCH PANEL SURFACE MOUNTED
- BRANCH PANEL FLUSH MOUNTED
- TERMINAL CABINET
- DISTRIBUTION TRANSFORMER, SIZE & MOUNTING AS NOTED
- MOTOR STARTER, SEE MP&S CONNECT AS REQUIRED
- DISCONNECT SWITCH SIZE AND TYPE AS REQUIRED
- F -> FUSED
- MOTOR MP&S
- EXHAUST FAN - MP&S
- MECHANICAL EQUIPMENT I.D. TAG - MP&S
- NUMBERED NOTE SHOWN ON SAME SHEET
- DETAIL DESIGNATION, TOP LETTER INDICATES DETAIL, BOTTOM LETTER INDICATES SHEET NUMBER
- FIXTURE DESIGNATION, DENOTES FIXTURE TYPE
- TELEPHONE TERMINAL BOARD "TTB" 4"x8"x3/4" PLYWOOD BACKBOARD W/ FOURPLEX RECEPTACLE AND (1) #6 GND.
- WALL MOUNTED SENSOR SWITCH, DUAL TECHNOLOGY
- CEILING MOUNTED SENSOR SWITCH, ULTRASONIC
- WALL MOUNTED SENSOR SWITCH, PASSIVE INFRARED
- POWER PACK, 120V

**WIRING**

- CIRCUIT CONCEALED IN CEILING OR WALL
- CIRCUIT CONCEALED IN FLOOR OR UNDERGROUND
- TANDEM FIXTURE, MASTER SLAVE MAKE-UP
- HOME RUN TO PANELBOARD OR TERMINAL CABINET
- DENOTES # OF #12 WIRES, NO MARKS = 2 #12, 1/2" C. CURVED HATCH DENOTES I.G. OTHERS AS NOTED
- CONDUIT RISER
- CONDUIT RISER DOWN
- STUBBED CONDUIT
- FLEX CONDUIT

**ABBREVIATIONS**

- C CONDUIT
- C.O. CONDUIT ONLY WITH PULL ROPE
- (E) EXISTING
- EM EMERGENCY BATTERY PACK
- EL EVENING LIGHT
- GF1 GROUND FAULT INTERRUPTER
- GFIC GROUND FAULT CIRCUIT INTERRUPTER
- IG ISOLATED GROUND
- MP&S SEE MECHANICAL PLANS AND SPECIFICATIONS
- MT EMPTY CONDUIT WITH NYLON PULL ROPE
- (N) NEW
- NES NOT IN ELECTRICAL SECTION OF THESE PLANS AND SPECIFICATIONS
- NL NIGHT LIGHT
- PFB PROVISION FOR FUTURE BREAKER
- PNL PANELBOARD
- (R) EXISTING TO BE REMOVED OR RELOCATED
- RE: REFERENCE, REFER TO AND COORDINATE WITH ARCHITECTURAL PLANS
- TTB TELEPHONE TERMINAL BOARD
- UN UNLESS OTHERWISE NOTED
- WP WEATHER PROOF

**NOTE**

SYMBOLS INDICATES ABOVE MAY NOT NECESSARILY APPEAR AS PART OF THESE DRAWINGS IF NOT REQUIRED

**GENERAL NOTES**

- THESE GENERAL NOTES ARE INTENDED TO ASSIST THE CONTRACTOR DURING EXECUTION OF THE WORK, HOWEVER, THEY DO NOT COVER ALL OF THE SPECIFICATION REQUIREMENTS.
- INSTALL ALL EQUIPMENT, CONDUITS, OUTLETS AND FIXTURES IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, (NEC) OF THE SPECIFICATION REQUIREMENTS.
- DO NOT SCALE ELECTRICAL PLANS FOR FIXTURES, DEVICE, OR APPLIANCE LOCATIONS, USE FIGURED DIMENSIONS IF GIVEN OR CHECK ARCHITECTURAL PLANS.
- ALL MATERIAL AND EQUIPMENT IS TO BE LISTED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND NEC 110-3.
- MOUNT ALL RECEPTABLES OUTLETS AT +18" UNLESS OTHERWISE INDICATED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- MOUNT ALL TOGGLE SWITCHES AT +48" UNLESS OTHERWISE INDICATED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL FINAL RUNS AND CONNECTIONS TO EQUIPMENT.

**MARK DEVELOPERS' DESIGN/BUILDERS**

The power of one.

GENERAL CONTRACTOR FIRE PROTECTION ELECTRICAL  
 DATA COMMUNICATION UNDERGROUND HVAC  
 PLUMBING

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STATE OF CALIFORNIA

REVISIONS

NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PROJECT NAME:  
**CARMICHAEL PARK ELECTRICAL SERVICE UPGRADE**

7001 FAIR OAKS BLVD.  
 CARMICHAEL CA. 95608

PROJECT NUMBER: 1-08-6682

BLDG. DEPT. SUBMITTAL 11-15-08

SUBMITTAL REVISION

CONSTRUCTION SET

FINAL FIELD CHANGE SET

SHEET TITLE:  
**ELECTRICAL SYMBOLS, KEY PLAN, SCHEDULES, ONE LINE DIAGRAM**

SHEET:  
**E0.1**

OF SHEETS

DIRECTOR OF A/E

ARCHITECT-OF-RECORD

TRADE SPECIALIST INITIALS