

EQUIPMENT SYMBOLS

	EMERGENCY POWER OFF STATION (EPO)
	PULL BOX, SIZED PER N.E.C. OR AS NOTED.
	EXHAUST FAN, OR MOTOR LOAD. REFER TO MECHANICAL, PLUMBING OR KITCHEN DRAWINGS FOR SPECIFIC LOAD REQUIREMENTS OR AS NOTED.
	TRANSFORMER - SEE PLANS FOR MORE INFORMATION.
	SERVICE ENTRANCE OR DISTRIBUTION EQUIPMENT - SEE PLANS FOR MORE INFO.
	HP-RATED FUSED DISCONNECT SWITCH. SEE MOTORIZED EQUIPMENT SCHEDULE FOR SIZE.
	HP-RATED COMBINATION STARTER/DISCONNECT SWITCH. REFER TO MOTORIZED EQUIPMENT SCHEDULE FOR STARTER AND DISCONNECT SIZES.
	HP-RATED NON-FUSED DISCONNECT SWITCH. REFER TO MOTORIZED EQUIPMENT SCHEDULE FOR DISCONNECT AND STARTER SIZES.
	ELECTRICAL PANELBOARD OR LOAD CENTER. REFER TO PLANS IF SHOWN AS SURFACE- OR RECESSED-MOUNTED.
	CIRCUIT BREAKER - SEE SINGLE-LINE DIAGRAM FOR MORE INFO.
	UTILITY COMPANY METER OR EMON/DMON METER WITH "CTS" AND "PTS" AS REQUIRED. SEE SINGLE-LINE DIAGRAM FOR MORE INFO.
	FUSED SWITCH - SEE SINGLE-LINE DIAGRAM FOR MORE INFO.
	GROUND - SEE PLANS FOR MORE INFO.
	STANDARD 20A SINGLE-POLE SWITCH, WALL MOUNTED AT +48" A.F.F. MAX. a,b - DENOTES TWO SWITCHES AND THEIR RESPECTIVE CONTROL IDENTIFICATION. 3 - DENOTES 3-WAY SWITCH 4 - DENOTES 4-WAY SWITCH M - MOTOR STARTING S - PROJECTION SCREEN

FLOOR BOX SYMBOLS

	SINGLE SERVICE DEVICE IN FLOOR BOX. PROVIDE DEVICES PER PLAN.
	TWO SERVICE DEVICE IN FLOOR BOX. PROVIDE DEVICES PER PLAN.
	THREE SERVICE DEVICE IN FLOOR BOX. PROVIDE DEVICES PER PLAN.

SMOKE & CARBON MONOXIDE DETECTORS

	CEILING MOUNT SMOKE DETECTOR
	CEILING MOUNT CARBON MONOXIDE DETECTOR

ANNOTATIONS

	PANEL OR EQUIPMENT CALLOUT.
	MECHANICAL EQUIPMENT CALL OUT WHICH INDICATES TYPE OF EQUIPMENT AND UNIT NUMBER. REFER TO MECHANICAL DRAWINGS FOR LOCATION AND ELECTRICAL REQUIREMENTS.
	LIGHTING FIXTURE CALL OUT. REFER TO LIGHTING FIXTURE SCHEDULE FOR MORE INFO.
	DETAIL REFERENCE CALL OUT.
	KEY NOTE REFERENCE.
	REVISION REFERENCE.

APPLICABLE CODES & STANDARDS

- 2019 CALIFORNIA BUILDING CODE WITH STATEWIDE AMENDMENTS
- 2019 CALIFORNIA ELECTRICAL CODE WITH STATEWIDE AMENDMENTS
- 2019 CALIFORNIA ENERGY CONSERVATION CODE
- 2019 CALIFORNIA GREEN BUILDING STANDARDS
- UNDERWRITERS LABORATORIES (UL)
- 2020 LA CITY ELECTRICAL CODE

SCOPE OF WORK

PROVIDE NEW 1200A ELECTRICAL SERVICE WITH RESIDENTIAL MULTIMETER DISTRIBUTION FOR A NEW SIX-STORY RESIDENTIAL BUILDING. SCOPE INCLUDES POWER AND LIGHTING DESIGN FOR PRE-FABRICATED RESIDENTIAL UNITS BY OTHERS.

BRANCH CIRCUIT

	CONDUIT CONCEALED WITHIN BUILDING WALLS OR CEILING SPACE.	<p>↑ DENOTES #12 THHN/THWN ISOLATED GROUND WIRE U.O.N.</p> <p>└ DENOTES #12 THHN/THWN EQUIPMENT GROUND WIRE U.O.N.</p> <p>ALL HOMERUNS AND BRANCH CIRCUITS SHALL HAVE GROUND WIRE - U.O.N..</p> <p>CROSS LINE DENOTES QUANTITY OF #12 THHN/THWN CONDUCTORS - U.O.N..</p> <p>NO CROSS LINE DENOTES 2#12 & 1#12G THHN/THWN CONDUCTORS - U.O.N..</p> <p>CONDUIT SHALL BE 1/2" MIN. - U.O.N..</p>
	CONDUIT ROUTED BELOW FINISHED GRADE AND / OR CONCRETE SLAB. INCLUDE CODE SIZED COPPER BOND CONDUCTOR (NOT SHOWN ON PLAN) IN ALL NON-METALLIC CONDUIT RUNS.	
	HOMERUN TO DESTINATION AS INDICATED. REFER TO CONDUIT SYMBOL ABOVE.	
	INDICATES CONDUIT DROP WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.	
	INDICATES CONDUIT RISER WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.	
	CONDUIT STUB OUT, CAP AND MARK	
	CONTINUATION	
	FLEXIBLE CONNECTION	
	LOW-VOLTAGE WIRING BETWEEN OCCUPANCY SENSORS	

LIGHTING SYMBOLS

	RECESSED-MOUNTED LIGHTING FIXTURE.		WALL-MOUNTED DIMMER AT +48" A.F.F.(MAX). SEE SWITCH SYMBOL FOR SUBSCRIPTS.
	EMERGENCY RECESSED-MOUNTED LIGHTING FIXTURE.		CEILING/SURFACE-MOUNTED OCCUPANCY SENSOR WITH SWITCH PACK AND SLAVE PACK AS REQUIRED. CHEVRONS INDICATE EITHER 1- OR 2-WAY DIRECTIONAL SENSORS.
	SURFACE-MOUNTED FIXTURE WITH JUNCTION/OUTLET BOX.		WALL-MOUNTED OCCUPANCY SENSOR AT +48" A.F.F. (MAX.) WITH DUAL-RELAY UNLESS SHOWN OTHERWISE ON PLANS.
	EMERGENCY SURFACE-MOUNTED FIXTURE WITH JUNCTION/OUTLET BOX.		WALL-MOUNTED LOW-VOLTAGE OVERRIDE SWITCH AT +48" A.F.F. (MAX.) REFER TO LIGHTING CONTROLLED SWITCHES/FIXTURE.
	HARD-LID CEILING RECESSED-MOUNTED FIXTURE WITH JUNCTION/OUTLET BOX.		WALL-MOUNTED LOW-VOLTAGE LOCAL SWITCH AT +48" A.F.F. (MAX.) LOWER CASE TEXT (a,b) - DENOTES TWO SWITCHES AND THEIR RESPECTIVE CONTROL IDENTIFICATION. COMPATIBLE WITH WATSTOPPER OCCUPANCY SENSORS EQUAL TO WATSTOPPER #DCC2.
	HARD-LID CEILING EMERGENCY RECESSED-MOUNTED FIXTURE WITH JUNCTION/OUTLET BOX.		SWITCHING PHOTOSENSOR WITH SWITCHPACK AND OUTLET BOX. LOWER CASE TEXT ("X") REPRESENTS CONTROLLED SWITCHES/FIXTURE.
	SURFACE/PENDANT-MOUNTED STRIP LIGHTING FIXTURE.		WALL-MOUNTED TIME SWITCH AT +48" A.F.F. (MAX.) EQUAL TO WATSTOPPER #TS-400 OR TS-400-24 (LOW-VOLTAGE). REFER TO PLANS FOR VOLTAGE USE.
	RECESSED-MOUNTED DOWNLIGHT FIXTURE.		WALL-MOUNTED VACANCY SENSOR AT +48" A.F.F. (MAX.) WITH DUAL-RELAY UNLESS SHOWN OTHERWISE ON PLANS.
	EMERGENCY RECESSED-MOUNTED DOWNLIGHT FIXTURE SCHEDULE.		WALL-MOUNTED VACANCY SENSOR WITH DIMMING AT +48" A.F.F. (MAX.) WITH DUAL-RELAY UNLESS SHOWN OTHERWISE ON PLANS.
	RECESSED-MOUNTED WALL WASH LIGHT FIXTURE.		
	WALL MOUNTED LIGHTING FIXTURE AND OUTLET BOX. REFER TO LIGHTING FIXTURE SCHEDULE AND PLANS FOR MOUNTING HEIGHT.		
	WALL/CEILING/UNIVERSAL-MOUNTED EXIT SIGN WITH JUNCTION/OUTLET BOX REFER TO PLANS FOR NUMBER OF FACES AND CHEVRONS.		
	POLE MOUNTED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE FOR MORE INFO.		

POWER SYMBOLS

	DUPLEX RECEPTACLE FLUSH IN CEILING.		ISOLATED GROUND DOUBLE DUPLEX WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	DOUBLE DUPLEX RECEPTACLE FLUSH IN CEILING.		DEDICATED 20A, DUPLEX RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	ISOLATED GROUND DUPLEX RECEPTACLE FLUSH IN CEILING.		HALF-SWITCHED DUPLEX RECEPTACLE WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	ISOLATED GROUND DOUBLE DUPLEX FLUSH IN CEILING.		SIMPLEX RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	DUPLEX RECEPTACLE 20A DEDICATED FLUSH IN CEILING.		SPECIAL RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. REFER TO PLAN NOTES. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	SIMPLEX RECEPTACLE FLUSH IN CEILING.		JUNCTION BOX 4 SQUARE x 2-1/8" DEEP MIN. MOUNTED IN ACCESSIBLE CEILING. SEE PLANS FOR SPECIFIC APPLICATION.
	SPECIAL RECEPTACLE FLUSH IN CEILING.		JUNCTION BOX 4 SQUARE x 2-1/8" DEEP MIN. WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	GFCI DUPLEX RECEPTACLE WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "WP" INDICATES WEATHERPROOF. SEE PLANS FOR SPECIFIC TYPE OF WEATHERPROOF BOX AND COVER PLATE. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.		JUNCTION BOX MOUNTED IN ACCESSIBLE CEILING SPACE FOR PREWIRED FURNITURE SYSTEM WITH FLEX CONNECTION.
	GFCI DUPLEX RECEPTACLE WALL MOUNTED AT +6" ABOVE COUNTER OR SINK. REFER TO ARCHITECTURAL ELEVATION FOR ADDITIONAL INFORMATION.		JUNCTION BOX WALL MOUNTED AT +18" A.F.F. FOR PREWIRED FURNITURE SYSTEM WITH FLEX CONNECTION.
	DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.		THERMOSTAT JUNCTION BOX WITH 1/2"C.O. TO ASSOCIATED HVAC UNIT.
	GFCI DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. WP INDICATES WEATHERPROOF. SEE PLANS FOR SPECIFIC TYPE OF WEATHERPROOF BOX AND COVER PLATE. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.		
	DEDICATED 20A, DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.		
	ISOLATED GROUND DUPLEX RECEPTACLE WALL MOUNTED AT +18" A.F.F. OR AS NOTED. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.		

DELINEATION OF WORK

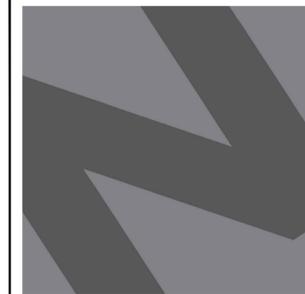
22-UNIT VOLUMETRIC MODULAR MULTI-FAMILY HOUSING 2853 WEST BLVD. LOS ANGELES, CA 90013							
SCOPE OF REVIEW			REVIEWER:				
LOCAL AUTHORITY HAVING JURISDICTION (LAHJ)			CITY OF LOS ANGELES DEPT. OF BUILDING & SAFETY (LADBS)				
STATE OF CALIFORNIA HOUSING & COMMUNITY DEVELOPMENT (HCD) DESIGN APPROVAL AGENCY			NTA				
LOCAL FIRE DEPARTMENT			CITY OF LOS ANGELES FIRE DEPARTMENT (LAFD)				
SCOPE SECTION/DESCRIPTION		PLAN REVIEW		INSPECTION		APPLICABLE CODES	
		HCD	LAHJ	LAFD	HCD	LAHJ	LAFD
Electrical							
LEVEL 01: ALL WORK (SITE BUILT), ELEVATOR, GENERATOR			X			X	
LEVELS 02-06: CORRIDORS, ELEVATOR LOBBY, TRASH RECYCLE ROOM STAIRS, CONCRETE CORES (SITE BUILT)			X			X	
LEVELS 02-06: RESIDENTIAL UNITS (MODULAR)		X			X		
2019 CALIFORNIA ELECTRICAL CODE							

ABBREVIATIONS

A	AMPERE	K	KELVIN
ADA	AMERICAN WITH DISABILITIES ACT	KCMIL	THOUSAND CIRCULAR MILS
A.F.F.	ABOVE FINISH FLOOR	KWH	KILOWATT HOUR
A.F.G.	ABOVE FINISH GRADE	KW	KILOWATT
AWG	AMERICAN WIRE GAUGE	KVA	KILOVOLT AMPERES
A.I.C.	AMPERES INTERRUPTING CAPACITY	LCL	LONG CONTINUOUS LOAD
A.F.C.	AVAILABLE FAULT CURRENT	LFS	LOW PRESSURE SODIUM METER
A.F.C.I.	ARC-FAULT CIRCUIT-INTERRUPTER	M	METER
AF/AT	AMP FRAME, AMP TRIP	MAX.	MAXIMUM
AS/AF	AMP SWITCH, AMP FUSE	MCA	MINIMUM CIRCUIT AMPS
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
C	CONDUIT	MCC	MOTOR CONTROL CENTER
CEC	CALIFORNIA ELECTRICAL CODE	MFR.	MANUFACTURER
CKT.	CIRCUIT	MH	METAL HALIDE
CONN	CONNECTED	MIN.	MINIMUM
C.O.	CONDUIT ONLY	MLO	MAIN LUGS ONLY
CSFD	COMBINATION SMOKE FIRE DAMPER	MOCP	MAXIMUM OVER-CURRENT PROTECTION
CT	CURRENT TRANSFORMER	MTD	MOUNTED
(D)	EXISTING DEVICE TO BE DEMOLISHED	NEC	NATIONAL ELECTRICAL CODE
DIA	DIAMETER	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
DISC	DISCONNECT	NF	NON-FUSED
DIST	DISTRIBUTION	NIC	NOT IN CONTRACT
E.C.	ELECTRICAL CONTRACTOR	NL	NIGHT LIGHT
EMT	ELECTRICAL METALLIC TUBING	NO. or #	NUMBER
EWC	ELECTRIC WATER COOLER	N.T.S.	NOT TO SCALE
E.G.	EQUIPMENT GROUND	P	POLE
(E)	EXISTING	PC	PHOTOCELL
FT or ' FT	FOOT OR FEET	PDU	POWER DISTRIBUTION PANEL
FA	FIRE ALARM	PH. or ∅	PHASE
FLA	FULL LOAD AMPS	PT	POTENTIAL TRANSFORMER
GEC	GROUNDING ELECTRODE CONDUCTOR	PVC	POLYVINYL CHLORIDE
GFP	GROUND FAULT PROTECTION	SFD	SMOKE FIRE DAMPER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SQ.	SQUARE
GND	GROUND	TC	TIME CLOCK
HOA	HAND-OFF-AUTO HEATING AIR CONDITIONING REFRIGERATION	TEL/DATA	TELEPHONE AND DATA
HACR	HEATING AIR CONDITIONING REFRIGERATION	TV	TELEVISION
HID	HIGH INTENSITY DISCHARGE	T.V.S.	TRANSIENT VOLTAGE SURGE SUPPRESSION
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
HP	HORSEPOWER	U.V.P.S.	UNDERGROUND PULL SECTION
IN. or "	INCH(ES)	U.O.N.	UNLESS OTHERWISE NOTED
I.G.	ISOLATED GROUND	U.P.S.	UNINTERRUPTIBLE POWER SUPPLY
IDF	INTERMEDIATE DISTRIBUTION FRAME	V	VOLTS
JBOX	JUNCTION BOX	VA	VOLTS AMPERES
		VD	VOLTAGE DROP
		W	WIRE
		WP	WEATHERPROOF
		W	WIRE
		XRF/ TRANS	TRANSFORMER

TELEPHONE/DATA & SIGNAL SYMB.

	TELEPHONE MUD RING, WALL MOUNTED AT +18" A.F.F. (MIN.). STUB UP 3/4" C.O. 6" ABOVE THE ACCESSIBLE CEILING. PROVIDE OUTLET BOX ON DEVICES MOUNTED ON RATED/INSULATED WALLS. "W" = WALL MOUNTED PHONE AT +48" A.F.F. (MAX) "P" = PUBLIC (PAY) PHONE PER TELEPHONE UTILITY COMPANY REQUIREMENTS. PROVIDE 1"C.O. (MIN.) TO THE MAIN TELEPHONE BACKBOARD. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	DATA MUD RING MOUNTED AT +18" A.F.F. MINIMUM OR AS NOTED. STUB A 3/4" C.O. UP 6" ABOVE THE ACCESSIBLE CEILING. PROVIDE OUTLET BOX ON DEVICES MOUNTED ON RATED/INSULATED WALLS. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	COMBINATION TELEPHONE AND DATA MUD RING WALL MOUNTED AT +18" A.F.F. (MIN.). STUB A 1" C.O. UP 6" ABOVE THE ACCESSIBLE CEILING. PROVIDE OUTLET BOX ON DEVICES MOUNTED ON RATED/INSULATED WALLS. "X" DENOTES MOUNTING HEIGHT IF HIGHER THAN +18 A.F.F.
	FLUSH-MOUNTED TELEPHONE OUTLET BOX IN CEILING.
	FLUSH-MOUNTED DATA OUTLET BOX IN CEILING.
	FLUSH-MOUNTED COMBINATION TELEPHONE AND DATA OUTLET BOX IN CEILING.
	TELEPHONE/DATA CONDUIT RUN WITH 3/4"C MIN.
	TELEPHONE/DATA CONDUIT RUN WITH 1"C MIN.
	TELEPHONE/DATA CONDUIT RUN WITH 1-1/4"C MIN.
	TELEPHONE/DATA CONDUIT RUN WITH 1-1/2"C MIN.
	TELEPHONE/DATA CONDUIT RUN WITH 2"C MIN.
	WALL-MOUNTED COMBINATION TELEPHONE AND DATA BOX FOR CONNECTION TO FURNITURE SYSTEM MOUNTED AT +18" A.F.F. PROVIDE OUTLET BOX ON DEVICES MOUNTED ON RATED/INSULATED WALLS.
	COMBINATION TELEPHONE AND DATA BOX MOUNTED IN ACCESSIBLE CEILING SPACE FOR CONNECTION TO FURNITURE SYSTEM.
	TELEPHONE TERMINAL BACKBOARD SIZED AS INDICATED.
	WALL-MOUNTED TV OUTLET AT +18" A.F.F. (MIN.), WITH 3/4"C.O. STUB-UP 6" ABOVE THE ACCESSIBLE CEILING WITH BUSHING. PROVIDE OUTLET BOX ON DEVICES MOUNTED ON RATED/INSULATED WALLS.
	CEILING-MOUNTED TV OUTLET.
	CCTV CAMERA. SEE SPECIFICATIONS FOR MORE INFO.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

JAIME PARTNERS OF CALIFORNIA, INC.

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD

LOS ANGELES, CA 90016

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
	PC RESUBMITTAL	05/18/22
	PC RESUBMITTAL	10/28/22
	HCD REVISION 1	12/16/22
	PC RESUBMITTAL	02/02/23
	HCD & PC RESUBMITTAL	06/06/23
	HCD RESUBMITTAL	06/14/23
	PC RESUBMITTAL	07/10/23
	CLIENT REVISIONS	07/11/23
	CLIENT REVISIONS	08/04/23
	PC RESUBMITTAL (ELEC)	09/12/23
	PC RESUBMITTAL (ELEC)	10/05/23
	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:03:35 PM

SHEET TITLE:

ELECTRICAL GENERAL INFORMATION

SHEET NO:

E001

SECTION 26 00 00 - ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION-I SPECIFICATION SECTIONS, APPLY TO WORK OF THIS SECTION.

1.2 SCOPE:

- A. PROVIDE ALL ELECTRICAL WORK FOR A COMPLETE AND OPERABLE SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED IN THIS SECTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING

1. SITE INVESTIGATIONS PRIOR TO BIDDING TO ESTABLISH EXISTING CONDITIONS.
2. SWITCHBOARDS, PANEL BOARDS, DRY TYPE TRANSFORMERS, AND FEEDERS FOR POWER AND LIGHTING AS SHOWN ON THE DRAWINGS.
3. COMPLETE GROUNDING SYSTEM AS REQUIRED.
4. LIGHTING FIXTURES AND LAMPS, POWER BRANCH CIRCUIT WIRING, INCLUDING DISCONNECT SWITCHES, TIME SWITCHES, CONTACTORS, PHOTOCELL CONTROLS, RELAYS, OUTLETS, DEVICES, PLATES, MATERIALS, ETC., FOR A COMPLETE INSTALLATION AS SHOWN ON THE DRAWINGS.
5. A TELECOMMUNICATION SYSTEM INCLUDING CONDUITS, BACKBOARDS, TERMINAL CABINETS AND GROUNDING.
6. CUTTING AND PATCHING AND SEALING OF PENETRATIONS.
7. FLASHING OF CONDUITS AT ROOF PENETRATIONS.
8. PROVIDE MATERIALS AND LABOR FOR ELECTRICAL WORK AS SPECIFIED IN OTHER SECTIONS.
9. RECORD DRAWINGS.
10. TEST OF ALL ELECTRICALLY-OPERATED EQUIPMENT.
11. COMPLETE 1-YEAR GUARANTEE OF SYSTEMS, MATERIALS AND WORKMANSHIP.
12. PAINTING OF EXPOSED CONDUIT OR EQUIPMENT.
13. CUTTING AND PATCHING.

1.3 QUALITY ASSURANCE

- A. IN ADDITION TO THE REQUIREMENTS OF ALL GOVERNING CODES, ORDINANCES AND AGENCIES, CONFORM TO THE REQUIREMENTS OF THE FOLLOWING GUIDELINES AND STANDARDS:

1. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS - IEEE
2. NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION - NEMA
3. UNDERWRITERS' LABORATORIES, INC. - UL
4. NATIONAL FIRE PROTECTION ASSOCIATION - NFPA
5. AMERICAN SOCIETY FOR TESTING AND MATERIALS - ASTM
6. AMERICAN NATIONAL STANDARDS INSTITUTE - ANSI
7. NATIONAL ELECTRICAL CODE - NEC, 2017 EDITION
8. NATIONAL ELECTRICAL SAFETY CODE - NESC
9. INSULATED CABLE ENGINEERS ASSOCIATION - ICEA
10. AMERICAN INSTITUTE OF STEEL CONSTRUCTION - AISC
11. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
12. ELECTRONICS INDUSTRIES ASSOCIATION/TELECOMMUNICATIONS INDUSTRY ASSOCIATION (EIA/TIA)
13. 2019 CALIFORNIA ELECTRICAL CODE - CEC
14. 2019 CALIFORNIA ENERGY CODE

1.4 JOB CONDITIONS

A. DRAWINGS:

1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE LOCATIONS OF THE COMPONENTS OF THE WORK, AND FURTHER INDICATE THE REQUIRED SIZE AND POINTS OF TERMINATION OF THE CONDUIT, NUMBER AND SIZE OF WIRES. PROVIDE ALL CONDUIT, WIRE AND NECESSARY CONNECTIONS FOR THE COMPLETE ELECTRICAL SERVICE, COORDINATING CONDUIT RUNS WITH BUILDING STRUCTURE, AND ALL WORK OF OTHER TRADES.
2. UNLESS OTHERWISE APPROVED BY THE ARCHITECT, THE FOLLOWING CONDITIONS SHALL BE ADHERED TO:
 - a. GROUP OUTLETS AND WIRING DEVICES WITHIN CLOSE PROXIMITY HORIZONTALLY OR VERTICALLY FOR A UNIFORM AND NEAT APPEARANCE.
 - b. ALL EQUIPMENT AND MATERIAL LOCATED OUTDOORS OR IN HAZARDOUS OR OTHER SPECIAL AREAS SHALL BE UL LABELED FOR THE CONDITIONS TO BE ENCOUNTERED.
 - c. OUTLETS IN GYPSUM BOARD ARE TO BE SYMMETRICAL WITH RESPECT TO WALLS AND OTHER ARCHITECTURAL FEATURES.
 - d. DO NOT LOCATE PANELBOARDS, CABINETS, OUTLETS OR OTHER APERTURES IN TWO-HOUR RATED WALLS.
 - e. PRIOR TO INSTALLATION, THE OWNER RESERVES THE RIGHT TO RELOCATE ANY OUTLET OR DEVICE WITHIN SIX FEET OF THE LOCATION INDICATED ON THE DRAWINGS AT NO ADDITIONAL COST.

1.5 PERMITS, FEES AND INSPECTIONS

- A. OBTAIN AND PAY FOR ALL PERMITS AND LICENSES REQUIRED FOR THE ELECTRICAL WORK, AND ARRANGE AND SCHEDULE ALL REQUIRED INSPECTIONS. OBTAIN PERMITS PRIOR TO COMMENCING ANY WORK.
- B. PAY ALL FEES OR CHARGES LEVIED BY THE UTILITY COMPANY OR CITY FOR PERMANENT OR TEMPORARY SERVICES TO THE PROJECT OR ANY OTHER IMPOSED FEES.

1.6 COORDINATION

- A. VERIFY AND COORDINATE ALL SIZES OF EQUIPMENT TO BE INSTALLED WITH THE MANUFACTURER OF EQUIPMENT, INSURING ADEQUATE CLEARANCES, VENTILATION AND ACCESS.
- B. COORDINATE WORK OF MECHANICAL TRADES WITH WORK REQUIRED AS A PART OF THIS SECTION, AND VERIFY QUANTITY, SIZES AND LOCATION OF ALL WORK.
- C. COORDINATE THE WORK OF ALL OTHER TRADES, VERIFYING ALL REQUIRED CLEARANCES, PROPER SLEEVES, SUPPORTS, DOOR SWINGS AND OTHER ITEMS AFFECTING THIS WORK. DETERMINE IN ADVANCE THE METHODS OF INSTALLING AND CONNECTING ALL EQUIPMENT, OUTLETS AND OTHER ITEMS.
- D. INCLUDE ALLOWANCES FOR SITE CONDITIONS AND CIVIL, ARCHITECTURAL AND OTHER DRAWINGS.

1.7 SUBMITTALS

A. EQUIPMENT ORDER LIST:

1. AFTER AWARD OF CONTRACT, DELIVER TO THE ARCHITECT SIX (6) COPIES OF A COMPLETE LIST OF EQUIPMENT AND MATERIALS ORDERED GIVING DESCRIPTION, PLATE NUMBERS, DATE OF ORDERS AND REQUESTED DELIVERY DATES. ARRANGE DELIVERY OF PROPER QUANTITIES SO THAT THE PROGRESS OF THE WORK WILL NOT BE DELAYED.

B. MATERIAL LIST:

1. SUBMIT COMPLETE MATERIAL LIST FOR ALL PRODUCTS TO BE USED IN THIS WORK.

C. RECORD DRAWINGS:

1. MARK AND DIMENSION ACTUAL ROUTINGS OF ALL UNDERGROUND CONDUITS INSTALLED EXTERIOR TO BUILDINGS AND ALL FEEDERS UNDER BUILDING SLABS. DIMENSION THE TERMINAL LOCATION AND SHOW ITS DEPTH BELOW FINISHED GRADE FOR EACH UNDERGROUND SUB-OUT. PROVIDE OWNER WITH ONE SET REPRODUCIBLE AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.

1.8 GUARANTEE

- A. ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS SECTION OF THE SPECIFICATIONS SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE BUILDING AGAINST DEFECTIVE MATERIAL, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF THE FAILURE OF ANY PART OF THE WORK DURING THE GUARANTEE PERIOD, THE AFFECTED WORK SHALL BE REPLACED PROMPTLY WITH NEW WORK BY AND AT THE EXPENSE OF THE CONTRACTOR AND AT NO COST TO THE OWNER.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE, PROVIDE ONLY NEW MATERIALS HAVING ALL LEGALLY REQUIRED APPROVALS AND/OR LABELS.
- B. PROVIDE MATERIALS COMPLYING WITH THE STANDARDS OF NATIONALLY RECOGNIZED ORGANIZATIONS (SUCH AS ANSI, NEMA AND UL).
- C. PROTECTION: TAKE ALL MEANS NECESSARY TO PROTECT THE MATERIALS BEFORE, DURING, AND AFTER INSTALLATION.
- D. REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY REPAIR DAMAGED OR DEFECTIVE WORK AT NO ADDITIONAL COST TO THE OWNER.

2.2 MAIN SWITCHBOARD

- A. PROVIDE MAIN SWITCHBOARDS CONTAINING SERVICE, METERING, CURRENT TRANSFORMER COMPARTMENT, MAIN DISCONNECT AND DISTRIBUTION SECTION AS INDICATED AND AS REQUIRED.

B. ENCLOSURES:

1. TOTALLY ENCLOSED SECTIONS BOLTED TOGETHER TO FORM A SINGLE FLOOR-STANDING ASSEMBLY, NEMA TYPE 1 FOR GENERAL PURPOSE FOR INDOOR INSTALLATION, AND NEMA 3R GENERAL PURPOSE FOR OUTDOOR INSTALLATION, FRONT ACCESS ONLY UNLESS INDICATED. PROVIDE SERVICE FULL SECTIONS WHERE REQUIRED AND SIZE AS REQUIRED BY THE SERVING UTILITY. SECTIONS 90 IN. HIGH AND ALL OF THE SAME DEPTH WITH REAR WIRE-WAY IN DISTRIBUTION SECTIONS. LEGAL GAUGE SHEET STEEL FINISHED MANUFACTURER'S STANDARD GRAY BAKED ENAMEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH A SWITCHBOARD TO FIT THE SPACE INDICATED.
2. PERMANENT PLACARD(S) MARKED PER THE SPECIFICATIONS AND PER NEC (OR CEC-WHERE ADOPTED) SECTIONS 225.37, 230.2(E), 690.54(B) & (C), 692.56, 700.8, 701.9, AND 702.8 DENOTING PRESENCE OF ADDITIONAL SERVICES, PHOTOVOLTAIC SYSTEMS, FUEL CELLS, EMERGENCY OR STAND-BY POWER SOURCES AS APPLICABLE.

C. BUSBARS:

1. RECTANGULAR CROSS-SECTION, FULL HEIGHT IN-EACH DISTRIBUTION SECTION WITH HORIZONTAL CROSS BUS BARS BETWEEN SECTIONS, SILVER PLATED COPPER OR TIN PLATED ALUMINUM BUSSING, JOINTS AND CONNECTIONS, THROUGHOUT. ALL BUSSING SHALL HAVE MINIMUM WITHSTANDING RATING EQUAL TO THE AVAILABLE FAULT CURRENT INDICATED. ALL HORIZONTAL BUSSING SHALL BE RATED AT FULL CAPACITY IN ALL SWITCHBOARD AND DISTRIBUTION SECTIONS. WHENEVER FUTURE SECTIONS OR SPACE FOR FUTURE EXPANSION IS INDICATED ON THE PLANS, PROVIDE BUSSING AND COVERED OPENING IN SWITCHBOARD AS REQUIRED FOR FUTURE EXPANSION.
2. LUGS SUITABLE FOR USE WITH ALUMINUM OR COPPER CONDUCTORS LISTED FOR USE WITH 75° CELSIUS AMPACITY CONDUCTORS.

D. LUGS:

1. LUGS FOR ALL EXTERNAL AND INTERNAL CONNECTIONS, PLATES OR OTHERWISE SHALL BE SUITABLE FOR EITHER COPPER OR ALUMINUM CONDUCTORS LISTED FOR USE WITH 75 DEGREE CELSIUS AMPACITY CONDUCTORS.

E. CIRCUIT BREAKERS:

1. CIRCUIT BREAKERS AS INDICATED, SERIES RATED MINIMUM INTERRUPTING CAPACITY SYMMETRICAL RMS AMPERE RATING AS SHOWN ON SINGLE-LINE DIAGRAM.
 - a. CIRCUIT BREAKERS: MOLDED CASE, THERMAL MAGNETIC TYPE, PAD LOCKABLE IN THE "OFF" POSITION.
2. CIRCUIT BREAKERS FOR SERVICE ENTRANCE EQUIPMENT RATED AT 400 AMPS OR GREATER SHALL BE PROVIDED WITH A SOLID STATE MAIN OVER CURRENT DEVICE AND BUSSING RATED AT 100% OPERATION.

F. FUSED SWITCHES:

1. QUICK-MAKE, QUICK-BREAK, VISIBLE BLADE, HORSEPOWER RATED, SPRING PRESSURE FUSE CLIP AND BLADE JAW CONTACTS, PADLOCKABLE IN THE "OFF" POSITION, WITH POSITION-INDICATING OPERATING HANDLES AND DEFEATABLE COVER INTERLOCK TO PREVENT ACCESS TO THE FUSES UNLESS THE SWITCH IS IN THE OPEN POSITION, MINIMUM INTERRUPTING CAPACITY, WITH SPECIFIED FUSES, OF 100,000 SYMMETRICAL RMS AMPERES AT ALL VOLTAGES 600 VOLTS AND BELOW.

G. FUSES:

1. CURRENT LIMITING, REJECTION TYPE WITH MINIMUM 100,000 SYMMETRICAL RMS AMPERES INTERRUPTING CAPACITY, BUSS OR EQUAL BY BUSSMAN, UNLESS OTHER CLASS OR TYPE INDICATED, PROVIDE 10% BY VOLUME BUT MINIMUM OF THREE SPARE FUSES FOR EACH SIZE AND TYPE SHOWN ON SINGLE LINE DIAGRAM AND MOUNT IN A SUITABLE CABINET EQUAL TO BUSSMAN SFC SPARE FUSE CABINET, BEHIND A HINGED DOOR WITH NAMEPLATE ENGRAVED "SPARE FUSES". LOCATE CABINET NEAR SWITCHBOARD, CABINETS SHALL HAVE 3 SHELVES MINIMUM WITH CURVED UP EDGES FOR STORAGE OF FUSES.

H. METERING PROVISIONS:

1. SEQUENCE OF METER TO MAIN, PULL SECTION LANDING LUGS, BUS BARS AND PROVISIONS FOR CURRENT TRANSFORMER AS REQUIRED BY SERVING UTILITY.

I. DISTRIBUTION SECTIONS SHALL BE CONVERTIBLE TYPE WITH FULL LENGTH RECTANGULAR BUSSING AND CROSS BUSSING OF CAPACITY AND POLES AS REQUIRED ON THE DRAWINGS AND BRACED TO WITHSTAND SYMMETRICAL SHORT CIRCUIT CURRENT INDICATED ON SINGLE-LINE DIAGRAM.

J. ENDS OF SWITCHBOARD SHALL BE LOUVERED. EACH SWITCH OR BREAKER SHALL HAVE AN ENGRAVED BAKELITE NAMEPLATE INDICATING EQUIPMENT OR PANEL CONTROLLED. PROVIDE GOULD AMP-TRAP FUSES OR EQUAL BY BUSS OR ECONOMY, OF PROPER SIZE FOR EACH SWITCH. INSTALL WITH REJECTION CLIPS.

K. SERVICE SWITCHBOARDS SHALL BE AS MANUFACTURED BY, EATON, SIEMENS, G.E., MYERS OR SQUARE D.

L. USE LEVELING SCREWS TO SET THE SWITCHBOARD PLUMB AND TRUE.

M. SUBMIT SWITCHBOARD SHOP DRAWINGS TO THE SERVING UTILITY FOR APPROVAL PRIOR TO FABRICATION. SECURE CONFIRMATION THAT THE PROPOSED SWITCHBOARD COMPLIES WITH THE ELECTRICAL UTILITY COMPANY REGULATIONS.

N. SUBMIT SHOP DRAWINGS PER THE SPECIFICATIONS FOR THE SWITCHBOARDS, DISTRIBUTION BOARDS, TRANSFORMERS, PANEL BOARDS AND ALL OTHER DEVICES AS SHOWN ON THE SINGLE LINE DIAGRAM PRIOR TO FABRICATION. IF SHOP DRAWINGS ARE NOT PART OF THE SUBMISSION DOCUMENTS, ONLY APPROVED DRAWINGS WILL BE ACCEPTED.

- O. CONTRACTOR TO VERIFY EXISTING CONDITIONS INCLUDING SECONDARY FEEDERS FROM UTILITY TRANSFORMER AND ANY OTHER ASSOCIATED EXISTING FEEDERS, IF BEING REUSED, TO ENSURE LENGTH OF FEEDERS IS SUFFICIENT TO LAND IN LUGS OF NEW EQUIPMENT. COORDINATE WITH SERVING UTILITY COMPANY APPROVED METHODS OF EXTENDING FEEDERS AS REQUIRED.

- P. CONDUCT, WITH THE ASSISTANCE OF THE SWITCH GEAR MANUFACTURER OR A QUALIFIED POWER SYSTEM STUDIES ANALYST, AN ELECTRICAL HAZARD ANALYSIS CONSISTING OF AN ARC FLASH STUDY, SHORT CIRCUIT STUDY AND A COORDINATION STUDY TO DETERMINE APPROPRIATE LEVEL OF PERSONNEL PROTECTIVE EQUIPMENT (PPE) AS REQUIRED BY NFPA 70E & IEEE STD 1584, AND TO ENSURE PROPER COORDINATION (INCLUDING GROUND FAULT COORDINATION) EXISTS BETWEEN ALL OVER CURRENT PROTECTIVE DEVICES SHOWN ON THE SINGLE LINE, IN ADDITION:

1. THE STUDY SHALL INCLUDE ALL PORTIONS OF THE ELECTRICAL SINGLE LINE DIAGRAM, NORMAL SYSTEM CONNECTIONS AND THOSE THAT RESULT IN THE MAXIMUM FAULT CONDITION SHALL BE ADEQUATELY COVERED IN THE STUDY. PERFORM THE STUDY WITH THE AID OF A DIGITAL COMPUTER PROGRAM, SKM CAPTOR OR EQUAL. THE STUDY SHALL INCLUDE SELECTIVE COORDINATION SO THAT THE DEVICE CLOSEST TO THE FAULT WILL TRIP BEFORE ANY OF THE UPSTREAM DEVICES TRIPS. THE GROUND FAULT PORTION OF THE STUDY SHALL DEMONSTRATE COORDINATION OF THE MAIN BREAKER AND ANY FEEDER GROUND FAULT DEVICES WITH DOWNSTREAM CIRCUIT BREAKERS, 30A OR LESS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST SETTINGS OF ALL DEVICES, TO INCLUDE GROUND FAULT SETTINGS, TO ACHIEVE SYSTEM COORDINATION. THE CONTRACTOR SHALL FIELD ADJUST SETTING ACCORDINGLY UTILIZING A QUALIFIED MANUFACTURER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL SET GROUND FAULT RELAYS TO THE SHORTEST AVAILABLE DELAY DURING THE CONTRACTOR PHASE.
4. PERFORM ARC FLASH ANALYSIS STUDY TO DETERMINE THE FLASH BOUNDARY, FLASH HAZARD CATEGORY, PPE REQUIREMENTS, AND MINIMUM ARC RATING (CAL/SQUARE CM). THE ABOVE INFORMATION SHALL BE INDICATED AT EACH ARC FLASH SOURCE ON A NBEC, OR CEC WHERE ADOPTED, COMPLIANT ARC FLASH HAZARD LABEL(S) AS MANUFACTURED BY BRADY.
5. A GROUND FAULT SYSTEM TEST SHALL BE CONDUCTED BY AN INDEPENDENT TESTING AGENCY PER NEC (OR CEC-WHERE ADOPTED) 230.5(C). THE GROUND FAULT SYSTEM TEST SHALL BE PERFORMED IN THE PRESENCE OF THE LOCAL AUTHORITY HAVING JURISDICTION. VERIFICATION OF THE DEVICE SETTINGS PER THE COORDINATION STUDY SHALL BE PERFORMED BY THE SAME INDEPENDENT TESTING AGENCY. THE GROUND FAULT TEST RESULTS SHALL BE DELIVERED TO THE ENGINEER OF RECORDS.
6. RESULT OF THE COORDINATION STUDY SHALL BE SUBMITTED AS PART OF THE OVERALL SWITCH GEAR SUBMITTAL AND SHALL INCLUDE PROTECTIVE DEVICE TIME VERSUS CURRENT COORDINATION CURVES, GROUPING APPROPRIATE DEVICES TOGETHER, TABULATIONS OF RELAY AND CIRCUIT BREAKER TRIP SETTINGS, FUSE ELECTION, AND COMMENTARY REGARDING SAME.

2.3 PANEL BOARDS

- A. PROVIDE PANEL BOARDS WITH RATINGS, COMPONENTS AND FEATURES IN ACCORDANCE WITH THE SINGLE-LINE DIAGRAM AND PANEL SCHEDULES ON DRAWINGS.

B. ENCLOSURES:

1. WITH BARRIERED TOP OR SIDE SECTION HAVING SEPARATE HINGED LOCKABLE DOOR WHERE INDICATED. MAINTAIN 2 IN. OF SOLID TRIM BETWEEN DOORS.
2. LEGAL GAUGE SHEET STEEL BOX, GALVANIZED FOR FLUSH BOX, DOOR AND TRIM MINIMUM NO. 12 GAUGE STEEL, FLUSH OR SURFACE TYPE AS INDICATED. HINGED LOCKABLE DOOR WITH CONCEALED HINGES AND FASTENERS. WEATHERPROOF WHERE LOCATED OUTDOORS.
3. FINISH: PARTS EXPOSED TO VIEW TO HAVE ONE COAT ZINC CHROMATE AND ONE COAT HAMERTONE GRAY OR MANUFACTURER'S STANDARD GRAY BAKED ENAMEL.
4. LOCKS AND KEYS: FURNISH FLUSH TYPE LOCK AND TWO KEYS WITH EACH PANEL BOARD. ALL LOCKS SHALL BE KEYED ALIKE.
5. SIZES: MINIMUM 20 IN. WIDE UNLESS INDICATED. SURFACE MOUNT 5-3/4 IN. DEEP UNLESS INDICATED. TOP AND BOTTOM GUTTERS MINIMUM 6 IN. HIGH. PROVIDE 1/2 IN. HIGH GUTTER WHERE DOUBLE LUGS ARE REQUIRED OR WHERE CABLE SIZE EXCEEDS BUS SIZE.
6. PROVIDE ADDITIONAL SIDE GUTTER SPACE OR SEPARATE BARRIERED SIDE SECTION WITH COVER WHERE REQUIRED FOR FEED THROUGH LUGS.
7. BUSBARS: BUS SHALL BE SILVER PLATED COPPER OR TIN PLATED ALUMINUM. PROVIDE SPLIT BUS BARS WHERE INDICATED. NEUTRAL BUS ELECTRICALLY ISOLATED FROM ENCLOSURE.
8. LUGS: LUGS FOR ALL EXTERNAL CONNECTIONS SHALL BE SUITABLE FOR COPPER CONDUCTORS. SHOP DRAWINGS MUST INDICATE QUANTITY AND SIZES OF LUGS BASED ON ACTUAL CONDUCTORS TO BE USED AS SHOWN ON THE PLANS.
9. GROUND BUS: WHENEVER GROUND CONNECTORS ARE INSTALLED OR REQUIRED, PROVIDE A SEPARATE EQUIPMENT GROUND BUS IN PANEL ELECTRICALLY CONNECTED TO THE ENCLOSURE.
10. WHERE INDICATED AS RECESSED MOUNTED, PROVIDE SPARE CONDUITS STUBBED UP INTO ACCESSIBLE CEILING SPACE AND SHALL BE CAPPED AND MARKED. PROVIDE (2) 1" CONDUITS FOR THREE SPARES OR SPACES.
11. PANEL BOARDS SHALL BE MANUFACTURED BY EATON, SIEMENS, G.E., MYERS OR SQUARE "D".
12. WHERE PANEL SCHEDULE IS INDICATED TO INCLUDE:
 - A. 200% NEUTRAL: PANEL BOARDS WITH NEUTRAL BUSES TO HOLD 200% OF THE CAPACITY OF THE PHASE BUSSING OR IT SHALL BE FULL SIZE IN RECTANGULAR SHAPE.
 - B. DOUBLE LUGS: DOUBLE LUG KIT AT THE SAME END OF PANEL BOARD AS THE PANEL BOARD MAIN LUGS.
 - C. I.G. BUS: PANEL BOARDS WITH A DRILLED AND TAPPED ISOLATED GROUND BUS FOR NUMBER OF ISOLATED GROUND CONDUCTORS SHOWN AND FOR SPARES AND SPACES AS SHOWN ON THE PANEL BOARD SCHEDULE.

1. MOLDED CASE CIRCUIT BREAKERS SHALL BE BOLT-ON DEVICES ONLY AND SUITABLE FOR 75 DEGREE AMPACITY CONDUCTORS. PLUG-IN TYPE BREAKERS ARE NOT ACCEPTABLE. TANDEM CIRCUIT BREAKERS ARE NOT ACCEPTABLE.
2. MOLDED CASE CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, TRIP FREE, MULTI-POLE BREAKERS SHALL BE COMMON TRIP. MAIN BREAKERS TO BE BUS CONNECTED TO MAIN BUS BAR AND HORIZONTALLY MOUNTED.
3. PROVIDE CIRCUIT BREAKER ACCESSORIES AS INDICATED ON THE DRAWINGS OR PANEL SCHEDULES.
4. WHERE INDICATED ON PANEL SCHEDULE A.I.C. RATING AS "SERIES RATED" PROVIDE CIRCUIT BREAKERS SERIES RATED WITH THE AVAILABLE FAULT CURRENT OF THE UPSTREAM SYSTEM.
5. CIRCUIT BREAKERS SERVING MECHANICAL OR HVAC EQUIPMENT SHALL BE "THACR" TYPE BREAKER AND UL LISTED.

14. CIRCUIT IDENTIFICATION:

- a. CIRCUIT NUMBER ON BLACK-ON-WHITE LAMINATED PLASTIC TABS OR OTHER PERMANENT TYPE NOT READILY CHANGED FROM THE FRONT.
- b. UNDER THE PANEL DESIGNATION, IN 1/4 IN. HIGH LETTERS, INDICATE THE VOLTAGE AND PHASE, EXAMPLE:
"277/480 VOLT, 3 PHASE, 4 WIRE, 100A BUS"

2.4 TRANSFORMERS

- A. TRANSFORMERS 15 KVA AND LARGER SHALL BE OF THE VENTILATED TYPE AND HAVE A UL RECOGNIZED 220° C INSULATION SYSTEM. THE KVA RATINGS SHALL BE BASED ON AN ALLOWABLE 150° C WINDING TEMPERATURE RISE ABOVE A 30° C HOT SPOT.
- B. "K" RATED TRANSFORMERS SHALL HAVE CLASS 220 INSULATION WITH 115 DEGREE CELSIUS TEMPERATURE RISE ABOVE 30 DEGREE CELSIUS AVERAGE AND 40 DEGREE CELSIUS MAXIMUM WHEN OPERATING AT FULL LOAD WITHOUT LOSS OF LIFE.
- C. TRANSFORMER DESIGN KVA RATING SHALL BE SUITABLE FOR A 30° AVERAGE, 40° MAXIMUM AMBIENT TEMPERATURE.

D. CORE AND COIL:

1. CORE CONSTRUCTION SHALL BE OF NON-AGING GRAIN-ORIENTED SILICON STEEL TO MINIMIZE HYSTERESIS AND EDDY CURRENT LOSSES. CORE LAMINATIONS SHALL BE TIGHTLY ASSEMBLED.
2. WINDINGS SHALL BE WOUND OF HIGH QUALITY COPPER OR ALUMINUM AS SPECIFIED ON TRANSFORMER SCHEDULE.
3. VENTILATED WINDINGS SHALL BE ARRANGED TO BRACE COIL LAYERS AND PROVIDE MAXIMUM VENTILATION. CORE AND COIL ASSEMBLIES SHALL BE CONSTRUCTED TO PROVIDE SHORT CIRCUIT WITHSTAND CAPABILITY AS DEFINED BY ANSI AND NEMA STANDARDS. THE COMPLETE ASSEMBLY SHALL BE INSTALLED ON VIBRATION DAMPENING PADS TO REDUCE NOISE AND SECURELY BOLTED TO THE ENCLOSURE BASE. A FLEXIBLE GROUNDING CONDUCTOR SHALL BE INSTALLED BETWEEN THE CORE AND COIL AND THE TRANSFORMER ENCLOSURE.
4. TRANSFORMER DESIGN KVA RATING SHALL BE SUITABLE FOR A 30° AVERAGE, 40° MAXIMUM AMBIENT TEMPERATURE.
5. CORE AND COIL SEALING PROCESS:
 - a. THE COMPLETE CORE AND COIL ASSEMBLY SHALL BE IMPREGNATED WITH NON-HYDROSCOPIC THERMO-SETTING POLYESTER VARNISH TO PROVIDE A HIGH DIELECTRIC AND FLAME RETARD ANT SEAL.
 - b. THE SHIELD OF VARNISH TO THE COILS SHALL EFFECTIVELY IMPREGNATE THE ENTIRE CORE AND COIL ASSEMBLY THAT RESULTS IN A UNIT WHICH IS VIRTUALLY IMPERMEABLE TO MOISTURE, DUST, DIRT, SALT AIR AND OTHER INDUSTRIAL CONTAMINANTS.
 - c. ENCAPSULATED CORE AND WINDINGS SHALL BE CAST IN A RESIN COMPOUND TO PROVIDE A MOISTURE-PROOF, SHOCK-RESISTANT, HIGH DIELECTRIC SEAL.

6. CORE LAMINATION CLAMPING ANGLE SHALL BE OF ADEQUATE THICKNESS AND HARDNESS TO INSURE A TIGHT AND RIGID CORE ASSEMBLY TO ELIMINATE MOVEMENT OF CORE PLATES. WELDED CORE DESIGNS SHALL INCLUDE MULTIPLE BEADS AS NECESSARY TO INSURE A TIGHT AND RIGID CORE ASSEMBLY TO ELIMINATE MOVEMENT.
7. PROVIDE FULL CAPACITY TAPS IN THE HIGH-VOLTAGE WINDINGS AS FOLLOWS:
 - a. BELOW 15 KVA THREE PHASE STEP-DOWN TRANSFORMERS: 2 - 5% FULL CAPACITY BELOW NORMAL.
 - b. 15 KVA THROUGH 500 KVA STEP-DOWN TRANSFORMERS: 2 - 2-1/2% FULL CAPACITY ABOVE NORMAL AND 4 - 2-1/2% FULL CAPACITY BELOW NORMAL.
 - c. 750 KVA AND ABOVE STEP-DOWN TRANSFORMERS: 2 - 2-1/2% FULL CAPACITY ABOVE NORMAL 2 - 2-1/2% FULL CAPACITY BELOW NORMAL.
 - d. STEP-UP AND DUAL PRIMARY TRANSFORMERS: PROVIDE NEMA STANDARD TAPS.
8. FURNISH LUGS OF APPROPRIATE SIZE.

E. ENCLOSURES:

1. VENTILATED ENCLOSURES SHALL BE OF HEAVY GAUGE STEEL CONSTRUCTION OF NEMA 3R CONSTRUCTION FOR OUTDOOR USE WITH THE ADDITION OF WEATHER SHIELDS AND NEMA 1 FOR INDOOR INSTALLATION. FRONT AND REAR COVERS SHALL BE REMOVABLE TO PROVIDE ACCESS TO TERMINAL COMPARTMENT(S). TERMINALS SHALL BE FULLY SIZED TO CARRY THE TRANSFORMER FULL LOAD CURRENT AND SHALL BE ARRANGED IOL ACCEPT UL LISTED CABLE CONNECTORS.
2. ENCLOSURE WIRING SPACE AND POSITIONING OF TERMINALS SHALL ALLOW FOR ADEQUATE CABLE BENDING SPACE.
3. FINISH ENCLOSURE IN ANSI 61 GRAY PAINT.
4. EACH TRANSFORMER SHALL HAVE A SECURELY ATTACHED NAMEPLATE PROVIDING COMPLETE ELECTRICAL RATINGS, WIRING DIAGRAM, TAP CONNECTIONS AND CATALOG NUMBER, AS APPLICABLE.

F. SOUND

1. UNLESS OTHERWISE SPECIFIED, SOUND LEVELS SHALL BE IN ACCORDANCE WITH VALUES ALLOWED BY NEMA ST-20.

G. ACCESSORIES:

1. PROVIDE WEATHER SHIELDS FOR VENTILATED TRANSFORMERS INSTALLED OUTDOORS CONFORMING TO THE REQUIREMENTS OF NEMA 250, TYPE 3R.

H. TRANSFORMERS SHALL BE GROUND TO A CODE APPROVED GROUND SOURCE PER NEC OR CEC WHERE ADOPTED. ARTICLE 250.30.

1. TRANSFORMERS SHALL BE MANUFACTURED BY EATON, SIEMENS, G.E., MYERS OR SQUARE "D".

2.5 CONDUIT

- A. ELECTRICAL METALLIC TUBING (EMT) SHALL BE GALVANIZED. ALL COUPLINGS AND CONNECTORS SHALL BE SET SCREW OR WATERTIGHT COMPRESSION TYPE.
- B. METAL-CLAD (MC) CABLE: TYPE MC CABLE SHALL BE CORRUGATED TUBE, TYPE CS. MC CABLE SHALL INCLUDE A FULL SIZE GROUND CONDUCTOR AND ANTI-SHORT BUSHINGS AT EACH TERMINATION POINT.
- C. FLEXIBLE CONDUIT SHALL BE HOT DIPPED GALVANIZED STEEL.
- D. CONNECTIONS FOR FLEXIBLE STEEL CONDUIT SHALL BE SCREW IN TYPE (JAKE) AS MANUFACTURED BY DURO FITTING COMPANY, OR ENGINEER-APPROVED EQUAL.
- E. GALVANIZED RIGID CONDUIT SHALL BE FULL WEIGHT THREADED TYPE STEEL. STEEL CONDUIT SHALL BE PROTECTED BY OVERALL ZINC COATING TO INSIDE AND OUTSIDE SURFACES APPLIED BY THE HOT DIP, METLIZING OR SHERARIZING PROCESS.
- F. INTERMEDIATE METAL CONDUIT SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH UL 1242 AND MEET THE LATEST REVISION OF FEDERAL SPECIFICATIONS WW-C-581.
- G. NONMETALLIC FLEXIBLE TUBING (ENT) SHALL NOT BE USED. ENT SHALL ONLY BE USED IN PARKING STRUCTURES AND CMU WALLS WHEN DIRECTED IN WRITING BY THE ENGINEER.
- H. POLY-VINYL-CHLORIDE (PVC) CONDUIT, SCHEDULE 40, TYPE II CONFORMING TO UL FOR UNDERGROUND INSTALLATION.

2.6 OUTLET BOXES

- A. ONE-PIECE GALVANIZED PRESSED STEEL KNOCKOUT TYPE EQUAL TO STEEL CITY MANUFACTURING COMPANY, 4" X 2-1/8" SQUARE, MINIMUM (WALL), 4" SQUARE X 1-1/2" DEEP MINIMUM (CEILING).
- B. CAST BOXES SHALL BE THREADED HUB CAST FERROUS, OR ALUMINUM BOXES WHERE LEGALLY PERMITTED AND EQUAL TO CROUSE-HINDS, KILLARK, OR PYLE-NATIONAL. PROVIDE PLUGS FOR SPARE HUBS.
- C. FOR LOCATIONS WHERE STANDARD BOXES ARE NOT SUITABLE DUE TO NUMBER AND SIZE OF CONDUIT TO BE TERMINATED, SPECIAL BOXES SHALL BE DESIGNED TO FIT SPACE OR MEET OTHER REQUIREMENTS AND SUBMITTED FOR APPROVAL.
- D. FLOOR BOX AS SPECIFIED ON DRAWINGS.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
C O P Y R I G H T N O T I C E :
C O P Y R I G H T I S R E T A I N E D B Y N A T I O N A L
E N G I N E E R I N G & C O N S U L T I N G I N C . F R O M
T H E D A T E O F I S S U A N C E O F T H E S E D O C U M E N T S .
D U P L I C A T I O N O F T H E S E D O C U M E N T S O R
T H E B U I L T - W O R K R E P R E S E N T E D B Y T H E M I S
P R O H I B I T E D W I T H O U T T H E E X P R E S S , W R I T T E N
C O N S E N T O F N A T I O N A L E N G I N E E R I N G &
C O N S U L T I N G I N C .

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

**1050 S. FLOWER STREET
LOS ANGELES, CA 90015**

PROJECT:

**2853 WEST BLVD
LOS ANGELES, CA 90016**

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:14:19 PM

SHEET TITLE:

**ELECTRICAL
SPECIFICATIONS**

SHEET NO:

E011

2.7 SHEET STEEL PULL BOXES

- A. IN WET LOCATIONS, OUTDOORS OR WHERE INDICATED TO BE WEATHERPROOF. PROVIDE BOXES THAT HAVE BEEN HOT-DIPPED GALVANIZED AFTER CONSTRUCTION AND GIVEN TWO COATS OF GRAY COLOR RUST-RESISTANT PAINT. INSTALL COVERS WITH STAINLESS STEEL SCREWS AND NEOPRENE GASKETS. SEAL AROUND CONDUIT ENTRIES WITH SILICONE SEALANT, GENERAL ELECTRIC OR EQUAL.
- B. IN DRY LOCATIONS, FINISH ALL BOX SURFACES WITH ONE COAT OF METAL PRIMER AND ONE COAT OF PRIMER SEALER.

2.8 IN-GRADE PULL BOXES

- A. IN GRADE PULL BOXES SHALL BE PRE-CAST CONCRETE AND MANUFACTURED BY CHRISTY, BROOKS-JENSEN OR UTILITY VAULT CO..

2.9 CONDUCTORS

- A. PROVIDE NEW CONDUCTORS MANUFACTURED WITHIN ONE YEAR OF DATE OF DELIVERY TO JOB. DELIVER CONDUCTORS TO SITE IN THEIR ORIGINAL UNBROKEN PACKAGES OR ON THEIR ORIGINAL CABLE REELS. ALL CONDUCTOR PACKAGES AND CABLE REELS SHALL BE MARKED AND TAGGED PLAINLY WITH UL LABEL, SIZE, VOLTAGE RATING, INSULATION TYPE, TYPE OF STRANDING, MANUFACTURER'S NAME, TRADE NAME AND MONTH AND YEAR WHEN MANUFACTURED.
- B. CONDUCTORS SHALL BE SOFT DRAWN, MINIMUM 98% CONDUCTIVITY STRANDED COPPER. TYPE THHN/THWN-2, 600 VOLT, UL APPROVED, DRY AND WET LOCATIONS RATED AT 90 DEGREE CELSIUS. FOR CONDUCTORS OF ALL SIZES FROM #12 AWG UP TO AND INCLUDING 1000 KCMIL. POWER CONDUCTORS NO. 10 AWG AND SMALLER SHALL BE SOLID.

C. ALUMINUM CONDUCTORS ARE NOT ACCEPTABLE.

- D. USE ONLY PLATED COPPER ALLOY CONNECTORS OR LUGS. ALUMINUM CONNECTORS OR LUGS ARE NOT ACCEPTABLE. THE FOLLOWING CONNECTORS ARE PROVIDED FOR COPPER CONDUCTORS:

1. FOR WIRE NO. 10 AWG AND SMALLER: 3M "SCOTCHLOC", IDEAL "SUPERNUT", BUCHANAN "B3".
2. FOR WIRE NO. 8 AWG AND LARGER: BURNDY "VERSTIPS" AND HEAVY DUTY CONNECTORS, O.Z. SOLDER LESS CONNECTORS OR THE EQUIVALENT BY BUCHANAN, KEARNEY OR PENN-UNION.

- E. WIRE AND CABLE SHALL BE NEW, MANUFACTURED NOT MORE THAN SIX (6) MONTHS PRIOR TO INSTALLATION, SHALL HAVE SIZE, TYPE OF INSULATION, VOLTAGE RATING AND MANUFACTURER'S NAME PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVALS.

- F. WIRE AND CABLE SHALL BE FACTORY COLOR-CODED BY INTEGRAL PIGMENTATION WITH A SEPARATE COLOR FOR EACH PHASE AND NEUTRAL. EACH SYSTEM SHALL BE COLOR-CODED AND IT SHALL BE MAINTAINED THROUGHOUT.

G. SYSTEMS CONDUCTOR COLOR CODING:

1. Power 208/120V, 3PH, 4W:
 - a. PHASE A = BLACK
 - b. PHASE B = RED
 - c. PHASE C = BLUE
 - d. NEUTRAL = WHITE
 - e. SWITCHLEGS = PURPLE
 - f. TRAVELLERS = PURPLE WITH BLACK STRIPE

(SWITCHLEGS SHALL ALSO BE IDENTIFIED SEPARATELY BY NUMERICAL TAGS)

2. Power 277/480V, 3PH, 4W:
 - a. PHASE A = BROWN
 - b. PHASE B = ORANGE
 - c. PHASE C = YELLOW
 - d. NEUTRAL = GREY
 - e. SWITCHLEGS = PURPLE
 - f. TRAVELLERS = PURPLE WITH BLACK STRIPE

(SWITCHLEGS SHALL ALSO BE IDENTIFIED SEPARATELY BY NUMERICAL TAGS)

3. GROUND CONDUCTORS: GREEN
4. ISOLATED GROUND CONDUCTORS: GREEN WITH CONTINUOUS YELLOW STRIPE.
5. FIRE ALARM SYSTEM: AS RECOMMENDED BY THE MANUFACTURER.

2.10 WIRING DEVICES

- A. WIRING DEVICES SHALL BE SPECIFICATION GRADE DECORA TYPE AS MANUFACTURED BY LEVITON, PASS & SEYMOUR OR HUBBELL. LEVITON DEVICES AND MODEL NUMBERS INDICATED BELOW:

DEVICE	MODEL
CONVENIENCE RECEPTACLE	16252
DEDICATED RECEPTACLE	16352
CONVENIENCE I.G.	16262
RECEPTACLE DEDICATED I.G.	16362
RECEPTACLE CONVENIENCE	6599
G.F.C.I. RECEPTACLE	6899
DEDICATED G.F.C.I.	5691-2
RECEPTACLE SINGLE POLE	5692-2
SWITCH DOUBLE POLE SWITCH	5623-2
THREE WAY SWITCH FOUR WAY	5624-2
SWITCH PROJECTION SCREEN	5657-2
SWITCH KEYED SWITCH PILOT	1221-2KL
LIGHT SWITCH "ON" PILOT LIGHT	5628-2
SWITCH "OFF" RECESSED	5631-2
CLOCK RECEPTACLE	5261-CH

- B. I.G. RECEPTACLE BODIES SHALL BE OF A BASIC COLOR SPECIFIED ABOVE WITH AN ORANGE TRIANGLE TO SYMBOLIZE ISOLATED GROUND.
- C. FINISH OF DEVICES SHALL BE AS SELECTED BY ARCHITECT.

2.11 COVERPLATES

- A. COVERPLATES SHALL BE NONCOMBUSTIBLE, MAR-RESISTANT THERMOSETTING PLASTIC 0.100 INCH THICK WITH PLAIN STYLE AND SMOOTH FINISH UNLESS OTHERWISE INDICATED. COLOR TO BE PASS & SEYMOUR P LINE WHITE OR AS SELECTED BY THE ARCHITECT.
- B. WHERE SPECIFIED, STAINLESS STEEL PLATES SHALL BE TYPE 302, 0.040 INCH THICK WITH U.S. BUREAU OF STANDARDS SATIN FINISH NO. 32D, PASS & SEYMOUR S LINE OR AS SELECTED BY ARCHITECT.

2.12 PHOTOELECTRIC CONTROLLERS

- A. AS MANUFACTURED BY AUTOMATIC SWITCH COMPANY, SQUARE D, TORK, PARAGON, OR SANGAMO.

2.13 CONTACTORS & RELAYS

- A. MANUFACTURERS: ALLEN-BRADLEY, AUTOMATIC SWITCH CO., SQUARE D, ELECTRIC CO. OR CHALLENGER.
- B. PROVIDE CONTRACTORS AND RELAYS FOR CONTROL OF LIGHTING OR OTHER LOADS AS INDICATED.
- C. CONTRACTORS AND RELAYS SHALL BE OF THE SIZE AND WITH THE NUMBER OF POLES INDICATED OR REQUIRED, WHERE A RELAY OR CONTRACTOR CONTROLS INDIVIDUAL BRANCH CIRCUIT, PROVIDE A MINIMUM OF ONE SQUARE POLE.
- D. UNLESS INDICATED OTHERWISE, CONTRACTORS CONTROLLING LIGHTING SHALL BE MECHANICALLY HELD WITH COIL CLEARING CONTACTS AND COIL VOLTAGE AS REQUIRED.
- E. CONTROLLING CONTACTORS ON TIME CLOCKS SHALL BE SPECIAL-TYPE FOR THIS PURPOSE.
- F. CONTRACTORS CONTROLLED BY PHOTOELECTRIC CONTROLLER SHALL BE MAGNETICALLY HELD.

2.14 SUPPORTS

- A. SWING CONNECTORS FOR STEEL RODS SUPPORTING HANGING ELECTRICAL EQUIPMENT (TRANSFORMERS, JUNCTION BOXES, ETC.) SHALL BE EQUAL TO STEEL CITY E-145, E-170 AND E-232.

2.15 DISCONNECT SWITCHES

- A. SQUARE D, WESTINGHOUSE, I.T.E., G.E., CHALLENGER, CROUSE HINDS OR ARROW HART.
- B. NON-FUSIBLE OR FUSIBLE, HEAVY DUTY, EXTERNALLY-OPERATED, HORSE-POWER-RATED, 600VAC. PROVIDE NEMA 3R, LOCKABLE ENCLOSURES FOR ALL SWITCHES LOCATED ON ROOF TOPS IN WE OR DAMP LOCATIONS AND IN ANY EXPOSED AREA EXPOSED TO THE ELEMENTS.
- C. FUSES SHALL BE CLASS "R", MANUFACTURED BY BUSMAN, SHAWMUT OR ENGINEER-APPROVED EQUAL.
- D. PROVIDE OWNER WITH ONE SPARE SET OF FUSES AND TWO SETS OF FUSE CLIPS/FUSE FOR EVERY SET OF FUSES ON THE PROJECT.
- E. FUSIBLE DISCONNECT SWITCHES SHALL HAVE QUICK-MAKE, QUICK-BREAK MECHANISM AND AN INTERLOCKED COVER WHICH CANNOT BE OPENED WHEN SWITCH IS IN THE "ON" POSITION AND BE PROVIDED WITH VOID ABLE INTERLOCKS. SWITCHES SHALL BE HORSEPOWER RATED AND TYPE THAT CAN BE USED ON INDUCTIVE LOADS. PROVIDE EACH SWITCH WITH A NAMEPLATE INDICATING EQUIPMENT CONTROLLED.
- F. PROVIDE A FUSIBLE DISCONNECT WITHIN SIGHT OF AND READILY ACCESSIBLE FROM AIR CONDITIONING EQUIPMENT, PER NEC 440-1.4. SIZE FUSES PER EQUIPMENT NAMEPLATES.
- G. SWITCHES LOCATED INDOOR SHALL BE IN NEMA TYPE I ENCLOSURES AND SWITCHES LOCATED OUTDOORS OR WHERE INDICATED OR REQUIRED TO BE WEATHERPROOF SHALL BE NEMA TYPE 3R ENCLOSURES.

2.16 LIGHTING FIXTURES

- A. PROVIDE, INSTALL AND CONNECT ALL LIGHTING FIXTURES INDICATED ON THE DRAWINGS ACCORDING TO THE FIXTURE SCHEDULE.
- B. ALL FIXTURES OF THE SAME TYPE SHALL BE OF A SINGLE MANUFACTURER AND OF IDENTICAL FINISH AND APPEARANCE.
- C. ALL LIGHT FIXTURES SHALL BE U.L. LABELED.
- D. REFER TO LIGHTING FIXTURE GENERAL NOTES FOR BALLASTS AND LAMP SPECIFICATIONS AND ADDITIONAL REQUIREMENTS.
- E. PROVIDE REQUIRED MOUNTING DEVICES AND ACCESSORIES FOR COMPLETE INSTALLATION.

2.17 LIGHTING CONTROL SYSTEM

- A. SEE DRAWINGS FOR LIGHTING CONTROL SPECIFICATIONS.

2.18 OCCUPANCY SENSORS

- A. OCCUPANCY SENSORS SHALL BE BY A SINGLE MANUFACTURER AND BE COMPLIANT WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL ENERGY CODES.
- B. WALL MOUNTED OCCUPANCY SENSORS SHALL BE UL LISTED AND HAVE A MINIMUM LOAD CAPACITY OF 800 WATTS AT 120 VOLTS AND 1200 WATTS AT 277 VOLTS. DECORATOR STYLE WITH A LOW PROFILE APPEARANCE AND HARD LENS. SENSOR SHALL UTILIZE DUAL TECHNOLOGY RATED 120/277 WITH NO MINIMUM LOAD AND COMPATIBLE WITH ALL LAMP TYPES. SENSORS SHALL HAVE MANUAL SWITCH OVER-RIDE CAPABILITY. IN ROOMS WITH MORE THAN ONE LIGHT FIXTURE, SENSORS SHALL HAVE BI-LEVEL SWITCH OVER-RIDE CAPABILITY. WAITSTOPPER #DW-100-W FOR SINGLE RELAY, WAITSTOPPER #DW-200-W FOR DUAL RELAY OR EQUAL.
- C. CEILING MOUNTED OCCUPANCY SENSORS SHALL HAVE A LOW PROFILE APPEARANCE AND SHALL UTILIZE DUAL TECHNOLOGY ULTRASONIC AND PASSIVE INFRARED WITH 360 DEGREE COVERAGE. SENSORS SHALL UTILIZE AN ADJUSTABLE PHOTO SENSOR TO KEEP LIGHTS OFF BASED ON SUFFICIENT DAYLIGHT. INITIAL OCCUPANCY DETECTION SHALL BE FIELD SELECTABLE BASED ON PIR SENSOR ONLY, ULTRASONIC SENSOR ONLY OR BOTH PIR AND ULTRASONIC SENSORS. AN ADDITIONAL SWITCH PACK SHALL BE REQUIRED TO AUTOMATICALLY CONTROL 50% OF THE LIGHTING IN ANY DAYLIGHTING ZONE VIA THE PHOTO SENSOR. WAITSTOPPER #DT-300 OR EQUAL.
- D. CEILING MOUNTED OCCUPANCY SENSORS SHALL BE PROVIDED WITH CONTROL UNITS OR SWITCH PACKS TO PERFORM THE FIXTURE SWITCHING REQUIREMENTS INDICATED BY THE DRAWINGS. CONTROL UNITS OR SWITCH PACKS SHALL BE DUAL VOLTAGE 120/277 WITH CONTACTS RATED 20 AMPS. WIRING BETWEEN SENSORS AND CONTROL UNITS SHALL BE PENUMA RATED 18AWG, UL CLASSIFIED, PVC-JACKETED AND INSULATED. POWER PACKS WITH INTEGRAL TRANSFORMERS SHALL BE UTILIZED TO PROVIDE 24VDC. CONTROL UNITS OR SWITCH PACKS SHALL BE LOCATED WITHIN JUNCTION BOXES AND NOT EXPOSED IN THE CEILING SPACE. A MAXIMUM OF THREE SENSORS, UNLESS OTHERWISE NOTED, SHALL BE WIRED TO ONE POWER PACK. THE POWER PACK SHALL BE 120 OR 277 VOLTS AS REQUIRED WITH NO MINIMUM LOAD, COMPATIBLE WITH ALL THE SPECIFIED BALLASTS AND NO LEAKAGE TO LOAD IN THE "OFF" MODE. WHERE MULTIPLE CIRCUITS ARE TO BE CONTROLLED, UTILIZE ADDITIONAL SWITCH PACKS. PROVIDE A FULL FEATURED POWER PACK (NOT A SLAVE PACK). WAITSTOPPER #B2-150 POWER PACKS OR EQUAL SHALL BE USED FOR DUAL SWITCHING ALONG WITH A LOW-VOLTAGE MOMENTARY SWITCH WAITSTOPPER #DC22 OR EQUAL.
- E. SWITCHING PHOTO SENSORS SHALL BE PROVIDED TO SWITCH SELECTED FIXTURES AND/OR LAMPS "OFF" AND "ON" BASED UPON DAYLIGHTING LEVELS PRESENT IN THE CONTROLLED SPACE. THE SWITCHING PHOTO SENSOR SHALL BE PROVIDED WITH A DEDICATED POWER/RELAY PACK. THE SENSOR SHALL UTILIZE AN INTEGRAL PHOTO CONDUCTIVE CELL TO MEASURE AMBIENT LIGHT LEVELS. ON/OFF CONTROLS SHALL BE FULLY ADJUSTABLE FROM 10 TO 200 FOOT-CANDLES AND SHALL BE PROVIDED WITH AN ADJUSTABLE TIME DELAY AND ON ADJUSTABLE DEAD BAND.

2.19 PLYWOOD BACKBOARDS

- A. DOUGLAS FIR PLYWOOD, EXTERIOR GRADE, 8H X 4W X 3/4" THICK (MINIMUM) UNLESS OTHERWISE NOTED. SIZE ON PLANS WITH FINISHED ONE SIDE AND PRIMER COAT PAINTED ON ALL SURFACES WITH FINISH COAT OF LIGHT GRAY ENAMEL ON FRONT (FINISHED) SIDE.

2.20 VANDAL-RESISTANT FASTENERS

- A. PROVIDE APPROVED VANDAL PROOF TYPE SCREWS, BOLTS AND NUTS WHERE EXPOSED TO SIGHT THROUGHOUT THE PROJECT. PROVIDE OWNER WITH SIX (6) SCREWDRIVERS FOR THIS TYPE.

2.21 TERMINAL CABINETS

- A. TERMINAL CABINETS SHALL BE FABRICATED OF CODE GAUGE SHEET STEEL, SIZE AS INDICATED ON THE DRAWING, COMPLETE WITH HINGED DOORS AND THE NUMBER OF 2-WAY SCREW TERMINALS REQUIRED FOR TERMINATION OF ALL CONDUCTORS. THE DOOR TO TERMINAL CABINETS SHALL BE CONTINUOUSLY HINGED ON ONE SIDE AND BE THE SAME SIZE AS THE CABINET SO AS TO ALLOW MAXIMUM TERMINATION SPACE WITHIN THE CABINET. TERMINAL CABINETS SHALL HAVE 5/8" PLYWOOD BACKING FINISHED IN BLACK INSULATING VARNISH.
- B. ALL TERMINAL CABINETS SHALL BE FINISHED WITH ONE COAT OF ZINC CHROMATE AND A COST OR PRIMER SEALER AFTER A THOROUGH CLEANING WHERE EXPOSED TO PUBLIC VIEW (E.G., CORRIDORS, COVERED PASSAGES, OFFICES, ETC.). PRIME COATED TERMINAL CABINETS SHALL BE PAINTED TO MATCH SURROUNDINGS AFTER INSTALLATION.
- C. TERMINAL CABINETS NOT LOCATED IN ELECTRICAL ROOMS OR ELECTRICAL CLOSETS SHALL HAVE CCL SECURITY PRODUCTS 15747 LOCKS AND KEYS.
- D. TERMINALS FOR SIGNAL SYSTEMS CABINETS TO BE CANNON "SS" OR EQUAL.
- E. PROVIDE ENGRAVED NAMEPLATE ON EACH CABINET INDICATING ITS DESIGNATION AND SYSTEM (I.E., "LIFE SAFETY SYSTEM - PANEL 215").

2.22 WIREWAYS AND AUXILIARY GUTTERS

- A. PROVIDE WIREWAYS AND AUXILIARY GUTTERS WITH ALL PARTS FOR A COMPLETE INSTALLATION: SQUARE D OR EQUAL, ENSURE CONTINUITY OF EQUIPMENT GROUNDING AT RACEWAY CONNECTIONS.
- B. WHERE INDICATED, OR AS A SUBSTITUTE FOR CONDUIT WHERE APPROVED, PROVIDE HINGED-COVER TYPE WIREWAYS DESIGNED TO PERMIT LAY-IN INSTALLATION OF CONDUCTORS. SUPPORT WIREWAYS AT LEGAL INTERVALS AND AT EACH CHANGE IN DIRECTION OR ELEVATION USING MANUFACTURER'S STANDARD FITTINGS. WHERE NOT ATTACHED DIRECTLY TO THE BUILDING STRUCTURE, USE 1/2 INCH GALVANIZED STEEL RODS WITH APPROVED SWINGS CONNECTORS, STEEL CITY OR EQUAL. USE FACTORY-FABRICATED FLANGES TO CONNECT WIREWAYS TO SWITCHBOARDS AND PANELBOARDS. INSTALL WIREWAYS FOR TOP OR SIDE ACCESS UNLESS INDICATED OR REQUIRED TO BE OTHERWISE.
- C. WHERE INDICATED, OR WHERE REQUIRED TO CONSOLIDATE WIRING OR TOP SUPPLEMENT WIRING SPACES AT EQUIPMENT, PROVIDE SCREW-COVER TYPE AUXILIARY GUTTERS SIZED AS REQUIRED TO ACCOMMODATE THE ASSOCIATED EQUIPMENT AND CONDUCTORS.

PART 3 - EXECUTION

3.1 STORAGE

- A. ALL MATERIALS AND EQUIPMENT IN STORAGE AND DURING CONSTRUCTION, SHALL BE COVERED IN SUCH A MANNER THAT NO FINISH SURFACE WILL BE DAMAGED OR MARRED, AND ALL MOVING PARTS SHALL BE KEPT PERFECTLY CLEAN AND DRY.

3.2 EXCAVATIONS

- A. TRENCHES FOR UNDERGROUND CONDUIT EXTERIOR TO BUILDING SHALL PROVIDE A MINIMUM EARTH COVER OF 24 INCHES FOR CONDUITS UNLESS NOTED OTHERWISE.

3.3 ACCESSIBILITY AND CLEARANCES

- A. INSTALL ELECTRICAL EQUIPMENT, OUTLETS, JUNCTION AND PULL BOXES IN ACCESSIBLE LOCATIONS AVOIDING OBSTRUCTIONS, PRESERVING HEADROOM, AND KEEPING OPENINGS AND PASSAGEWAYS CLEAR.
- B. MINOR ADJUSTMENTS IN THE LOCATIONS OF EQUIPMENT MAY BE MADE WHERE NECESSARY, PROVIDING SUCH ADJUSTMENTS DO NOT ADVERSELY AFFECT FUNCTIONING OF THE EQUIPMENT.

3.4 CONCRETE

- A. PROVIDE CONCRETE PADS (MINIMUM 1-1/2 IN. HIGH OR AS REQUIRED BY AUTHORITY HAVING JURISDICTION (AHJ)) FOR ALL FLOOR MOUNTED EQUIPMENT INSTALLED OUTDOORS, IN MECHANICAL EQUIPMENT ROOMS AND IN AREAS SUSCEPTIBLE TO BEING WET OR HOSED DOWN.

3.5 SLEEVES

- A. PROVIDE SLEEVES OF SUFFICIENT SIZE TO PERMIT READY INSTALLATION OF EACH CONDUIT WHICH PASSES THROUGH CONCRETE WALLS OR SUSPENDED SLABS. SLEEVES IN CONCRETE BEAMS, JOISTS, COLUMNS OR FOOTING WALLS MAY BE INSTALLED ONLY WHERE PERMITTED BY THE STRUCTURAL ENGINEER.
- B. FOR CONDUIT THAT PASSES THROUGH SUSPENDED CONCRETE SLABS, PLACE SLEEVES WITH THE TOP 1 INCH ABOVE FINISHED SLAB AND THE BOTTOM FLUSH WITH UNDERSIDE OF SLAB. IN ALL OTHER CASES, PLACE SLEEVES WITH THE ENDS FLUSH WITH CONCRETE SURFACES. SPACE SLEEVES AT LEAST THREE DIAMETERS APART ON CENTER OR MORE IF REQUIRED BY THE ARCHITECT.
- C. WHERE CONDUITS PASS THROUGH FIRE RESISTIVE WALLS, CEILINGS OR FLOORS, THEY SHALL BE PACKED WITH FIRE RESISTANT COMPOUND OR CONCRETE.
- D. PROVIDE SLEEVES OF GALVANIZED STEEL SHEET AND OF PROPER GAUGE TO RETAIN THEIR SHAPE DURING FORMING AND CONCRETE OPERATIONS. WHERE A CONDUIT PASSES THROUGH AN EXTERIOR SURFACE, SEAL THE SPACE BETWEEN THE CONDUIT AND ITS SLEEVE WITH AN APPROVED WATERTIGHT COMPOUND.

3.6 ROOF STUBS

- A. AT BUILT-UP ROOFING, PROVIDE PITCH POCKETS AT ALL ROOF STUBS. FOR OTHER TYPES OF ROOFS, PROVIDE A GALVANIZED STEEL OR JACK OF THE PROPER SIZE FOR EACH CONDUIT THAT STUBS-UP THROUGH A ROOF, FLASH AND COUNTER FLASH. COORDINATE THIS WORK WITH AFFECTED TRADES. INSTALL ROOF SEALS IN SUCH A MANNER AS NOT TO VOID ROOF GUARANTEES.

3.7 CONDUIT

- A. UNLESS OTHERWISE INDICATED, PROVIDE CONDUITS OF TYPE PERMITTED OR REQUIRED FOR ALL CONDUCTORS OR CABLES OF ALL SYSTEMS AND VOLTAGES.
- B. CONDUITS SHALL NOT CONTAIN MORE THAN SIX (6) CONDUCTORS UNLESS INDICATED EXCEPT FOR SIGNAL, REMOTE CONTROL OR COMMUNICATIONS SYSTEMS. CONDUITS WITH MORE THAN SIX (6) CONDUCTORS SHALL BE DERATED PER NEC.
- C. ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE INDICATED OR REQUIRED.
- D. UNLESS OTHERWISE INDICATED, USE ELECTRICAL METALLIC TUBING (EMT) AS FOLLOWS: ABOVE GRADE IN DRY LOCATIONS, IN ACCESSIBLE CEILINGS, AND WHERE NOT SUBJECT TO MECHANICAL INJURY OR OTHERWISE PROHIBITED, CONCRETE OR MASONRY IN CONTACT WITH EARTH ARE NOT CONSIDERED DRY LOCATIONS.
- E. METAL-CLAD CABLE MAY BE USED WHERE CONCEALED FOR FIRE ALARM AND BRANCH CIRCUITING OF LIGHTING AND CONVENIENCE RECEPTACLES. IT IS NOT PERMITTED TO BE EXPOSED AT PROJECTION BOOTHS OR AT CONCESSION STANDS.
- F. FLEXIBLE STEEL CONDUIT SHALL BE USED ONLY:

1. WHERE INDICATED, SIX FOOT MAXIMUM LENGTH PLUS GREEN GROUND WIRE.
2. FOR FINAL CONNECTIONS TO MOTORS, VIBRATING EQUIPMENT OR WHERE REQUIRED FOR EQUIPMENT SERVICING.
3. FOR CONNECTIONS TO RECESSED LIGHTING FIXTURES FROM NEARBY ACCESSIBLE JUNCTION BOXES.
4. FOR CONCEALED RUNS IN STUD WALLS, IN INACCESSIBLE CEILINGS AND IN DRY LOCATIONS WHERE STRUCTURAL CONDITIONS PREVENT THE USE OF OTHER TYPES OF CONDUIT OR WHERE EXCESSIVE CUTTING OR NOTCHING OF WOOD MEMBERS WOULD OTHERWISE BE REQUIRED.

- G. SIZE ALL CONDUIT AS REQUIRED, OR LARGER WHERE INDICATED OR PREFERRED. WHERE PORTIONS OF A CONDUIT RUN ARE INCREASED IN SIZE FOR WHATEVER REASON, MAKE ALL REMAINING PORTIONS IN THAT RUN THE SAME SIZE AND INCREASE JUNCTION BOX SIZES OR FITTINGS AS REQUIRED.

- H. SEAL ENDS OF ALL CONDUIT WITH APPROVED MANUFACTURED CONDUIT SEALS, CAPS OR PLUGS IMMEDIATELY AFTER INSTALLATION. KEEP ENDS SEALED UNTIL IMMEDIATELY PRIOR TO PULLING CONDUCTORS.

- I. WHERE CONDUIT IS UNDERGROUND, UNDER SLAB OR GRADE, EXPOSED TO THE WEATHER OR IN WET LOCATIONS, MAKE JOINTS LIQUID TIGHT AND GAS TIGHT. END OF UNDERGROUND FEEDER CONDUITS SHALL BE SEALED AFTER THE CABLE IS INSTALLED TO PREVENT BREATHING AND CONDENSATION.
- J. KEEP BENDS AND OFFSETS IN CONDUIT RUNS TO AN ABSOLUTE MINIMUM. FOR THE SERVING UTILITIES, MAKE LARGE-RADIUS BENDS TO MEET THEIR REQUIREMENTS. REPLACE ALL DEFORMED, FLATTENED OR KINKED CONDUIT.

- K. SUPPORT CONDUIT AT LEGAL INTERVALS. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PREVENT SAGGING OR AS DIRECTED. PERFORATED STRAP OR PLUMBERS TAPE IS NOT ACCEPTABLE FOR CONDUIT SUPPORT. HANG SUPPORTS FROM STRUCTURAL MEMBERS OR APPROVED CONCRETE HANGERS.

- L. WHERE CONDUIT MAY BE AFFECTED BY DISSIMILAR MOVEMENTS OF THE SUPPORTING STRUCTURES OR MEDIUM, PROVIDE SUITABLE FLEXIBLE OR EXPANSION DEVICES.

- M. ROUTE CONDUIT TO AVOID DRAINS OR OTHER GRAVITY LINES, WHERE CONFLICTS OCCUR, RELOCATE CONDUIT AS REQUIRED.

- N. RUN ALL CONDUIT PARALLEL WITH OR AT RIGHT ANGLES TO STRUCTURAL MEMBERS, WALLS OR LINES OF THE BUILDING. ROUTE ALL EXPOSED CONDUIT TO PRESERVE HEADROOM, ACCESS AND WORK SPACE.

- O. DO NOT RUN CONDUIT IN CONCRETE MEMBERS OR SUSPENDED SLABS UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

- P. ALL RIGID CONDUIT STUBS-UP IN CONCRETE FLOORS SHALL HAVE COUPLINGS FLUSH WITH FINISHED FLOOR UNLESS NOTED OTHERWISE.

- Q. PROVIDE A POLYPROPYLENE ROPE RATED 700 POUNDS TENSILE STRENGTH IN EACH CONDUIT 1-1/2" AND LARGER AND A FULL STRING FOR CONDUIT 1-1/4" AND SMALLER (MORE THAN 10 FEET IN LENGTH OR INSTALLED WITH ELBOWS) LEFT EMPTY FOR FUTURE USE.

- R. AT COMPLETION OF UNDERGROUND CONDUIT INSTALLATION, PULL A FLEXIBLE MANDREL (12 INCHES LONG BY A DIAMETER 1/4 IN. LESS THAN THE INSIDE DIAMETER OF THE CONDUIT) THROUGH EACH CONDUIT, FOLLOWED BY A STIFF-BRISTLE BRUSH. CAP CONDUITS AT BOTH ENDS.

- S. CONDUITS SHALL NOT BE RUN THROUGH STRUCTURAL MEMBERS EXCEPT AS SPECIFICALLY DIRECTED IN WRITING BY THE STRUCTURAL ENGINEER.

- T. CONDUITS ABOVE FUTURE SUSPENDED CEILINGS SHALL BE INSTALLED AS HIGH AS POSSIBLE AGAINST THE STRUCTURE ABOVE.

- U. UNLESS OTHERWISE INDICATED, PLASTIC CONDUIT MAY BE USED IN CONCRETE SLABS OR MEMBERS, BELOW SLABS ON GRADE OR BELOW GRADE EXTERIOR TO BUILDINGS WITH MINIMUM 24 INCHES OF COVER. PROVIDE SEPARATE GROUND WIRE IN ALL RUNS. INCREASE CONDUIT AND PULL BOXES SIZES AS REQUIRED TO ACCOMMODATE THE ADDITIONAL CONDUCTORS. USE RIGID STEEL CONDUIT COATED WITH BITUMEN COMPOUND (OR WITH MINIMUM 40 MIL BONDED PVC PLASTIC COATING) AND ENCASED IN CONCRETE FOR BENDS AND RISERS TO GRADE FROM NON-METALLIC CONDUITS.

3.8 OUTLET BOXES

- A. OUTLET BOXES SHALL BE OF MINIMUM SIZE PER PART 2 OR LARGER AS REQUIRED BY NEC, EXCLUSIVE OF COVER RINGS.

- B. USE CAST METALLIC BOXES WHERE LEGALLY REQUIRED.

- C. USE SOLID TYPE GANG BOXES WHERE REQUIRED FOR MORE THAN TWO DEVICES OR FOR BARRIERED OUTLETS. USE CONCRETE BOXES FOR OUTLETS IN CONCRETE CONSTRUCTION. FOR BOXES NOT INDICATED, PROVIDE TYPES AND MOUNTINGS AS REQUIRED TO SUIT THE EQUIPMENT OR AS DIRECTED.

- D. SUPPORT RECESSED BOXES IN STUD PARTITIONS WITH GALVANIZED STEEL BOX HANGERS OF TYPES MADE SPECIFICALLY FOR THE PURPOSE.

- E. ALL BOXES SHALL BE OF PROPER CODE SIZE FOR NUMBER AND SIZES OF CONDUCTORS PASSING THROUGH OR TERMINATING THEREIN.

- F. PROVIDE COVERS OF THE TYPES MOST SUITABLE FOR THE FIXTURES OR DEVICES USED AT THE OUTLETS. IN BRICK, CONCRETE BLOCK, STONE OR TILE WALLS, USE SQUARE CORNERED TILE COVERS OF PROPER DEPTH TO PERMIT A FACING OF THE MATERIAL TO FRAME THE COVER. IN OUTLETS SUPPORTING LIGHTING FIXTURES, PROVIDE 3/8 IN. ADJUSTABLE FIXTURE STUDS.

- G. USE EXTENSION RINGS WITH BLANK COVERS FOR MAKING EXPOSED CONDUIT CONNECTIONS FROM FLUSH WALL OR CEILING OUTLET BOXES.

- H. USE OUTLET BOXES SERVING FIXTURES OR DEVICES AS PULL OR JUNCTION BOXES WHEREVER POSSIBLE. WHERE NOT POSSIBLE, LOCATE PULL AND JUNCTION BOXES IN ACCESSIBLE CEILINGS. IN ACCESSIBLE AREAS NOT SUBJECT TO PUBLIC VIEW OR ELSEWHERE AS DIRECTED, PULL OR JUNCTION BOXES SHALL NOT BE LOCATED IN FINISHED AREAS UNLESS APPROVED BY THE ARCHITECT.

- I. SINGLE GANG HANDY OR UTILITY BOXES MAY BE USED FOR SINGLE DEVICES AT ENDS OF RUNS.

- J. ALL OUTLET BOXES THAT FINISH TO AN EXPOSED MASONRY SURFACE SHALL HAVE 1-1/4 IN. DEEP PLASTER RINGS AND SHALL BE SET DEEP ENOUGH TO ALLOW A MASONRY FACING OVER THE PLASTER RING TO FRAME THE OPENING. PLASTER RINGS SHALL NOT BE GROUDED INTO EXPOSED MASONRY WALLS. CENTER OUTLET IN A COURSE OF MASONRY.

- K. TAKE PARTICULAR CARE IN LOCATING OUTLET BOXES IN ACOUSTICAL TILE, MASONRY, PANELING OR OTHER MODULAR TYPE FINISHES. WHERE ARCHITECT'S DOCUMENTS DO NOT DICTATE LOCATION OR CONTROL, CONSULT WITH TRADES CONCERNED SO THAT OUTLETS MAY BE SYMMETRICALLY PLACED IN THE FINISHED MODULE. CENTER OUTLETS HORIZONTALLY IN VERTICAL WALL PANELS AND VERTICALLY IN MASONRY COURSES. (ADJUST INDICATED HEIGHTS TO SUIT.)

- L. FLUSH COUPLINGS SHALL BE REGULAR COUPLING WITH PLUMBER TYPE BRASS PLUG. INSTALL THIS PLUG FLUSH WITH FINISH FLOOR. USE OIL OR GREASE ON TOP OF AND IN THREADS TO PREVENT STICKING.

- M. ALL OUTLET BOXES SHALL BE ACCURATELY PLACED AND SECURELY FASTENED TO THE STRUCTURE INDEPENDENTLY OF THE CONDUIT. THE PLASTER RING SHALL BE SET FLUSH WITH THE FINISH SURFACE OF THE CEILING OR WALL. APPROVED BAR HANGERS SHALL BE USED TO SUPPORT OUTLET BOXES IN ALL FURRED CEILINGS AND STUD WALLS. HANGERS FOR LIGHT OUTLETS SHALL HAVE ADJUSTABLE STUDS.

- N. BEFORE ROUGHING IN BOXES FOR SWITCHES AT DOORS, CONTRACTOR SHALL VERIFY DOOR SWING TO MAKE SURE THAT SWITCH IS ON THE STRIKE SIDE OF DOOR.

- O. CROUSE-HINDS "CONDUITES" SHALL BE USED FOR ALL SWITCHES, RECEPTACLES AND JUNCTION BOXES WHERE CONDUIT IS EXPOSED.

- P. OUTLETS SHALL NOT BE INSTALLED BACK-TO-BACK, BUT SHALL BE OFFSET 12" MINIMUM.

3.9 SHEET STEEL PULL BOXES

- A. WHERE INDICATED OR REQUIRED TO SERVE AS PULL BOXES OR JUNCTION BOXES, PROVIDE SHEET STEEL BOXES WITH SCREW-ON COVERS FOR SURFACE OR FLUSH MOUNTING.

3.10 CONDUCTORS

- A. STORE CONDUCTORS OUT OF THE WEATHER AND WHERE NOT SUBJECT TO DAMAGE OR DELETERIOUS CONDITIONS.

- B. BEFORE INSTALLING CONDUCTORS, REMOVE DEBRIS AND MOISTURE FROM CONDUIT AND EQUIPMENT ENCLOSURES. WHERE NECESSARY USE UNSEED SOAP, MINERALAC OR OTHER SPECIFICALLY APPROVED WIRE PULLING COMPOUND TO FACILITATE THE INSTALLATION OF CONDUCTORS. DO NOT USE OIL, GREASE OR SIMILAR SUBSTANCES.

- C. COLOR CODE BRANCH CIRCUITS AS REQUIRED BY LOCAL AUTHORITIES AND SHALL BE CONTINUOUS FROM OUTLET TO OUTLET, PULL BOX OR CABINET.

- D. CONNECT CONTROL WIRING AS INDICATED AND IN ACCORDANCE WITH WIRING DIAGRAMS FURNISHED BY EQUIPMENT MANUFACTURERS. COLOR CODE AND TAG ALL CONTROL WIRING.

- E. MAKE JOINTS, SPLICES, TAPS AND CONNECTIONS FOR 600 VOLT CONDUCTORS WITH SOLDER LESS CONNECTORS.

- F. RE-TIGHTEN BOLT TYPE CONNECTORS 24 TO 48 HOURS AFTER INSTALLATION AND BEFORE TAPING.

3.11 TOGGLE SWITCHES

- A. ALL SWITCHES SHALL BE SPECIFICATION GRADE RATED 15, 20 OR 30 AMPERES AT 277 VOLT AC, TOTALLY ENCLOSED QUIET ACTION TYPE, 1 OR 2 POLE, 3 OR 4 WAY, MOMENTARY CONTACT OR LOCK TYPE AS REQUIRED. THE 15 AMPERE RATED SWITCH MAY BE USED ONLY FOR LIGHTING LOADS OF LESS THAN 10 AMPERES. SWITCHES AHEAD OF MOTORS SHALL BE HORSEPOWER RATED AND SHALL HAVE NUMBER OF POLES AS REQUIRED. TOGGLE COLORS SHALL BE AS SELECTED BY THE ARCHITECT.
- B. FOR FLUSH-MOUNTED WEATHERPROOF SWITCHES, PROVIDE SWITCHES AS LISTED ABOVE WITH GASKETED STAINLESS STEEL LIFT COVERPLATE; PASS & SEYMOUR WP SERIES, WHERE SURFACE MOUNTED, USE CAST BOX WITH GASKETED CAST ALUMINUM LIFT COVERPLATE; HUBBELL NO. 7420.

3.12 RECEPTACLES

- A. WHERE SINGLE RECEPTACLES ARE INDICATED, PROVIDE MATCHING UNITS TO THOSE LISTED FOR DUPLEX RECEPTACLES. PROVIDE SHORT STRAP UNITS WHERE REQUIRED FOR PANEL MOUNTING.
- B. MOUNT ALL WEATHERPROOF RECEPTACLES HORIZONTALLY WITH HINGE ON TOP.

3.13 COVER PLATES

- A. PROVIDE PLATES FOR ALL OUTLET BOXES AND FITTINGS OF ALL SYSTEMS EXCEPT AT OUTLETS WHERE FIXTURE CANOPIES ARE USED.
- B. PROVIDE WEATHERPROOF COVERS ON WEATHERPROOF DEVICES. USE CAST GASKETED COVERS FOR EXTERIOR PULL OR JUNCTION OUTLET BOXES OR FITTINGS.

3.14 LIGHTING SYSTEM

- A. LIGHTING FIXTURES SHALL HAVE ALL PARTS AND FITTINGS NECESSARY TO COMPLETELY INSTALL THE FIXTURES. WIRING RUNNING IN FIXTURES SHALL BE TYPE "THHN". FIXTURES SHALL BE EQUIPPED WITH LAMPS OF SIZE AND TYPE AS SHOWN IN THE FIXTURE SCHEDULE. ITEMS OF TRIM OR DECORATION SHALL BE SUPPLIED AND PROPERLY INSTALLED AFTER OTHER TRADES HAVE FINISHED THEIR WORK AND CLEANED THE AREA.
- B. ALL LIGHT FIXTURES INSTALLED OUTDOORS IN LOCATIONS PROTECTED FROM THE WEATHER (AS UNDER CANOPIES) SHALL BE RATED FOR OUTDOOR USE, GASKETED AND FINISHED WITH AN EPOXY TYPE PAINT OR OTHER APPROVED CORROSION RESISTANT FINISH.
- C. SURFACE MOUNTED FIXTURES AND OUTLETS FOR SURFACE MOUNTED FIXTURES ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS AND SHALL BE LOCATED SO AS TO CLEAR ALL DOOR SWINGS INCLUDING CABINET DOOR SWINGS. WHERE IT IS NOT POSSIBLE TO CLEAR A DOOR SWING, THE CONTRACTOR SHALL VERIFY CLEARANCES ABOVE THE TOP OF THE DOOR WITH ARCHITECTURAL DRAWINGS, DETAILS, SECTIONS, ELEVATIONS AND DOOR SCHEDULES, TYPICAL THROUGHOUT PROJECT.

3.15 SIGNAL CONDUIT SYSTEM

- A. SIGNAL OUTLETS IN SOLID WALLS SHALL BE 4-1 1/16" SQUARE, AT LEAST 2-1/8" DEEP WITH SINGLE GANG 1/2" DEEP PLASTER RING. RATINGS FOR OUTLETS IN FIRE RATED WALLS SHALL EXCEED THE WALL RATING.
- B. OUTLETS IN HOLLOW WALLS SHALL BE SINGLE GANG PLASTER RING. STRAP CONDUIT ADJACENT TO OUTLET AND TERMINATE WITH CABLE BUSHING.
- C. SIGNAL CONDUITS SHALL BE 3/4" MINIMUM SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND SHALL BE EMT OR RIGID GALVANIZED STEEL, 3/4" AND 1" CONDUIT BENDS SHALL HAVE 12" MINIMUM RADIUS, 1-1/4" AND LARGER CONDUIT SHALL HAVE 30" MINIMUM RADIUS. NO COUPLING SHALL BE PLACED IN BENDS. EACH RUN OF CONDUIT SHALL HAVE A MAXIMUM OF TWO 90 DEGREE BENDS. INSTALL ADDITIONAL PULL BOXES IF MORE THAN TWO BENDS ARE REQUIRED PER RUN. WHERE CONDUIT ENTERS BUILDING, KEEP CONDUIT FREE IF MORE THAN TWO BENDS ARE REQUIRED PER RUN. WHERE CONDUIT ENTERS BUILDING, KEEP CONDUIT FREE OF CONTACT WITH REINFORCING STEEL AND OTHER METALLIC STRUCTURES OR PIPE.
- D. INSTALL 1/2" CONDUIT FROM TELEPHONE BACKBOARD TO NEAREST COLD WATER PIPE IN AN ACCESSIBLE LOCATION, AND 1" C-1 #6 TO GROUNDING BOX.

3.16 PLYWOOD BACKBOARDS

- A. FOR TELEPHONE OR COMMUNICATIONS SYSTEM TERMINALS OR FOR MOTOR CONTROL OR OTHER EQUIPMENT ASSEMBLIES, PROVIDE BACKBOARDS OF SIZE INDICATED OR LARGER IF REQUIRED.

3.17 NAMEPLATES

- A. PROVIDE A NAMEPLATE FOR EACH TRANSFORMER, SWITCHBOARD, DISTRIBUTION BOARD, MOTOR CONTROL CENTER, PANELBOARD, TERMINAL CABINET, BACKBOARD, INDIVIDUALLY MOUNTED CIRCUIT BREAKER OR MOTOR CONTROL, DISCONNECT SWITCH, PULL BOX, CONTROL PANEL, RELAY, AND FOR ANY OTHER CONTROL DEVICE OR MAJOR ITEM OR ELECTRICAL EQUIPMENT.
- B. PROVIDE BLACK-ON-WHITE LAMINATED, PLASTIC MICARTA NAMEPLATE ENGRAVED IN MINIMUM 1/4 IN. HIGH LETTERS TO CORRESPOND WITH THE DESIGNATION ON DRAWINGS. PROVIDE OTHER OR ADDITIONAL INFORMATION ON NAMEPLATES WHERE INDICATED.
- C. ATTACH NAMEPLATES TO EQUIPMENT WITH RIVETS, BOLTS, SHEET METAL SCREWS OR INSTALL IN METAL HOLDERS WELDED TO THE EQUIPMENT.

3.18 GROUNDING & BONDING

- A. GROUND THE NEUTRAL OF EACH ISOLATED ELECTRICAL SYSTEM HAVING A NEUTRAL CONDUCTOR WITH A SYSTEM GROUND CONNECTION SIZED AS REQUIRED.
- B. FOR THE SYSTEM GROUND CONNECTION, PROVIDE A GREEN COLOR INSULATED COPPER CONDUCTOR IN A RIGID STEEL CONDUIT TO THE GROUND ELECTRODE. CONNECT THE CONDUIT AND CONDUCTOR TO THE ELECTRODE WITH A MALLEABLE IRON CONDUIT HUB AND A 2-BOLT GROUND CLAMP.
- C. WHERE THE COLD WATER PIPING SYSTEM IS UNSUITABLE FOR USE AS A GROUNDING ELECTRODE AND WHERE LOCAL CODE PERMITS, PROVIDE COPPER-CLAD MULTIPLE-ROD ELECTRODES COMPLYING WITH ALL LEGAL REQUIREMENTS INCLUDING ROD SIZE, SPACING ACCESSIBILITY AND RESISTANCE TO GROUND.
- D. USE THE CONDUIT SYSTEM FOR EQUIPMENT AND ENCLOSURE GROUNDING. PROVIDE A GREEN COLOR INSULATED GROUND CONDUCTOR OF CODE SIZE WITHIN THE CONDUIT AND TERMINATE PROPERLY TO THE EQUIPMENT ENCLOSURE AT EACH END. (USE SEPARATE GROUND BUS BARS IN ALL PANEL BOARDS AND SWITCHBOARDS.) INCREASE CONDUIT, FITTINGS AND PULLBOX SIZES AS REQUIRED TO ACCOMMODATE THE ADDITIONAL CONDUCTOR.
- E. PROVIDE BONDING DEVICES, FITTINGS OR JUMPERS AT EXPANSION FITTINGS OR WHEREVER CONTINUITY OF GROUNDING IS NOT CERTAIN OR WHERE REQUIRED BY INSPECTING AUTHORITIES.
- F. PROVIDE A COMPLETE GROUNDING AND BONDING INSTALLATION IN ACCORDANCE WITH ALL REQUIREMENTS OF APPLICABLE CODES AND ORDINANCES WHETHER SPECIFICALLY INDICATED OR NOT.
- G. GROUND RESISTANCE SHALL NOT BE GREATER THAN CODE REQUIREMENTS, AND SUPPLEMENTARY GROUNDING FACILITIES SHALL BE PROVIDED, IF REQUIRED, TO MAINTAIN MINIMUM RESISTANCE VALUE AS REQUIRED BY THE LOCAL ELECTRICAL INSPECTOR.
- H. CONNECTION FROM THE GROUND TO THE EQUIPMENT SHALL BE MADE IN PERMANENTLY ACCESSIBLE LOCATIONS BY APPROVED TYPES OF BOLTED OR CLAMPED SOLDERLESS CONNECTORS WITH STRANDED COPPER CONDUCTORS, SOLDERED CONNECTIONS OR LUGS SHALL NOT BE USED.

3.19 SUPPORTS

- A. PROVIDE ALL NECESSARY FOUNDATIONS, SUPPORTS AND BACKING FOR ALL ENCLOSURES, CONDUITS EQUIPMENT, OUTLETS, DEVICES AND LIGHTING FIXTURES.
- B. ATTACH ALL BOXES, OUTLET BOXES, STRAPS, CABINETS AND EQUIPMENT TO WOOD WITH WOOD OR LAG SCREWS, TO METAL WITH MACHINE SCREWS OR BOLTS, AND TO CONCRETE WITH EXPANSION ANCHORS OR SELF-DRILLING METAL ANCHORS, AND WITH MACHINE SCREWS OR BOLTS. USE SIZE AND NUMBER OF ATTACHMENTS AS REQUIRED TO SUPPORT EQUIPMENT WEIGHT WITH A MINIMUM SAFETY FACTOR OF 4 TO 1.
- C. SECURE FLOOR MOUNTED EQUIPMENT TO FLOOR WITH MACHINE BOLTS AND ANCHORS.
- D. PROVIDE STRUCTURAL CONCRETE BASES FOR LIGHTING POLES PER STRUCTURAL ENGINEER'S AND MANUFACTURER'S RECOMMENDATIONS AS SHOWN ON THE DRAWINGS.
- E. CONTRACTOR SHALL VERIFY ALL MOUNTINGS AND INSTALLATIONS TO CONFORM TO CALIFORNIA SEISMIC REQUIREMENTS.

3.20 SEISMIC DESIGN AND ANCHORING OF ELECTRICAL EQUIPMENT:

- A. SEISMIC PROTECTION CRITERIA: ALL ELECTRICAL AND MECHANICAL MACHINERY INSTALLATIONS PROVIDED, AS PART OF THIS CONTRACT LOCATED IN ANY SEISMIC RISK ZONE OF THE UNIFORM BUILDING CODE SEISMIC RISK MAP SHALL BE PROTECTED FROM EARTHQUAKES IN ACCORDANCE WITH THE UNIFORM BUILDING CODE AND, AS APPLICABLE, CBC CALIFORNIA BUILDING CODE ZONE 4 OR THE RESPECTIVE STATE AND LOCAL BUILDING CODES AND REGULATIONS. PROTECTION CRITERIA FOR THESE ZONES SHALL BE A HORIZONTAL FORCE FACTOR AS PRESCRIBED BY THE UBC MULTIPLIED BY THE MACHINERY WEIGHT CONSIDERED PASSING THROUGH THE MACHINERY CENTER OF GRAVITY IN ANY HORIZONTAL DIRECTION. UNLESS VIBRATION ISOLATION IS REQUIRED TO PROTECT MACHINERY AGAINST UNACCEPTABLE STRUCTURE TRANSMITTED NOISE AND/OR VIBRATION, MACHINERY SHALL BE PROTECTED FROM EARTHQUAKES BY RIGID STRUCTURALLY SOUND ATTACHMENT TO THE LOAD SUPPORTING STRUCTURE. THE FORCE FACTOR AND ANCHORAGE SHALL BE DETERMINED BY CALCULATIONS PERFORMED AND SUBMITTED TO THE ARCHITECT BY A REGISTERED CALIFORNIA PROFESSIONAL ENGINEER (CIVIL OR STRUCTURAL) HIRED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF SEISMIC RESTRAINT SYSTEMS FOR ALL PIECES OF EQUIPMENT WEIGHING OVER 50 POUNDS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. SWITCH GEAR
2. CONDUITS/CONDUIT SUPPORT TRAPEZES
3. TRANSFORMERS
4. PANELS
5. LIGHT FIXTURES
6. UPS, PDU, LIGHTING INVERTERS AND GENERATOR EQUIPMENT
7. CABLE TRAY / FLEXIBLE CABLE TRAY/ LADDER TRAY
8. BUS DUCT

- B. SEISMIC PROTECTION, LABOR, MATERIALS AND DESIGN SHALL BE INCLUDED IN THE CONTRACT SUM.

3.21 TESTING

- A. ALL WIRING AND CONNECTIONS SHALL BE TESTED FOR CONTINUITY, SHORTS AND IMPROPER GROUNDINGS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE. ALL RECEPTACLE OUTLETS SHALL BE TESTED FOR PROPER GROUNDING. ANY AND ALL REPAIRS RESULTING FROM THE TESTS OR PRELIMINARY OPERATION OF THE EQUIPMENT SHALL BE MADE BY THE CONTRACTOR AT HIS EXPENSE.
- B. REQUIRED TESTS, IN ADDITION TO THOSE MENTIONED ABOVE, INCLUDE BUT ARE NOT LIMITED TO:
 1. GROUND RESISTANCE TEST.
 2. SERVICE AND FEEDER CONDUCTORS INSULATION RESISTANCE.
 3. GROUND FAULT PROTECTION.
 4. SUCH OTHER TESTS AS MAY BE REQUIRED BY THE ARCHITECT.
- C. WHEN THE WORK IS SUBSTANTIALLY COMPLETE, CONDUCT A SERVICE VOLTAGE TEST AS FOLLOWS:
 1. MEASURE SERVICE VOLTAGE AT NO LOAD AND AT MAXIMUM LOAD AND SUBMIT RESULTS TO ENGINEER.
 2. IF IN THE OPINION OF THE ENGINEER THE VOLTAGES AND REGULATIONS ARE NOT WITHIN ACCEPTABLE LIMITS, NOTIFY THE SERVING UTILITIES FOR PROPER ELECTRICAL SERVICE AND THEN VERIFY THAT SUCH HAS BEEN ACCOMPLISHED.
- D. AFTER THE SERVICE VOLTAGE TEST, CONDUCT AN OPERATING TEST OF THE ELECTRICAL SYSTEM. THE SYSTEM SHALL:
 1. OPERATE IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 2. BE FREE OF ELECTRICAL AND MECHANICAL DEFECTS.
- E. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL MAKE ADDITIONAL TESTS AS NECESSARY TO SATISFY THE OWNER AND THE ENGINEER OR HIS REPRESENTATIVE THAT THE TRUE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS HAVE BEEN CARRIED OUT. CONTRACTOR SHALL PROVIDE ALL INSTRUMENTS AND LABOR NECESSARY TO MAKE SUCH TESTS. ANY WORK SHOWING FAULTS UNDER TEST, AND ANY WORK NOT IN ACCORDANCE WITH THE SPECIFICATIONS, SHALL BE MADE GOOD BY THE CONTRACTOR AT HIS OWN EXPENSE. SUCH TESTS MAY OCCUR AT ANYTIME DURING THE GUARANTEE PERIOD.

3.22 PROTECTION OF WORK

- A. PROTECT THE WORK FROM DAMAGE, DEFACEMENT OR DETERIORATION UNTIL FINALL ACCEPTANCE. PROVIDE STORAGE FACILITIES AND CONDUCT OPERATIONS TO THIS EFFECT.
- B. REPAIR OR REPLACE DAMAGED WORK AND BE RESPONSIBLE FOR CORRECTION OF ANY DAMAGE DONE IN THE PERFORMANCE OF WORK TO THE WORK OF OTHER TRADES.

3.23 HEATING, VENTILATION, AND AIR CONDITIONING

- A. REFER TO DIVISION 15 FOR ADDITIONAL REQUIREMENTS.
- B. FURNISH AND INSTALL ALL LINE AND LOW VOLTAGE CONDUITS AND WIRING, OUTLETS, DISCONNECT SWITCHES AND MANUAL TIMER SWITCHES REQUIRED FOR SPECIFIC OPERATION OF THE EQUIPMENT.
- C. CONNECT ALL MOTORS AND CONTROL EQUIPMENT.
- D. WIRING SHALL BE INSTALLED IN CONDUIT.

3.24 CLEANING

- A. KEEP ALL PARTS OF THE BUILDING AND SITE FREE FROM ANY ACCUMULATIONS OF RUBBISH OR WASTE MATERIALS. REMOVE ACCUMULATIONS AT FREQUENT INTERVALS.
- B. CLEAN EQUIPMENT, PANELBOARDS, SWITCHES, LIGHTING FIXTURES AND LAMPS. RESTORE FINISHED SURFACES TO THEIR ORIGINAL TEXTURE. POLISH PLATE SURFACES, METAL AND GLASS WORK.

END OF SECTION



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE :
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

**1050 S. FLOWER STREET
LOS ANGELES, CA 90015**

PROJECT:

**2853 WEST BLVD
LOS ANGELES, CA 90016**

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:14:51 PM

SHEET TITLE:

**ELECTRICAL
SPECIFICATIONS**

SHEET NO:

E013



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

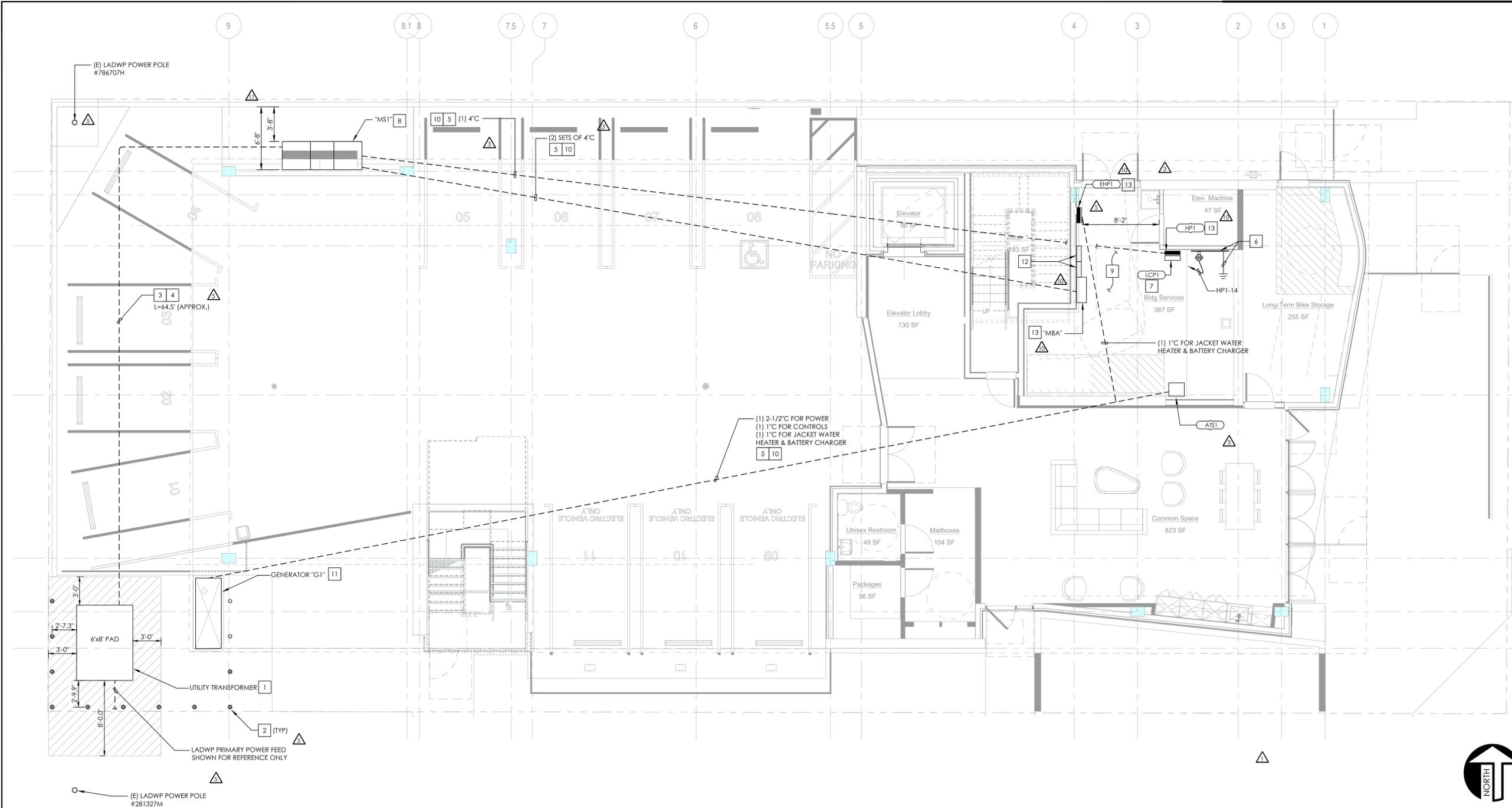
Plot Date: 10/11/2023 4:19:56 PM

SHEET TITLE:

△ **SITE UTILITY PLAN**

SHEET NO:

E100



SITE UTILITY PLAN SCALE 3/16" = 1'-0" 1

PLAN NOTES

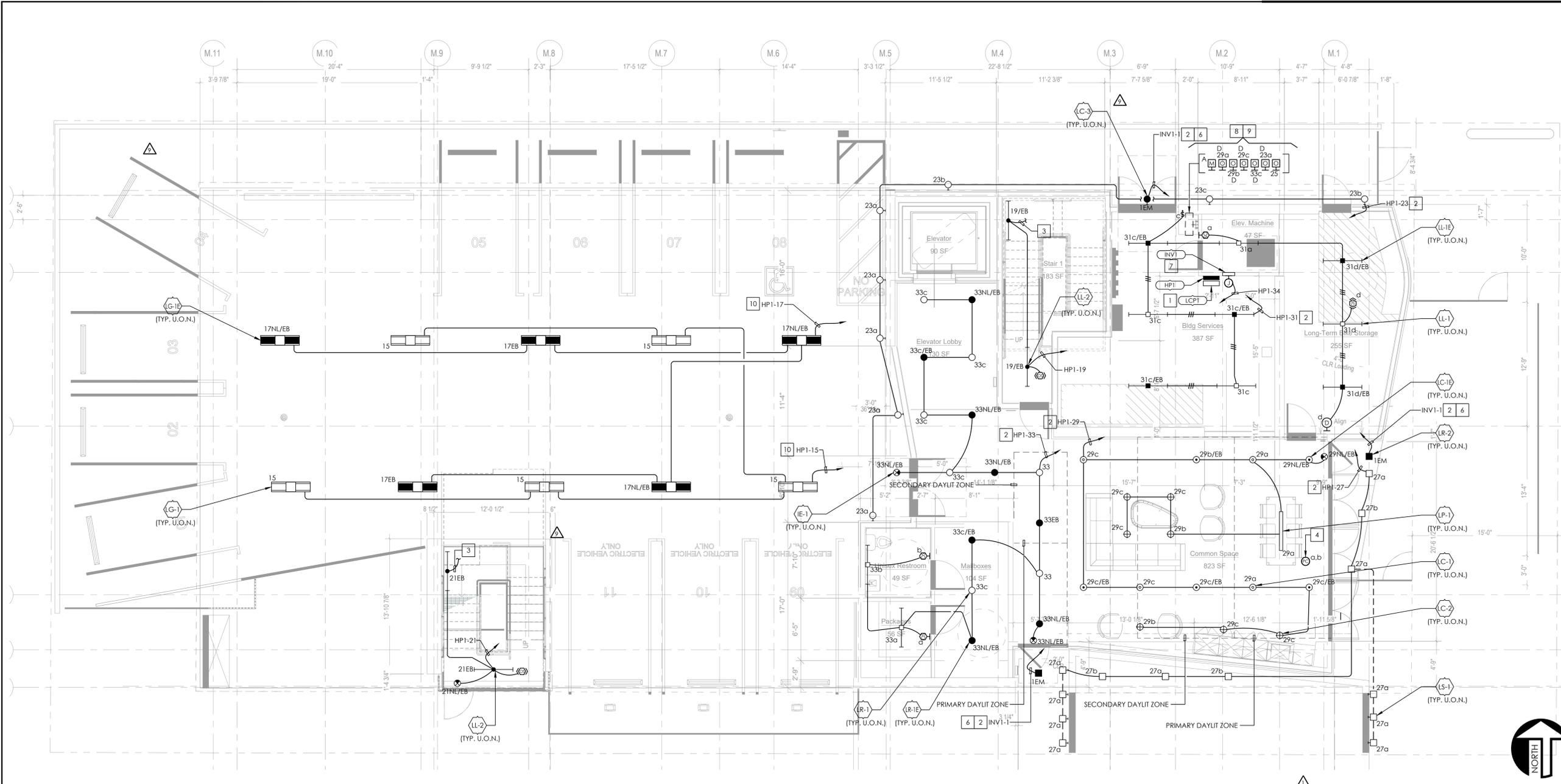
- A. CALL UNDERGROUND SERVICE ALERT AT 1 (800) 227-2600 (NORTH) OR AT 1 (800) 422-4133 (SOUTH) OR APPLICABLE STATE AND LOCAL DIG SAFE OR UNDERGROUND ALERT HOTLINES 2 DAYS OR 48 HOURS PRIOR TO EXCAVATION.
- B. MINIMUM OF SIX INCHES (6") OF COMPACTED SAND, GRADED LEVEL IS REQUIRED UNDER ALL PULLBOXES, HANDHOLES AND SPLICE BOXES. SIX INCHES (6") OF GRAVEL DRAIN ROCK OR BASE ROCK IS REQUIRED FOR MANHOLES. THE FLOOR MUST BE LEVEL AND FREE OF DEBRIS.
- C. PLACEMENT OF BOXES AND MANHOLES MUST ALLOW FOR FINAL GRADE OF NEW SIDEWALK AND PARKWAYS.
- D. CONDUIT MUST ENTER AND TERMINATE AT THE END WALL OR SIDE WALL IN A TERMINATOR OR KNOCKOUT AS SPECIFIED BY UTILITY ENGINEER. ENTRY THROUGH THE BOTTOM OF A BOX OR THE MIDDLE OF SIDE WALL IS NOT ACCEPTABLE.
- E. ALL PULLBOXES, SPLICE BOX AND MANHOLES PLACED BY THE OWNER SHALL BE MAINTAINED AND OWNED BY THE PROPERTY OWNER AND APPROVED BY THE UTILITY COMPANY. THE OWNER MUST ENSURE BOXES AND MANHOLES INCLUDE APPROPRIATE RACKING, SUMP, BOLT DOWN COVER, AND PULLING EYES. LABEL ALL NON-UTILITY COMMUNICATION MANHOLES, VAULTS AND PULLBOX COVERS WITH A GENERIC TELEPHONE NAME OR "COMMUNICATIONS".
- F. ALL CONDUITS ENTERING KNOCKOUTS IN A PLASTIC OR POLYMER BOX MUST BE CUT WITHIN ONE INCH FLUSH WITH THE INSIDE OF THE WALL AND SEALED. ALL JOINTS SHALL BE MORTARED AND ALL UNUSED PORTS AND OPENINGS SHALL BE SEALED. CEMENT MORTAR, WATER PLUG CEMENT OR OTHER APPROVED MORTARS SHALL BE USED.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROPOSED TRANSFORMER LOCATION. SIZE OF UTILITY TRANSFORMER PAD PER LOS ANGELES DEPARTMENT OF WATER AND POWER (LADWP) SPECIFICATIONS. VERIFY EXACT LOCATION AND REQUIREMENTS WITH UTILITY COORDINATOR PRIOR TO INSTALLATION.
- 2. PROVIDE MIN. OF 5" DIAMETER GALVANIZED PIPE BARRIER POST INSTALLED IN CONCRETE FOUNDATION. COORDINATE EXACT LOCATION, REQUIREMENTS AND SPECIFICATIONS WITH LADWP PRIOR TO INSTALLATION.
- 3. CONTRACTOR TO VERIFY EXACT POINT OF CONNECTION AND REQUIREMENTS WITH UTILITY COORDINATOR PRIOR TO BID AND INSTALLATION. CONTRACTOR SHALL INCLUDE IN BID, COST PER LINEAR FOOT FOR TRENCHING AND CONDUIT.
- 4. PROVIDE REQUIRED CONDUIT UNDERGROUND ROUTED TO SERVICE ENTRANCE EQUIPMENT "MS1" UNDERGROUND PULL SECTION. PROVIDE ADDITIONAL SPARE CONDUITS AS REQUIRED. CONTRACTOR TO VERIFY EXACT REQUIREMENTS WITH UTILITY COORDINATOR AND LADWP PRIOR TO BID AND INSTALLATION.
- 5. REFER TO SINGLE-LINE DIAGRAM FOR COMPLETE FEEDER SIZE.
- 6. PROVIDE 4" X 8" X 3/4" THICK BACKBOARD PAINTED WITH FIRE RETARDANT PAINT, COLOR TO MATCH SURROUNDING WALLS. PROVIDE 1/2", 1#6 GROUNDING PER GROUNDING DETAIL #3 ON SHEET E402.
- 7. LIGHTING CONTROL PANEL "LCP1" TO BE MOUNTED ABOVE PANEL "HP1."
- 8. REFER TO SWITCHBOARD ELEVATION ON SHEET E402 FOR DIMENSIONS.
- 9. NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT. ELECTRICAL ROOM DOOR(S) SHALL BE EQUIPPED WITH PANIC HARDWARE FOR EGRESS AS REQUIRED BY NEC 110-26 (OR CEC WHERE ADOPTED).
- 10. CONDUITS SHALL BE BURIED MINIMUM 24" BELOW GRADE PER CEC TABLE 300.5. COORDINATE WITH STRUCTURAL FOR CONDUIT THROUGH FOUNDATION PRIOR TO INSTALLATION.

- 11. REFER TO GENERATOR SPECIFICATIONS AND CUT SHEET ON E406 & E407 FOR SIZE AND MORE INFORMATION.
- 12. TENANT SUB-METERING. REFER TO SINGLE-LINE DIAGRAM ON SHEET E401 FOR SUB-METERING INFORMATION.
- 13. PROVIDE PERMANENT PLAQUE OR DIRECTORY DENOTING LOCATIONS OF BUILDING'S MAIN SERVICE DISCONNECT AND EMERGENCY DISCONNECT AS REQUIRED PER CEC 229.37 AND 230.2(E).

- G. ALL COMMUNICATION CONDUITS SHALL HAVE A MAXIMUM OF TWO (2) 90 DEGREE BENDS PER SECTION, UNLESS OTHERWISE APPROVED BY UTILITY COMPANY. PULL BOXES MAY BE REQUIRED. STRAIGHT 20' LENGTHS MAY BE USED ON 90 DEGREE BENDS WITH A RADIUS GREATER THAN 40'. ALL OTHER BENDS SHALL BE FACTORY BENDS.
- H. MINIMUM RADIUS BENDS SHALL BE EQUIVALENT OF THE DIAMETER OF CONDUIT IN FEET, U.O.N.
- I. BENDS OR SWEEPS THAT HAVE A RADIUS OF 80' OR LESS, SHALL BE ENCASED IN 2500 PSI CONCRETE.
- J. ALL SITE BRANCH CIRCUIT SHALL INCLUDE AN NEC-SIZED EQUIPMENT GROUND CONDUCTOR.
- K. LOCATIONS OF UTILITY STRUCTURES AND CONDUIT ROUTING ARE SHOWN IN DIAGRAMMATIC FORMAT. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING TO AVOID EXISTING DUCTS, PIPING, OR CONDUITS, ETC., AND TO PREVENT HAZARD TO PERSONNEL AND/OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY.
- L. UTILITY POINT OF CONNECTIONS AND WORK/MATERIAL SHOWN ARE BASED UPON PRELIMINARY INFORMATION ONLY AND ARE SHOWN FOR BID PURPOSES ONLY. CONTRACTOR TO PROVIDE COST PER LINEAR FOOT FOR CONDUIT, TRENCHING AND BACKFILL AS BASIS OF THE BID.



LEVEL 1 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

- ### PLAN NOTES
- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
 - C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
 - D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
 - E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
 - F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS [DIMMED HOT, SWITCHED HOT AND NEUTRAL] OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
 - G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
 - H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
 - I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
 - J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
 - K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
 - L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

- ### KEY NOTES
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
1. LIGHTING CONTROL PANEL "LCP1" TO BE MOUNTED ABOVE PANEL "HP1."
 2. ROUTE VIA LIGHTING CONTROL PANEL "LCP1." REFER TO LIGHTING CONTROL SCHEDULE ON SHEET E502 FOR MORE INFORMATION. PROVIDE ADDITIONAL UNSWITCHED "HOT" CONDUCTORS FOR EMERGENCY/NIGHT LIGHTING.
 3. SEE SHEET E102 FOR STAIRWELL LIGHTING CONTINUATION.
 4. PROVIDE LOW-VOLTAGE DIMMING PHOTOCELL EQUAL TO #NLIGHT NCM-ADCX PER LIGHTING CONTROL SYSTEM. REFER TO SHEET E502 FOR LIGHTING CONTROL SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
 5. REFER TO LIGHT FIXTURE SCHEDULE FOR COMPATIBLE LINE-VOLTAGE DIMMER SWITCHES.
 6. PROVIDE JUNCTION BOX NEAR PANEL FOR MULTIPLE HOMERUN CIRCUITRY.
 7. PROVIDE INVERTER EQUAL TO LVS #CEPS-M-110-120-W.
 8. PROVIDE LOW-VOLTAGE SWITCHES/DIMMERS COMPATIBLE TO LIGHTING CONTROL SYSTEM EQUAL TO #NLIGHT #nPODM-WH FOR MASTER SWITCH AND NON-DIMMING. #nPODM-DX-WH FOR LOCAL/OVERRIDE WITH DIMMING. REFER TO LIGHTING CONTROL SPECIFICATIONS ON SHEET E502 FOR MORE INFORMATION.
 9. PROVIDE LOCK BOX TO SWITCHBANK.
 10. LIGHTING CONTROL VIA BUILT-IN MOTION SENSOR. SEE FIXTURE SCHEDULE FOR MORE INFORMATION.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

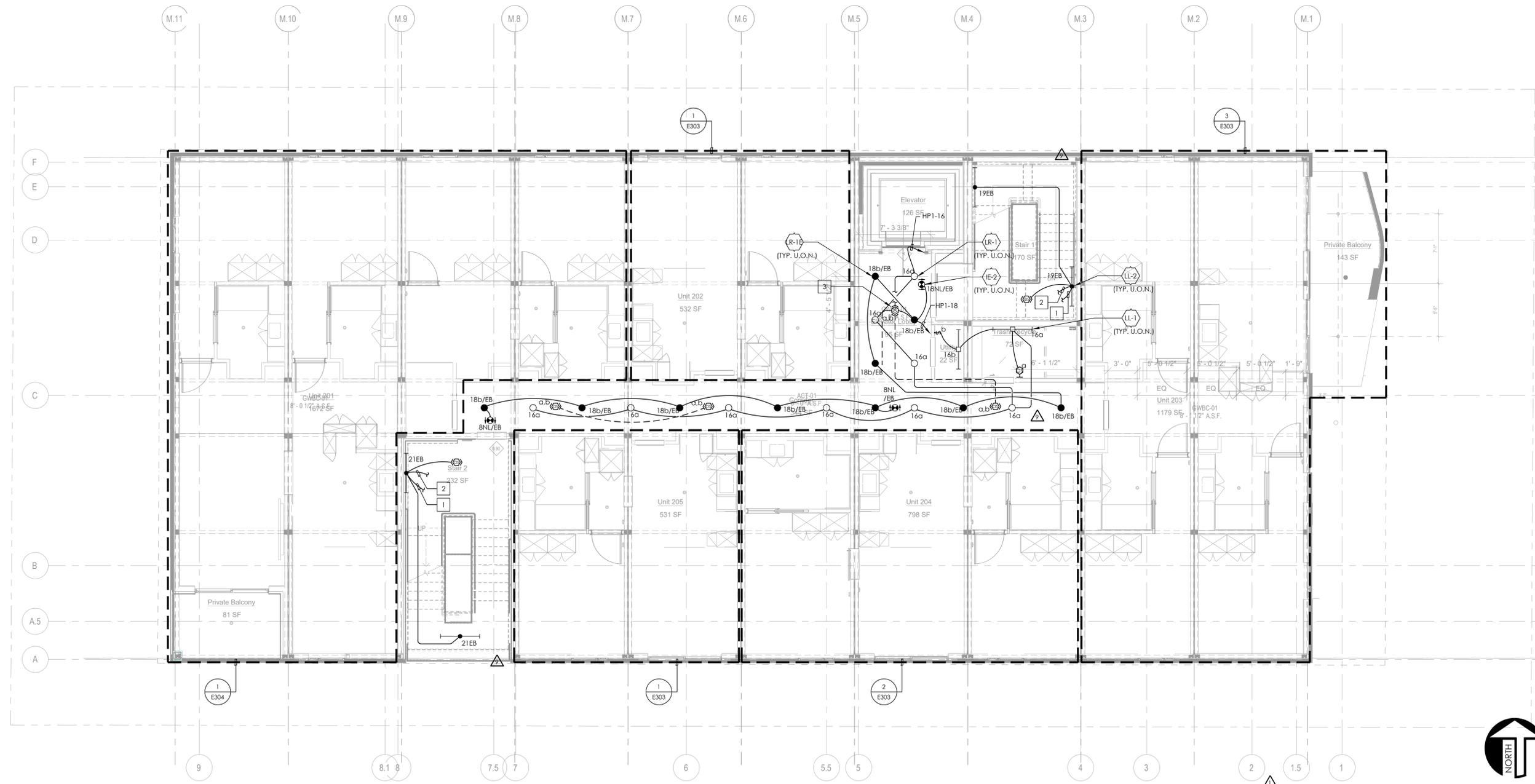
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:25:01 PM

SHEET TITLE:
LEVEL 1 LIGHTING PLAN

SHEET NO:
E101



LEVEL 2 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

- ### PLAN NOTES
- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
 - C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
 - D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
 - E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
 - F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
 - G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
 - H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
 - I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
 - J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
 - K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
 - L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

- ### KEY NOTES
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
 - 1. REFER TO SHEET E101 FOR STAIRWELL LIGHTING CONTINUATION.
 - 2. REFER TO SHEET E103 FOR STAIRWELL LIGHTING CONTINUATION.
 - 3. PROVIDE ADDITIONAL SWITCH PACK TO CEILING MOUNTED OCCUPANCY SENSORS AS REQUIRED TO ACCOMMODATE TWO CIRCUITS AS SHOWN. TYPICAL TO ALL OCCUPANCY SENSORS IN CORRIDOR.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

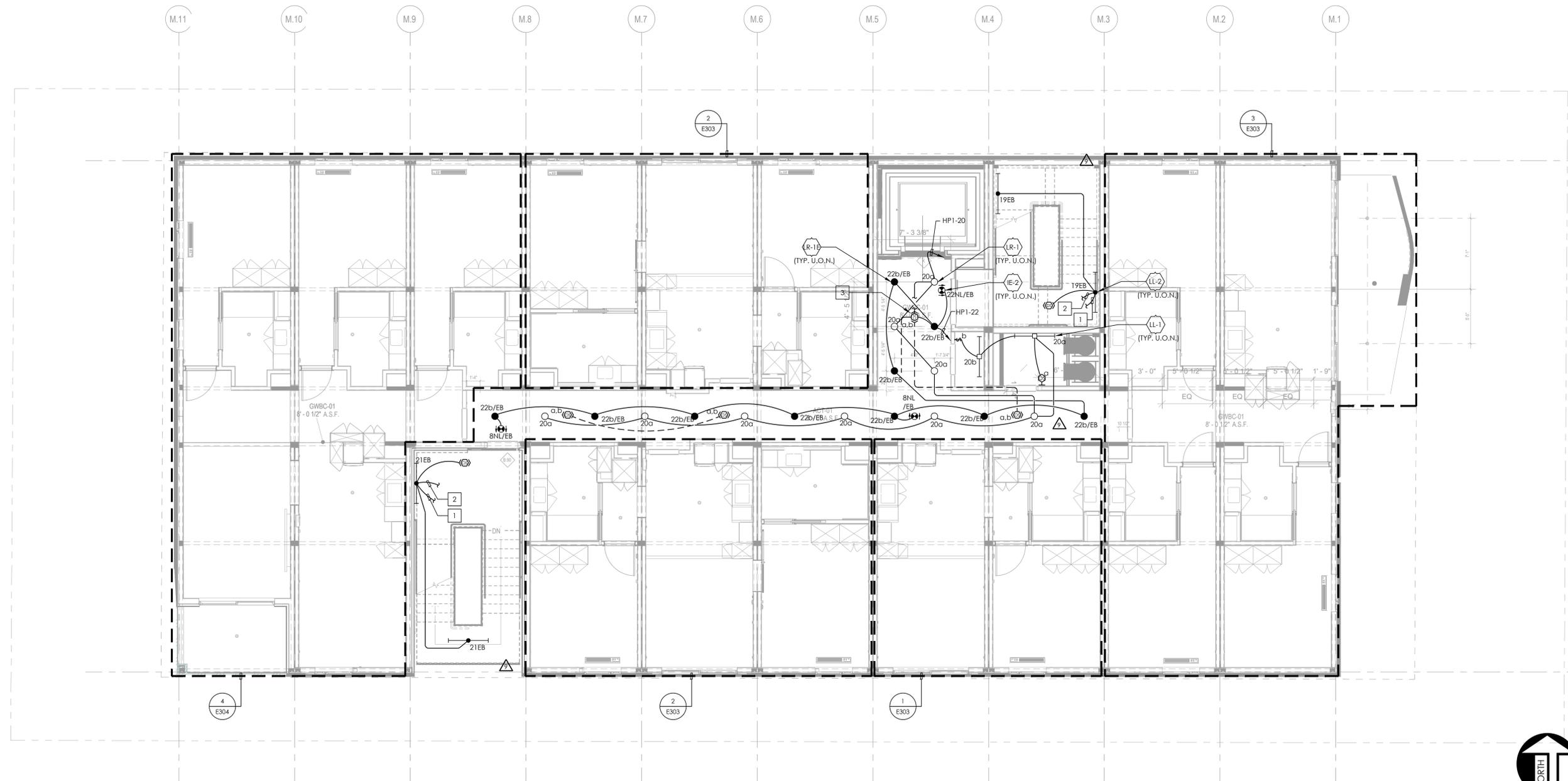
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:21:48 PM

SHEET TITLE:
LEVEL 2 LIGHTING PLAN

SHEET NO:
E102



NATIONAL
 ENGINEERING & CONSULTING, INC
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
 COPYRIGHT NOTICE:
 COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. NO REPRODUCTION, DISTRIBUTION, OR USE OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PERMITTED WITHOUT THE EXPRESS, WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
 1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
 LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:11:21 PM

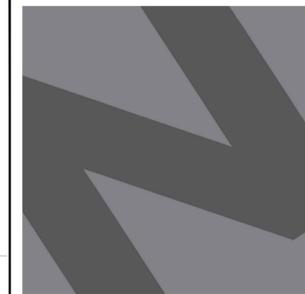
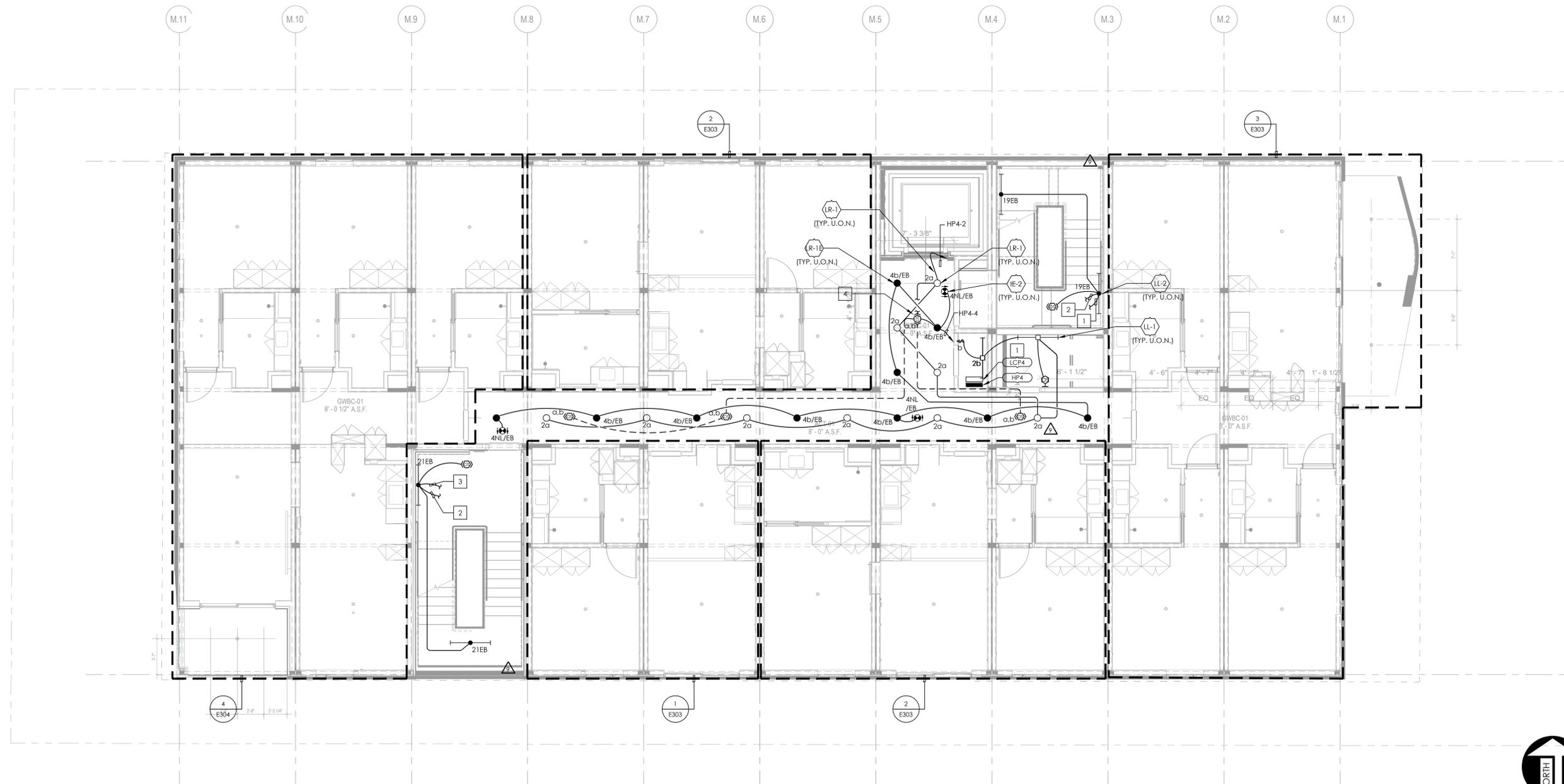
SHEET TITLE:
LEVEL 3 LIGHTING PLAN

SHEET NO:
E103

LEVEL 3 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

- PLAN NOTES**
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
 - CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
 - ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
 - BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
 - FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
 - EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
 - ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
 - ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
 - ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
 - ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
 - ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

- KEY NOTES**
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- REFER TO SHEET E102 FOR STAIRWELL LIGHTING CONTINUATION.
 - REFER TO SHEET E104 FOR STAIRWELL LIGHTING CONTINUATION.
 - PROVIDE ADDITIONAL SWITCH PACK TO CEILING MOUNTED OCCUPANCY SENSORS AS REQUIRED TO ACCOMMODATE TWO CIRCUITS AS SHOWN. TYPICAL TO ALL OCCUPANCY SENSORS IN CORRIDOR.



NATIONAL
 ENGINEERING & CONSULTING, INC.
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
 COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
 1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
 LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:24:22 PM

SHEET TITLE:

LEVEL 4 LIGHTING PLAN

SHEET NO:

E104

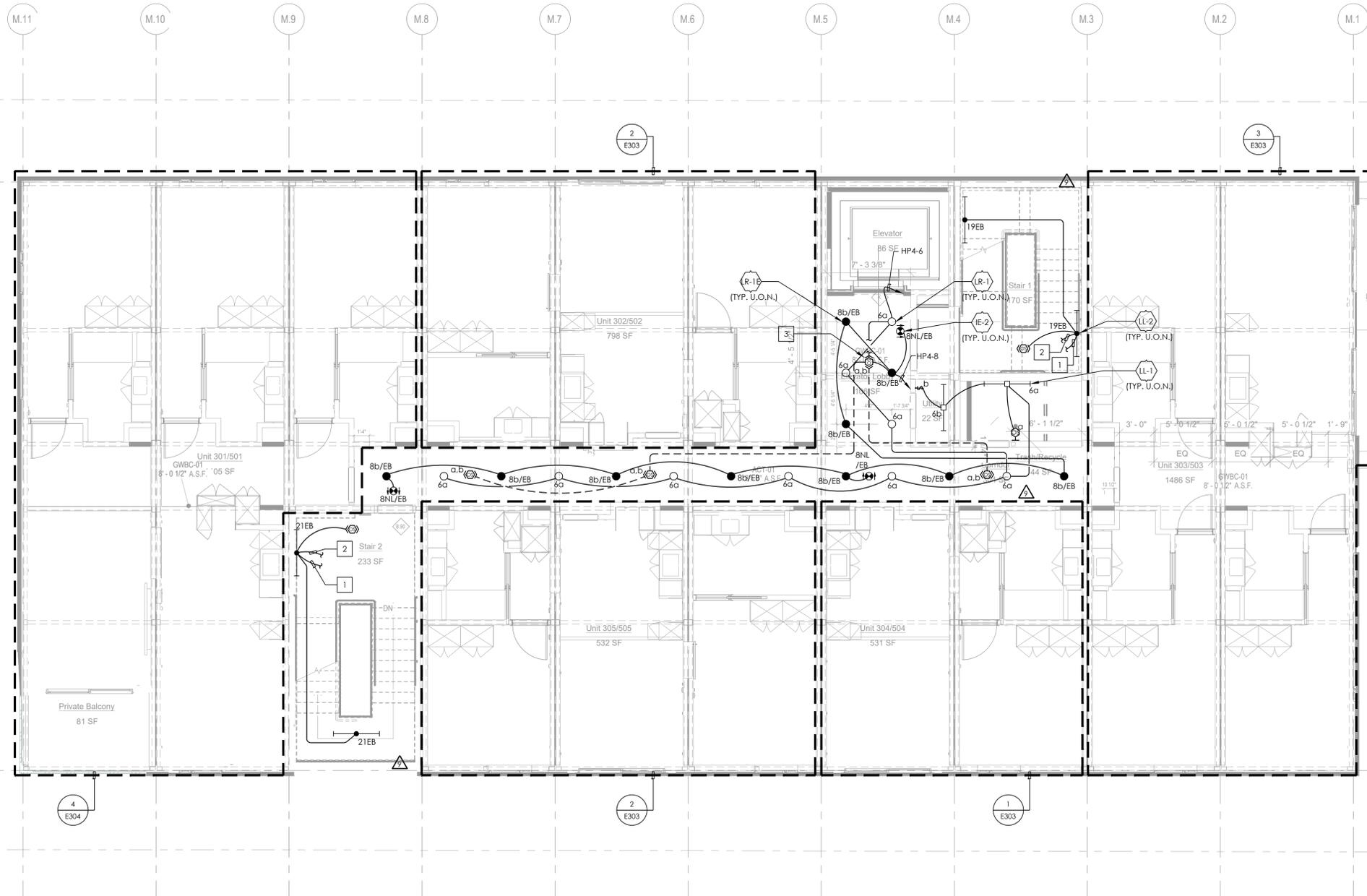
LEVEL 4 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

PLAN NOTES

- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
- B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
- C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
- D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
- E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
- F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
- G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
- H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
- I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
- J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
- K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
- L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. LIGHTING CONTROL PANEL "LCP4" TO BE MOUNTED ABOVE PANEL "HP4."
- 2. REFER TO SHEET E103 FOR STAIRWELL LIGHTING CONTINUATION.
- 3. REFER TO SHEET E105 FOR STAIRWELL LIGHTING CONTINUATION.
- 4. PROVIDE ADDITIONAL SWITCH PACK TO CEILING MOUNTED OCCUPANCY SENSORS AS REQUIRED TO ACCOMMODATE TWO CIRCUITS AS SHOWN, TYPICAL TO ALL OCCUPANCY SENSORS IN CORRIDOR.



LEVEL 5 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

- ### PLAN NOTES
- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
 - C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
 - D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
 - E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
 - F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
 - G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
 - H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
 - I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
 - J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
 - K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
 - L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

- ### KEY NOTES
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
 - 1. REFER TO SHEET E104 FOR STAIR LIGHTING CONTINUATION.
 - 2. REFER TO SHEET E106 FOR STAIR LIGHTING CONTINUATION.
 - 3. PROVIDE ADDITIONAL SWITCH PACK TO CEILING MOUNTED OCCUPANCY SENSORS AS REQUIRED TO ACCOMMODATE TWO CIRCUITS AS SHOWN. TYPICAL TO ALL OCCUPANCY SENSORS IN CORRIDOR.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. NO PART OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE EXPRESS WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:08:40 PM
SHEET TITLE:

LEVEL 5 LIGHTING PLAN

SHEET NO:
E105



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

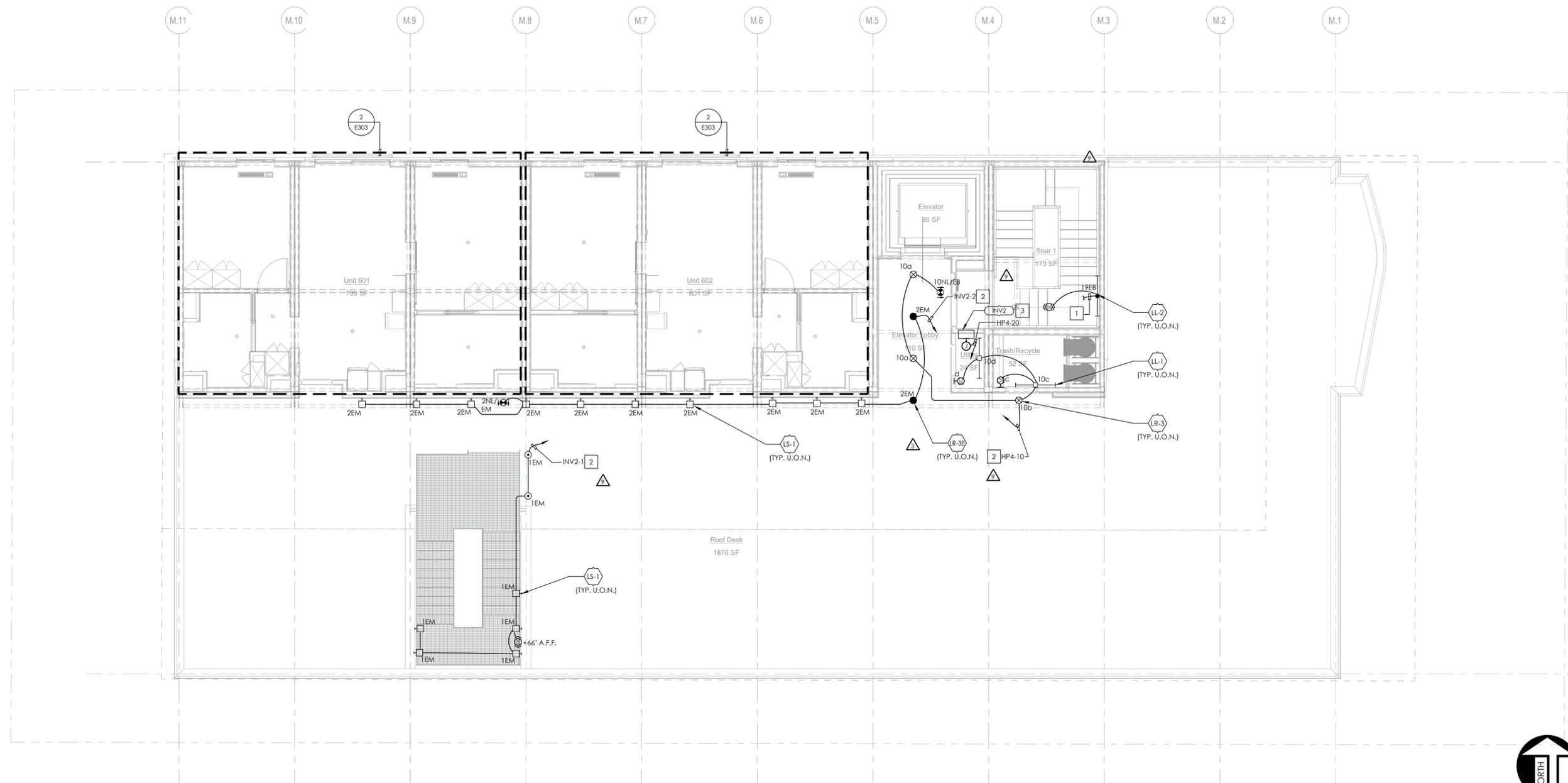
Plot Date: 10/11/2023 4:07:13 PM

SHEET TITLE:

**LEVEL 6
LIGHTING PLAN**

SHEET NO.:

E106



LEVEL 6 LIGHTING PLAN SCALE 3/16" = 1'-0" 1

- PLAN NOTES**
- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
 - C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
 - D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
 - E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
 - F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
 - G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
 - H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
 - I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
 - J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
 - K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
 - L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

- KEY NOTES**
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
 - 1. REFER TO SHEET E105 FOR BRANCH CIRCUIT CONTINUATION.
 - 2. ROUTE VIA LIGHTING CONTROL PANEL "LCP4." REFER TO LIGHTING CONTROL SCHEDULE ON SHEET E502 FOR MORE INFORMATION. PROVIDE ADDITIONAL UNSWITCHED "HOT" CONDUCTORS FOR EMERGENCY/NIGHT LIGHTING IF SHOWN.
 - 3. PROVIDE 120V INVERTER EQUAL TO LVS#CEPS-M-2-W-1-B-20-02 SURFACE MOUNTED TO THE WALL WITH TWO 20A OUTPUT BREAKERS.



STAMP:

COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

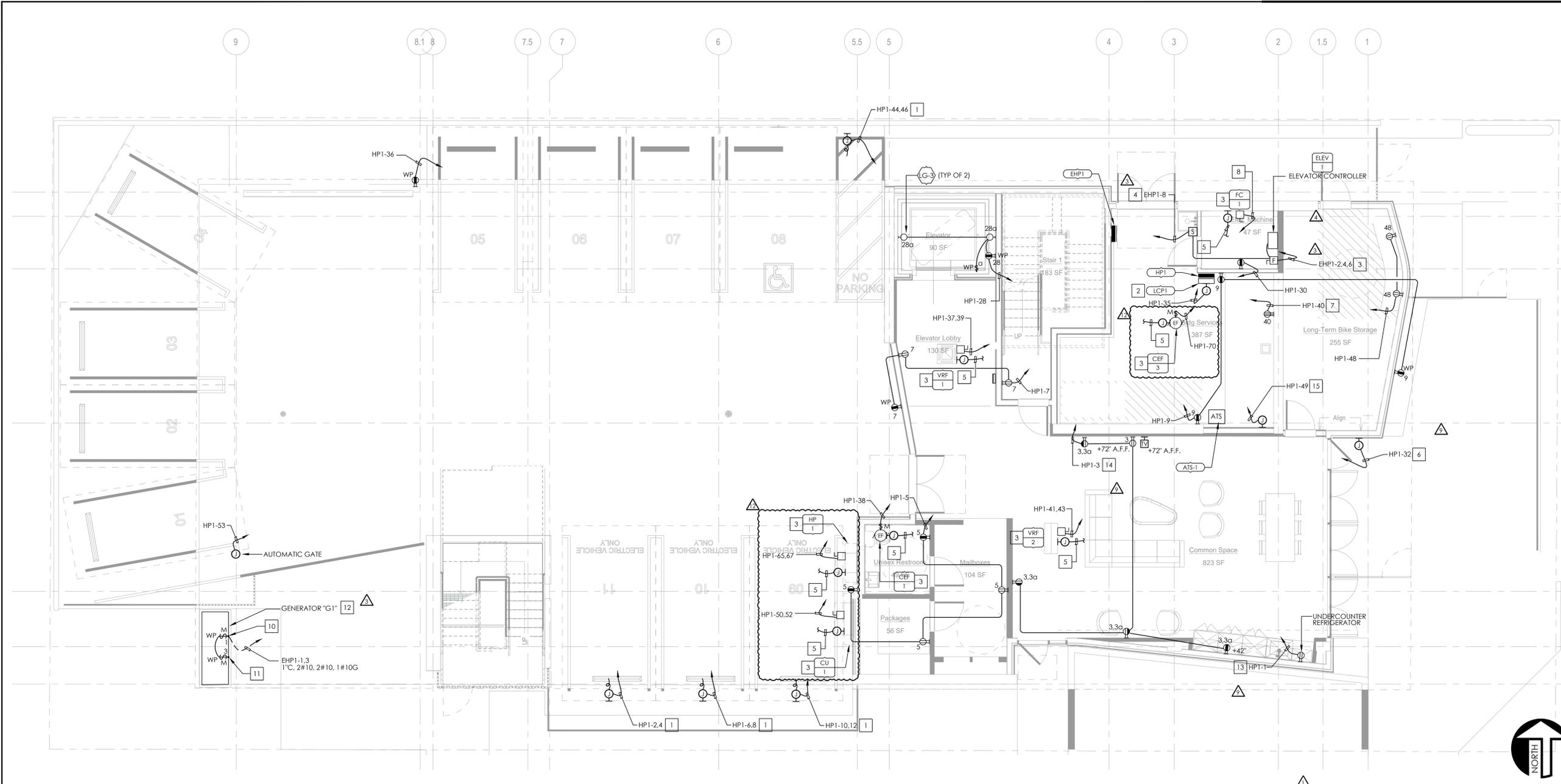
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:29:24 PM
SHEET TITLE:

LEVEL 1 POWER PLAN

SHEET NO:
E201



LEVEL 1 POWER PLAN SCALE 3/16" = 1'-0" 1

SIGNAL PLAN NOTES

- A. CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- B. CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- C. CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- D. TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- E. INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- F. ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- G. ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- H. CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- I. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

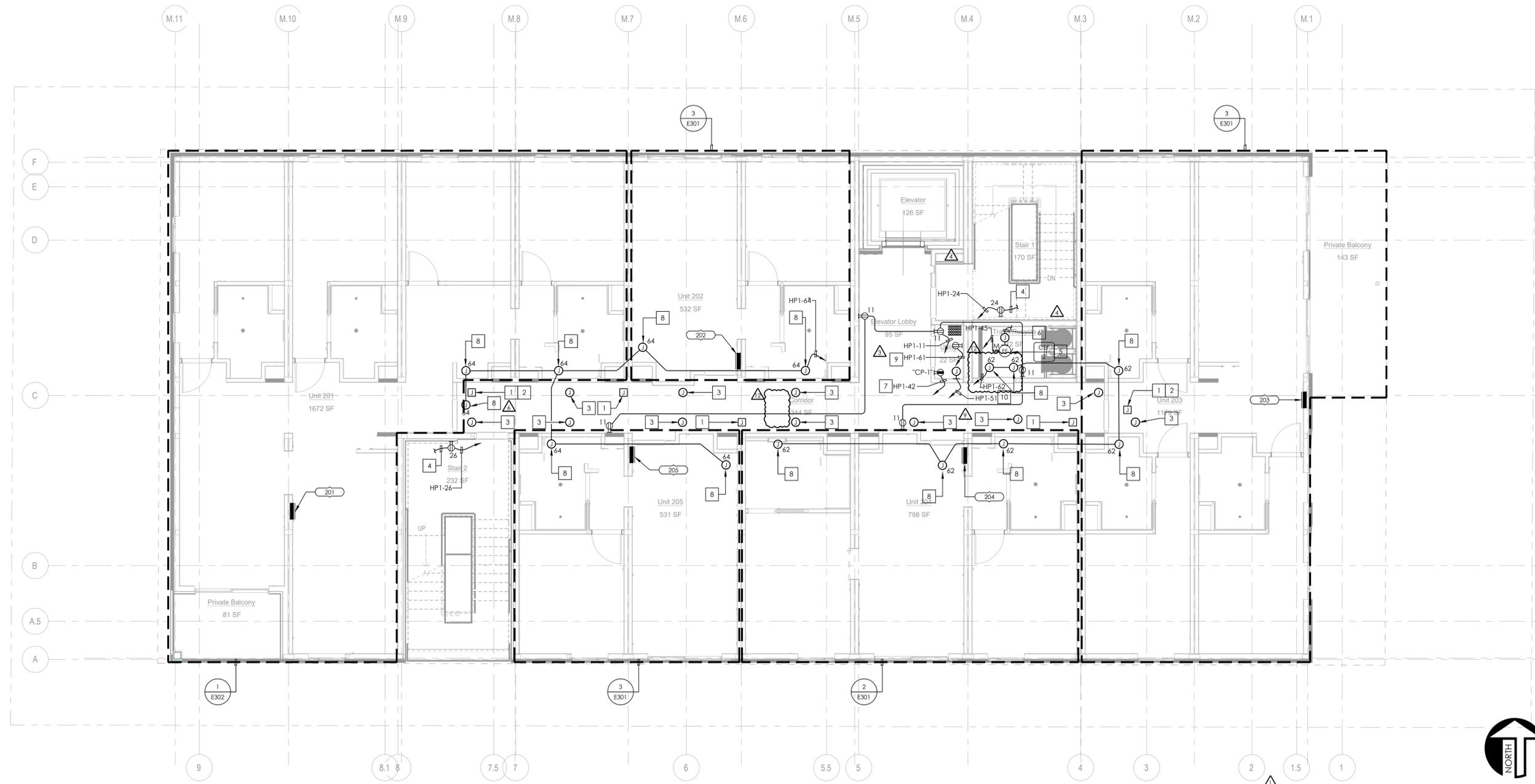
PLAN NOTES

- A. ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- B. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- C. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- D. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 40A, 208V, 1Ø FOR EV CHARGING STATION WITH 3/4" C, 2#8, & 1#10 GND.
- 2. LIGHTING CONTROL PANEL "LCP1" TO BE MOUNTED ABOVE PANEL "HP1."
- 3. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR FEEDER/BRANCH CIRCUIT INFORMATION.
- 4. PROVIDE 250A/3P, 208V, 3Ø ENCLOSED CIRCUIT BREAKER WITH SHUNT TRIP. PROVIDE 120V TO SHUNT TRIP RELAY AS REQUIRED. SHUNT TRIP RELAY/MODULE SHALL BE ROUTED VIA NORMALLY OPEN FIRE ALARM RELAY PER FIRE ALARM DRAWINGS. COORDINATE EXACT REQUIREMENTS WITH FIRE ALARM VENDOR / INSTALLER PRIOR TO ROUGH-IN.
- 5. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
- 6. PROVIDE 120V POWER AND TO SECURITY KEYPAD AND STUB 1" C WITH PULL-STRING TO SECURITY PANEL. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH SECURITY VENDOR PRIOR TO ROUGH-IN.
- 7. PROVIDE 120V, 3ØA POWER WITH 1/2" C, 2#10, 1#10G TO WATER HEATER WH-1. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
- 8. FAN COIL UNIT (FC-1) SHALL BE POWERED BY CONDENSING OUTDOOR UNIT CU-1. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.
- 9. PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO ROUGH-IN.
- 10. PROVIDE 120V POWER TO STAND-BY GENERATOR'S BATTERY CHARGER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH GENERATOR MANUFACTURER PRIOR TO ROUGH-IN.
- 11. PROVIDE 120V POWER TO STAND-BY GENERATOR'S JACKET WATER HEATER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH GENERATOR MANUFACTURER PRIOR TO ROUGH-IN.
- 12. REFER TO GENERATOR SPECIFICATIONS AND CUT SHEET ON E406 & E407 FOR SIZE AND MORE INFORMATION.
- 13. ROUTE CIRCUIT VIA GFCI BREAKER. REFER TO RESPECTIVE PANEL SCHEDULE FOR MORE INFORMATION.

- 14. ROUTE RECEPTACLE CIRCUIT SHOWN WITH SUBSCRIPT "g" VIA LIGHTING CONTROL PANEL "LCP1" FOR PLUG CONTROL.
- 15. PROVIDE 120V TO FIRE ALARM CONTROL PANEL (FACP). COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FIRE ALARM CONSULTANT / INSTALLER PRIOR TO ROUGH-IN.



LEVEL 2 POWER PLAN

SCALE
3/16" = 1'-0"

1

SIGNAL PLAN NOTES

- A. CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- B. CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- C. CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- D. TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- E. INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- F. ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- G. ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- H. CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- I. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- A. ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- B. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- C. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- D. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
1. J-BOX TO BE PLACED IN ACCESSIBLE CEILING FOR CONNECTION TO MODULAR UNITS LOAD CENTER.
 2. CONNECTION TO MODULAR UNITS LOAD CENTER TO BE COMPLETED ON SITE THROUGH UNITS CORRIDOR SPACE.
 3. J-BOX IN ACCESSIBLE CEILING FOR BRANCH CIRCUITS FROM MODULAR UNITS LOAD CENTER TO DEVICES/LOADS. UP TO (4) BRANCH CIRCUITS PER J-BOX. PROVIDE AS REQUIRED PER UNIT PLANS.
 4. SEE SHEET E203 FOR BRANCH CIRCUIT CONTINUATION.
 5. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION.
 6. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
 7. PROVIDE 120V TO RECIRC PUMP "CP-1". VERIFY EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
 8. PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.
 9. PROVIDE 120V TO (5) REMOTE PULSE METER READERS FOR UTILITY WATER SUB-METERING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
 10. PROVIDE 120V TO FIRE ALARM SYSTEM'S "PBS". COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FIRE ALARM CONSULTANT / INSTALLER PRIOR TO ROUGH-IN.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

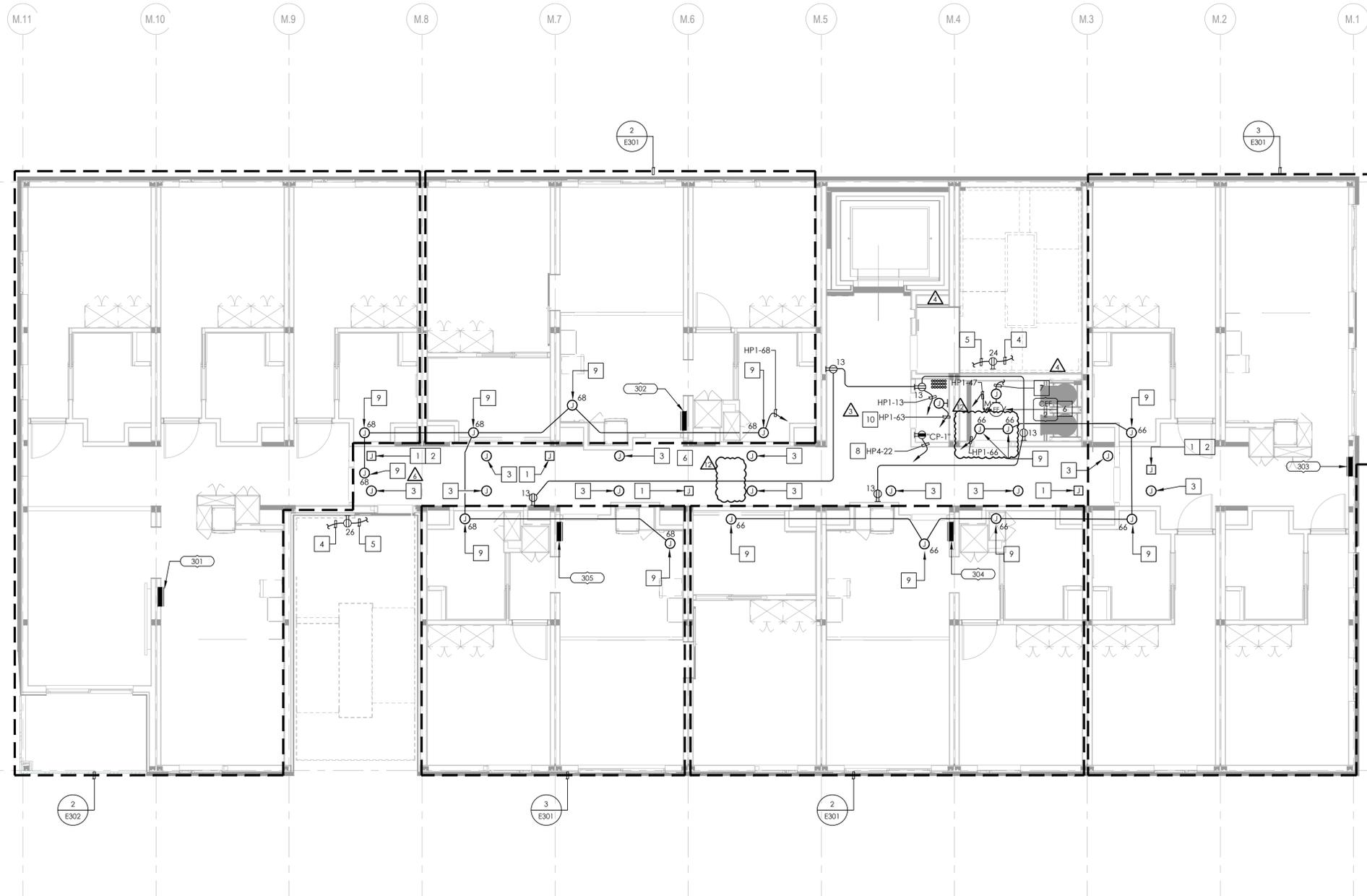
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:28:48 PM

SHEET TITLE:
LEVEL 2 POWER PLAN

SHEET NO:
E202



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016



LEVEL 3 POWER PLAN

SCALE
3/16" = 1'-0" **1**

SIGNAL PLAN NOTES

- A. CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- B. CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- C. CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- D. TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- E. INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- F. ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- G. ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- H. CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- I. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- A. ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- B. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- C. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- D. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. J-BOX TO BE PLACED IN ACCESSIBLE CEILING FOR CONNECTION TO MODULAR UNITS' LOAD CENTER.
- 2. CONNECTION TO MODULAR UNITS' LOAD CENTER TO BE COMPLETED ON SITE THROUGH UNITS' CORRIDOR SPACE.
- 3. J-BOX IN ACCESSIBLE CEILING FOR BRANCH CIRCUITS FROM MODULAR UNITS' LOAD CENTER TO DEVICES/LOADS. UP TO (4) BRANCH CIRCUITS PER J-BOX. PROVIDE AS REQUIRED PER UNIT PLANS.
- 4. REFER TO SHEET E204 FOR BRANCH CIRCUIT CONTINUATION.
- 5. REFER TO SHEET E202 FOR BRANCH CIRCUIT CONTINUATION.
- 6. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION.
- 7. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
- 8. PROVIDE 120V TO RECIRC PUMP "CP-1". VERIFY EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
- 9. PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.
- 10. PROVIDE 120V TO (5) REMOTE PULSE METER READERS FOR UTILITY WATER SUB-METERING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

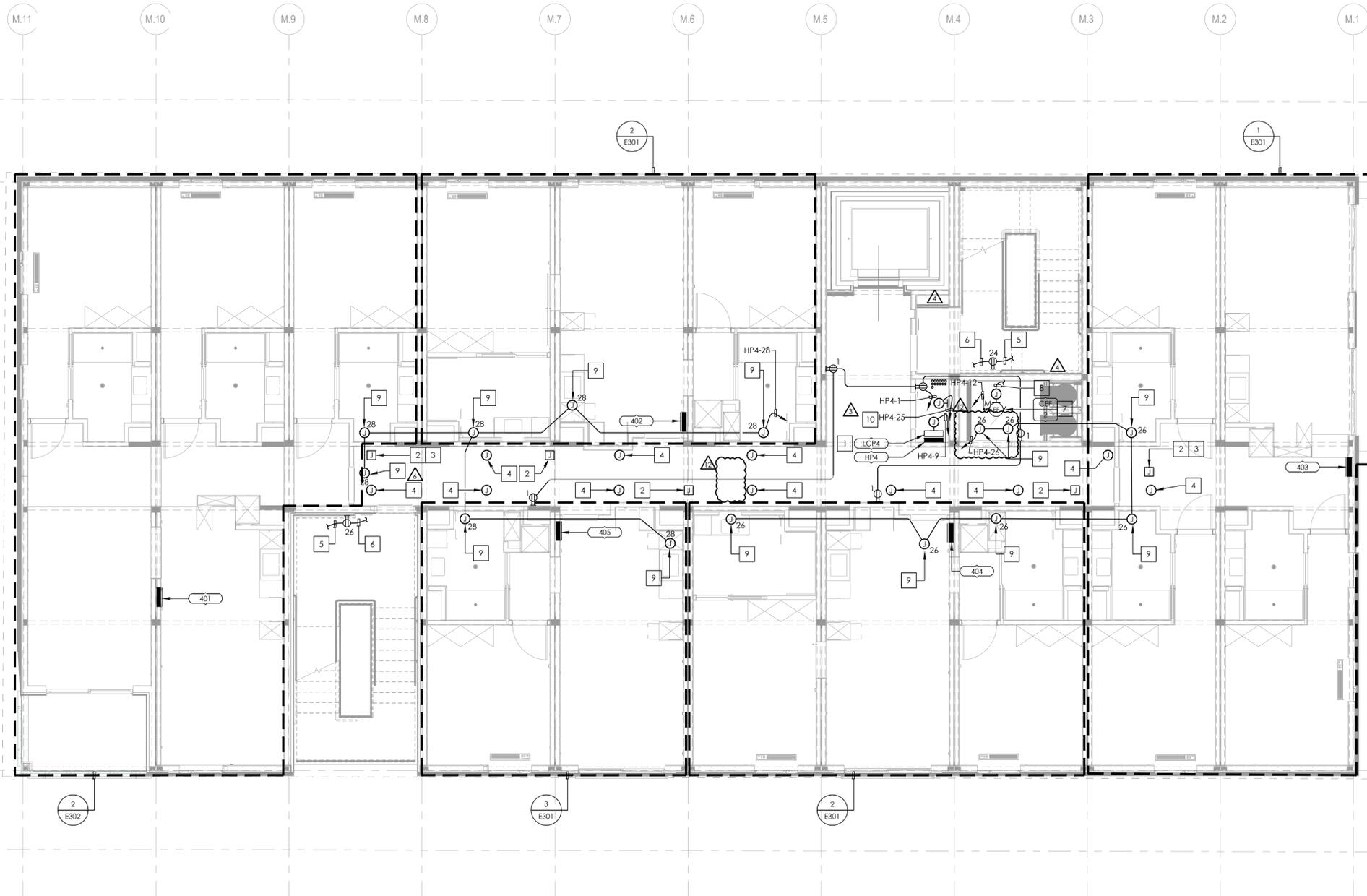
Plot Date: 10/11/2023 4:16:39 PM

SHEET TITLE:

**LEVEL 3
POWER PLAN**

SHEET NO.:

E203



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:17:19 PM

SHEET TITLE:
LEVEL 4 POWER PLAN

SHEET NO:
E204

LEVEL 4 POWER PLAN SCALE 3/16" = 1'-0" 1

SIGNAL PLAN NOTES

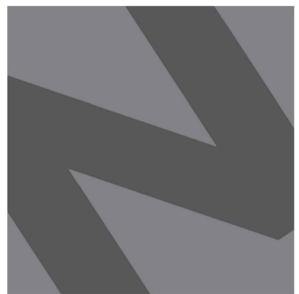
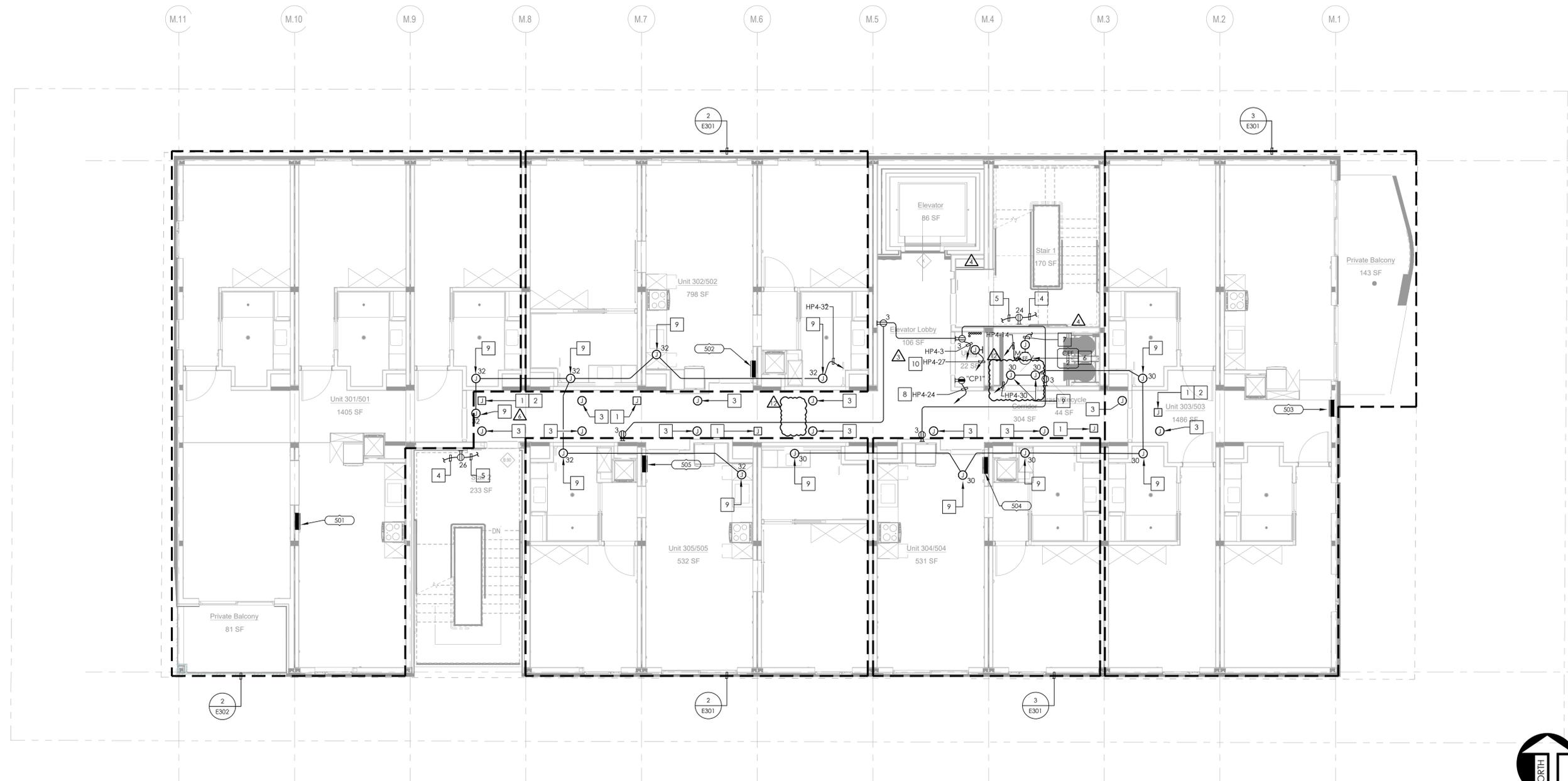
- CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4". RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- LIGHTING CONTROL PANEL "LCP4" TO BE MOUNTED ABOVE PANEL "HP4".
 - J-BOX TO BE PLACED IN ACCESSIBLE CEILING FOR CONNECTION TO MODULAR UNITS LOAD CENTER.
 - CONNECTION TO MODULAR UNITS LOAD CENTER TO BE COMPLETED ON SITE THROUGH UNITS CORRIDOR SPACE.
 - J-BOX IN ACCESSIBLE CEILING FOR BRANCH CIRCUITS FROM MODULAR UNITS LOAD CENTER TO DEVICES/LOADS. UP TO (4) BRANCH CIRCUITS PER J-BOX. PROVIDE AS REQUIRED PER UNIT PLANS.
 - REFER TO SHEET E205 FOR BRANCH CIRCUIT CONTINUATION.
 - REFER TO SHEET E203 FOR BRANCH CIRCUIT CONTINUATION.
 - REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR FEEDER BRANCH CIRCUIT INFORMATION.
 - PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
 - PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.
 - PROVIDE 120V TO EK4 PUSH3 GATEWAY AND TO (5) REMOTE PULSE METER READERS FOR UTILITY WATER SUB-METERING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016



LEVEL 5 POWER PLAN

SCALE
3/16" = 1'-0"

1

SIGNAL PLAN NOTES

- A. CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- B. CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- C. CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- D. TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- E. INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- F. ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- G. ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSITIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILING WITHIN THE ACCESSIBLE CEILING SPACE.
- H. CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- I. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- A. ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- B. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- C. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- D. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. J-BOX TO BE PLACED IN ACCESSIBLE CEILING FOR CONNECTION TO MODULAR UNITS' LOAD CENTER.
- 2. CONNECTION TO MODULAR UNITS' LOAD CENTER TO BE COMPLETED ON SITE THROUGH UNITS' CORRIDOR SPACE.
- 3. J-BOX IN ACCESSIBLE CEILING FOR BRANCH CIRCUITS FROM MODULAR UNITS' LOAD CENTER TO DEVICES/LOADS. UP TO (4) BRANCH CIRCUITS PER J-BOX. PROVIDE AS REQUIRED PER UNIT PLANS.
- 4. REFER TO SHEET E206 FOR BRANCH CIRCUIT CONTINUATION.
- 5. REFER TO SHEET E204 FOR BRANCH CIRCUIT CONTINUATION.
- 6. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION.
- 7. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
- 8. PROVIDE 120V TO RECIRC PUMP "CP-1". VERIFY EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
- 9. PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.
- 10. PROVIDE 120V TO (5) REMOTE PULSE METER READERS FOR UTILITY WATER SUB-METERING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

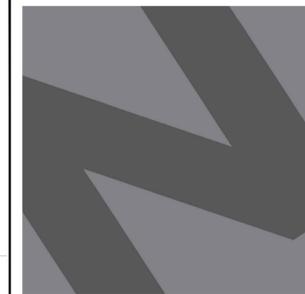
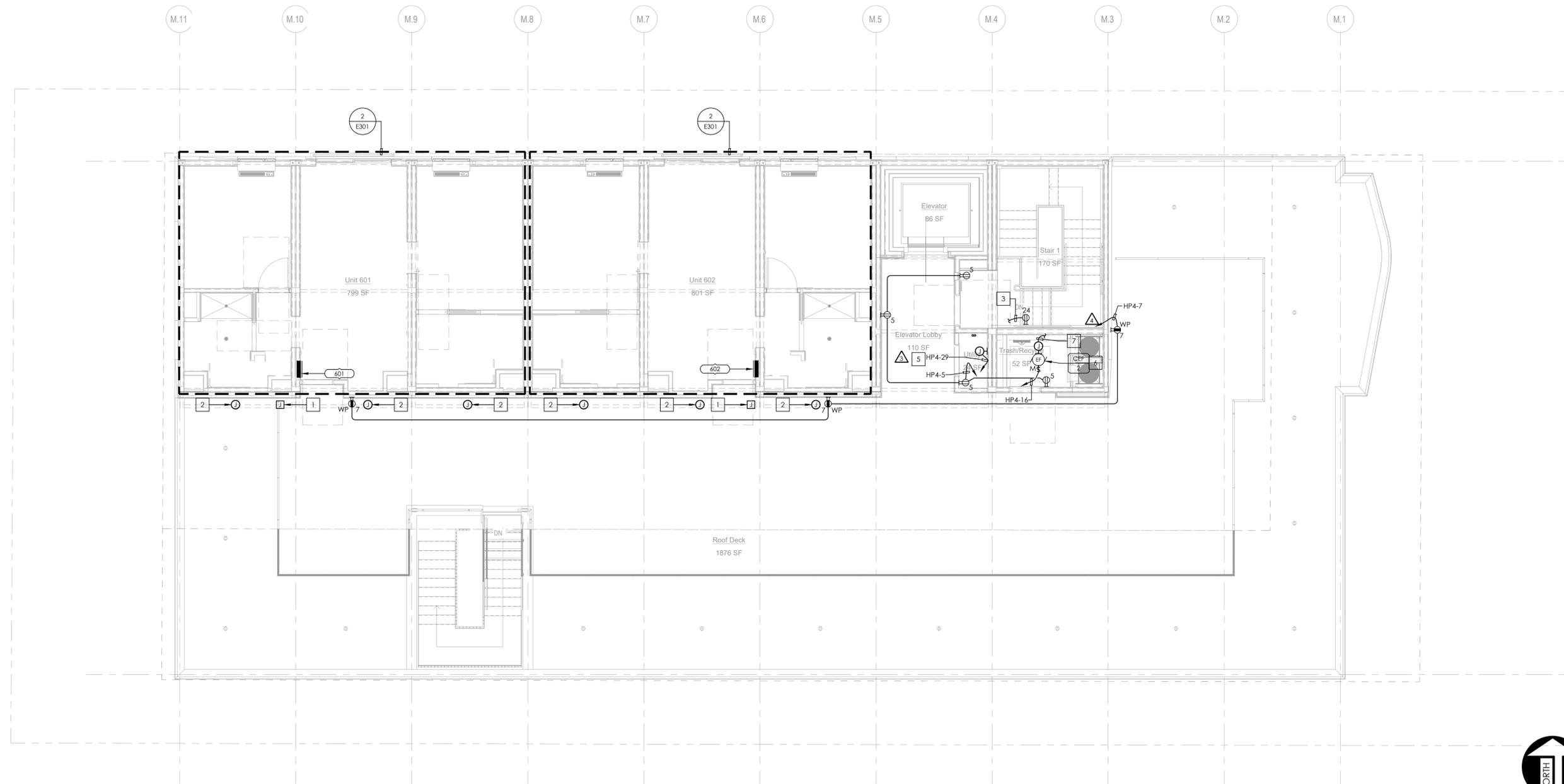
Plot Date: 10/11/2023 4:12:02 PM

SHEET TITLE:

**LEVEL 5
POWER PLAN**

SHEET NO:

E205



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:23:39 PM
SHEET TITLE:

**LEVEL 6
POWER PLAN**

SHEET NO:
E206

LEVEL 6 POWER PLAN SCALE 3/16" = 1'-0" 1

SIGNAL PLAN NOTES

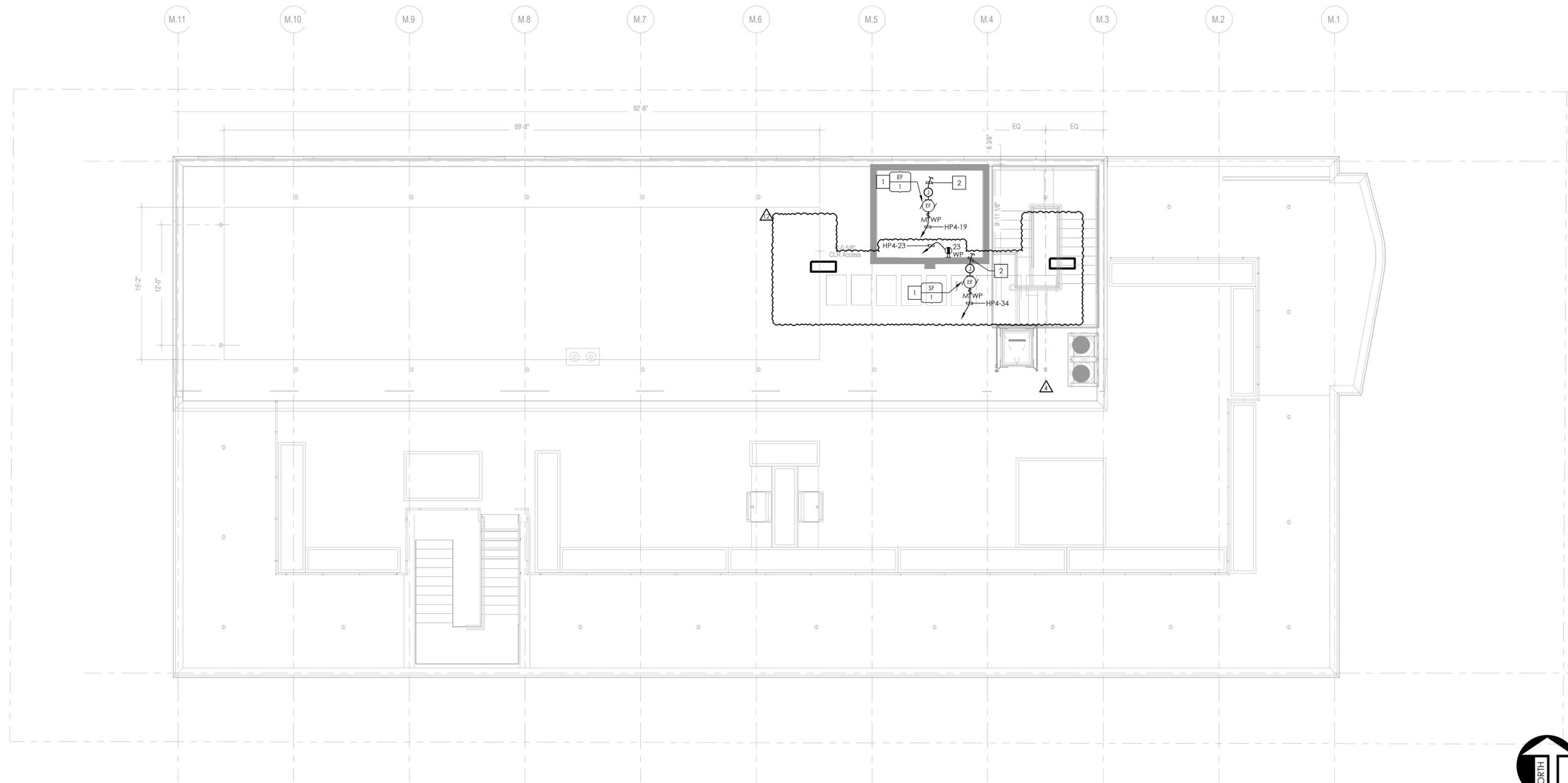
- CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT, AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINCK SHALL BE G.F.C.I.
- ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.

KEY NOTES

- NUMBERS INDICATE NOTES SHOWN ON PLAN
- J-BOX TO BE PLACED IN ACCESSIBLE CEILING FOR CONNECTION TO MODULAR UNITS LOAD CENTER.
- J-BOX IN ACCESSIBLE CEILING FOR BRANCH CIRCUITS FROM MODULAR UNITS LOAD CENTER TO DEVICES/LOADS. UP TO (4) BRANCH CIRCUITS PER J-BOX. PROVIDE AS REQUIRED PER UNIT PLANS.
- REFER TO SHEET E205 FOR BRANCH CIRCUIT CONTINUATION.
- PROVIDE 120V TO FIRE-SMOKE DAMPER AND SMOKE DETECTOR. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO ROUGH-IN.
- PROVIDE 120V TO (1) REMOTE PULSE METER READER FOR UTILITY WATER SUB-METERING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING PRIOR TO ROUGH-IN.
- REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION.
- PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:13:09 PM

SHEET TITLE:

ROOF PLAN

SHEET NO:

E207

ROOF PLAN SCALE 3/16" = 1'-0" 1

MECHANICAL EQUIPMENT SCHEDULE									
UNIT	V/P	HP/W	FLA	MCA	MOCPP	DISC. SIZE/ FUSE SIZE	FEEDER	KEYED NOTES	
VHP 1	208-1	-	8	10	20	30AS,NF 2P	1/2"C, 2#12, 1#12G	A	D
HPAC 1	208-1	-	4.1	5.1	15	30AS,NF 2P	1/2"C, 2#12, 1#12G	A	D
VRF 1	230-1	-	0.58	0.73	15	30AS,NF 2P	1/2"C, 2#12, 1#12G	A	D
VRF 2	230-1	-	0.76	0.95	15	30AS,NF 2P	1/2"C, 2#12, 1#12G	A	D
VRF 3	230-1	-	0.58	0.73	15	30AS,NF 2P	1/2"C, 2#12, 1#12G	A	D
ELEV 1	208-3	20HP	59.4	83.2	90	100AS/90AF 3P,WP	1-1/4"C, 3#3, 1#8G	A	

- A INDICATED FUSE SIZE IS BASED ON THE MOCPP AS SHOWN ON THE MECHANICAL DRAWINGS. CONTRACTOR TO VERIFY AND PROVIDE FUSE SIZE PER THE MANUFACTURER'S NAMEPLATE. FUSE RATING SHOWN ON THE MANUFACTURER'S EQUIPMENT NAMEPLATE TAKES PRECEDENCE OVER THE MOCPP.
- B NOT USED.
- C POWERED VIA CU-1.
- D NON-FUSED DISCONNECT BY OTHERS.
- E INTERLOCK FAN WITH TIME CLOCK.
- F FAN TO OPERATE CONTINUOUSLY.

MECHANICAL EQUIPMENT SCHEDULE									
UNIT	V/P	HP/W	FLA	MCA	MOCPP	DISC. SIZE/ FUSE SIZE	FEEDER	KEYED NOTES	
HP 1	230-1	△	28.8	36	40	60AS/40AF 2P, WP	3/4"C, 2#8, 1#8G	A	
EF 1	120-1	73W	0.61	0.76	15	M ₅ WP	1/2"C, 2#12, 1#12G	A	E
EF 2	120-1	1/6	4.4			NOT USED	1/2"C, 2#12, 1#12G		
CEF 1	115-1	-	.31	0.39	15	M ₅	1/2"C, 2#12, 1#12G	A	
CEF 2	115-1	-	.32	0.4	15	M ₅	1/2"C, 2#12, 1#12G	A	
CEF 3	115-1	-	4.75	5.9	15	M ₅	1/2"C, 2#12, 1#12G	A	F
EF 1	115-1	1/4	5.8	7.25	15	M ₅	1/2"C, 2#12, 1#12G	A	F
CU 1	208-1	-	13.6	17	30	30AS/30AF 2P, WP	1/2"C, 2#10, 1#10G	A	
FC 1	208-1	-	-	-	-	30AS 2P	1/2"C, 2#10, 1#10G	A	C D

PLAN NOTES

A. CONTRACTOR TO VERIFY EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-IN.

B. ALL ELECTRICAL DEVICES MOUNTED ON THE ROOF SHALL BE WEATHERPROOF TYPE. COMPLETE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE (CEC) ARTICLES 430 AND 440. RECEPTACLES SHALL BE GFCI TYPE.

KEY NOTES

NUMBERS INDICATE NOTES SHOWN ON PLAN

1. REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION.

2. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

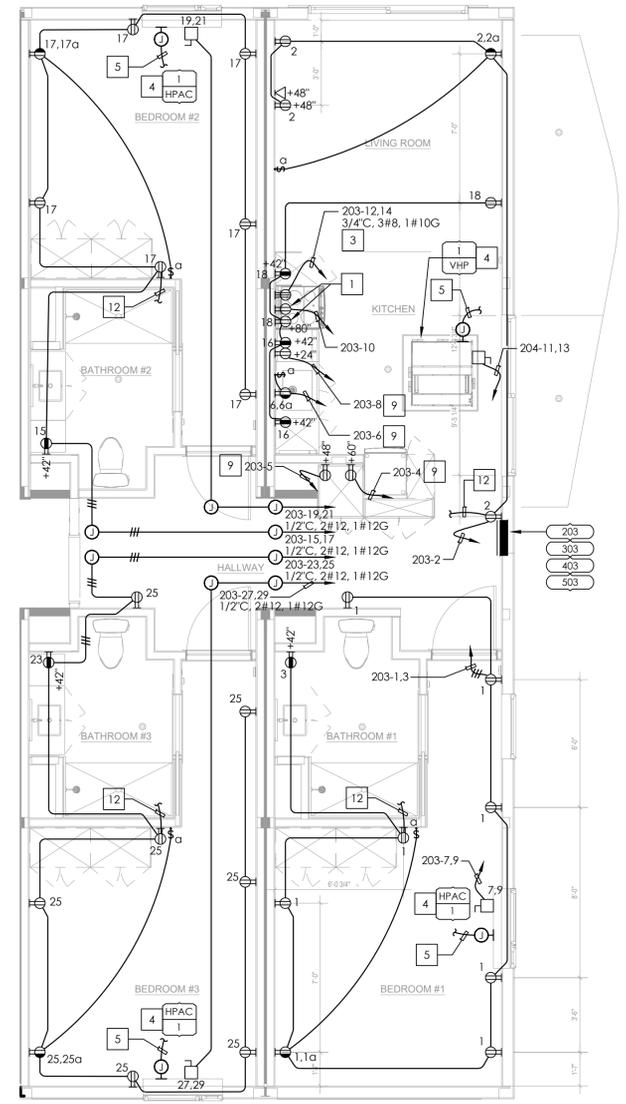
PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

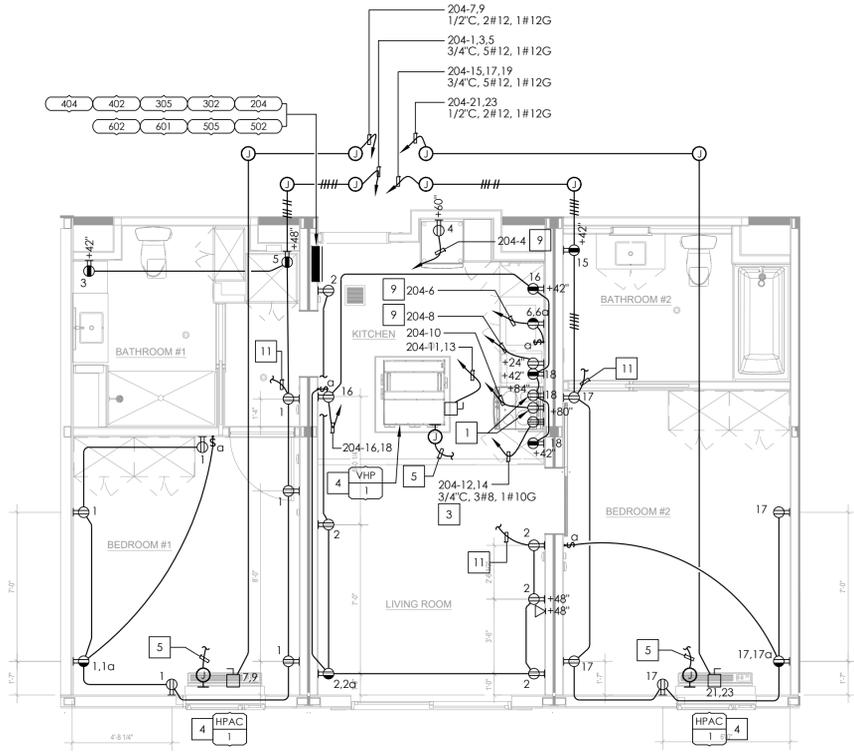
Plot Date: 10/11/2023 4:09:26 PM

SHEET TITLE:
ENLARGED UNIT POWER TYPICAL PLANS

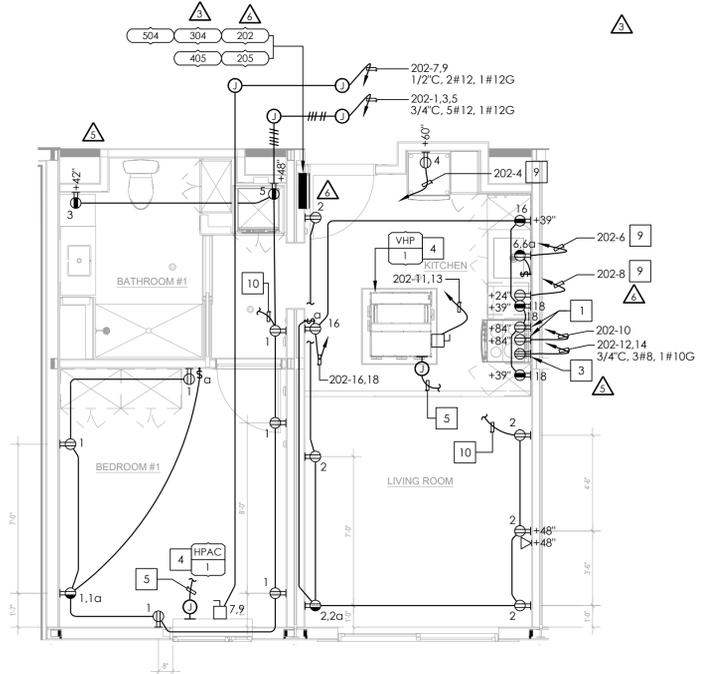
SHEET NO:
E301



UNIT TYPE 3 ENLARGED POWER PLAN SCALE 1/4" = 1'-0" 1



UNIT TYPE 2 ENLARGED POWER PLAN SCALE 1/4" = 1'-0" 2



UNIT TYPE 1A ENLARGED POWER PLAN SCALE 1/4" = 1'-0" 3

SIGNAL PLAN NOTES

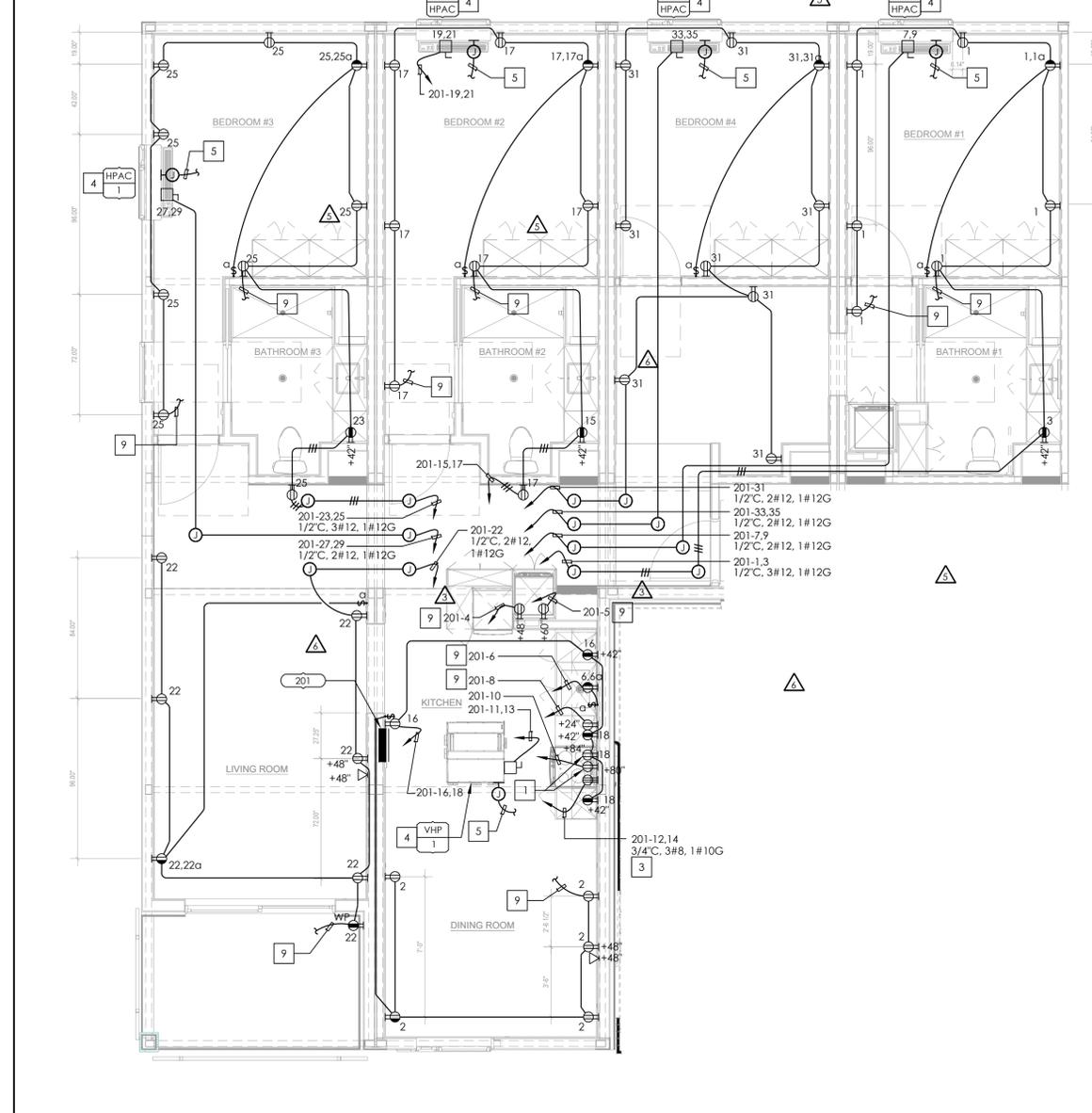
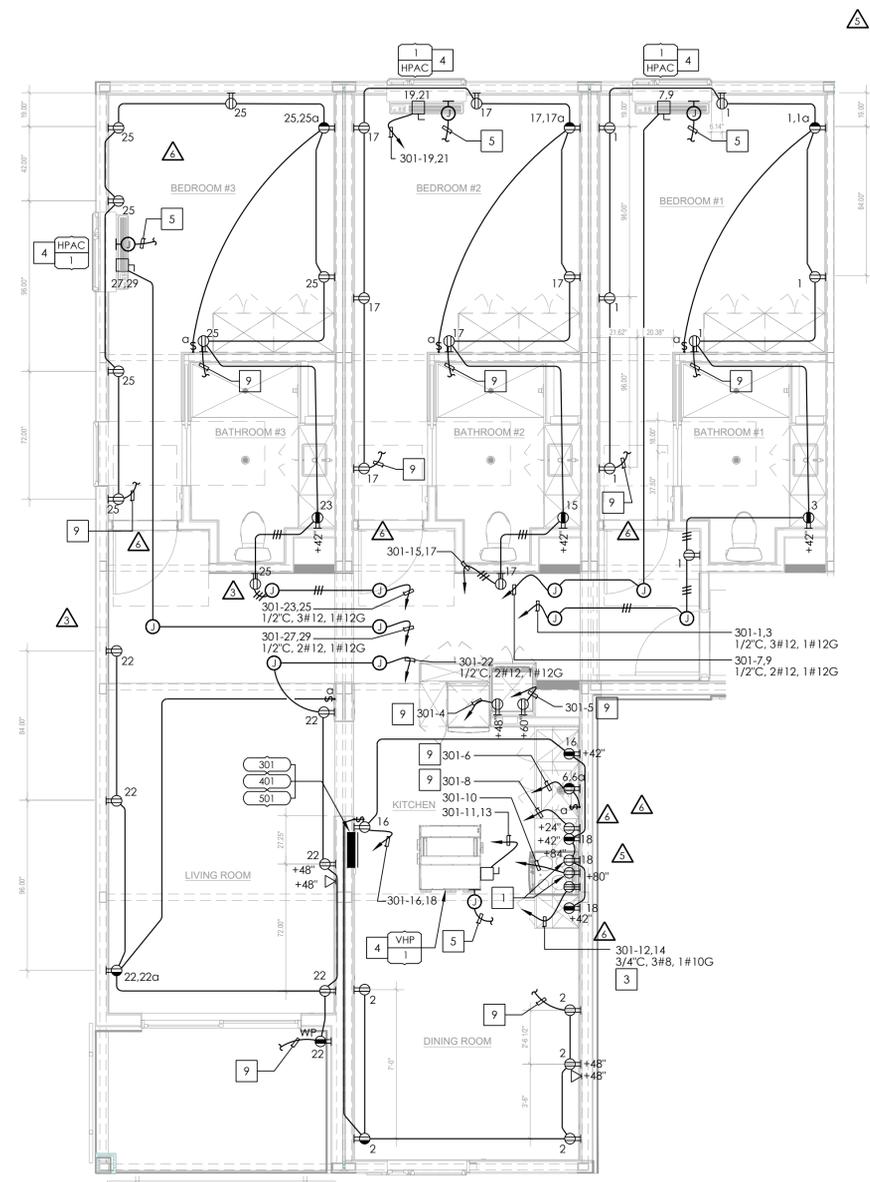
- CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT. AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4" C. RUN CODE-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.
- ARC-FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED IN 210.12(A),(B),(C) AND (D). THE ARC-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
- ALL 125V, 15A AND 20A RECEPTACLES WITHIN A DWELLING UNIT/SPACE SHALL BE TAMPER RESISTANT.
- ALL 120-VOLT SINGLE-PHASE, 15 AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BED ROOMS, SUNROOMS RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6)"

KEY NOTES

- NUMBERS INDICATE NOTES SHOWN ON PLAN
- PROVIDE 120V RECEPTACLES FOR MICROWAVE AND KITCHEN HOOD AS REQUIRED. COORDINATE EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
- PROVIDE 120V RECEPTACLES FOR DRYER. VERIFY EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.
- PROVIDE 40A, 240V BREAKER FOR OVEN. VERIFY EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.
- REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR/FEEDER BRANCH CIRCUIT INFORMATION.
- PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
- PROVIDE 1/2" C.O.(S) FOR CIRCUITS "8,10"; 3#12 FOR CIRCUITS "15 & 17". ALL CIRCUITS TO UTILIZE (6) 2" CONDUIT.
- PROVIDE 1/2" C.O.(S) "9,11"; 3#12 FOR CIRCUITS "12 & 14". ALL CIRCUITS TO UTILIZE (6) 2" CONDUIT.
- PROVIDE 1/2" C.O.(S) "9,11"; 3#12 FOR CIRCUITS "13 & 15". ALL CIRCUITS TO UTILIZE (6) 2" CONDUIT.
- PROVIDE GFCI BREAKER AT PANEL.
- SEE SHEET E303, DETAIL#3 FOR CONTINUATION.
- SEE SHEET E303, DETAIL#2 FOR CONTINUATION.
- SEE SHEET E303, DETAIL#1 FOR CONTINUATION.



TYPICAL TO UNITS: 301,401,501

UNIT: 201

UNIT TYPE 4 ENLARGED POWER PLAN SCALE 1/4" = 1'-0" 2

UNIT TYPE 5 ENLARGED POWER PLAN SCALE 1/4" = 1'-0" 1

SIGNAL PLAN NOTES

- A. CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M OR 98 FT. AND (b) CONTAIN NO MORE THAN (2) 90 DEGREE BENDS OR A REVERSE BEND WITHOUT INSTALLING A PULLBOX. CONDUITS IN PLACE OF PULLBOX IS UNACCEPTABLE.
- B. CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS.
- C. CONDUIT BEND RADIUS SHALL BE (a) MINIMUM OF 6 TIMES OF THE INTERNAL CONDUIT DIAMETER FOR 2" CONDUITS OR SMALLER, AND (b) 10 TIMES THE INTERNAL DIAMETER FOR LARGER THAN 2" CONDUITS.
- D. TERMINATE CONDUITS THAT PROTRUDE THROUGH STRUCTURAL FLOORS 3" ABOVE THE FLOOR SURFACE.
- E. INSTALL BELL ENDS AND BUSHING AS REQUIRED ON ALL CONDUITS.
- F. ALL SUB-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATION CABLES.
- G. ALL PULLBOXES SHALL BE SIZES AND INSTALLED PER ANSI/TIA/EIA-569A. PULLBOXES FOR UNDER FLOOR CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE.
- H. CONTRACTOR SHALL SUBMIT FIRE ALARM PLANS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
- I. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).

PLAN NOTES

- A. ALL RECEPTACLES ON COMMON WALLS SHALL HAVE SEPARATE BOXES AND A 24" MINIMUM OFFSET.
- B. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- C. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER SHALL BE VERIFIED WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. RECEPTACLES MOUNTED WITHIN 6 FEET OF ANY SINK SHALL BE G.F.C.I.
- D. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4". RUN CODE-SIZED INSULATED EQUIPMENT PROTECTION CONDUCTOR.
- E. ARC-FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED IN 210.12(A),(B),(C) AND (D). THE ARC-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
- F. ALL 125V, 15A AND 20A RECEPTACLES WITHIN A DWELLING UNIT/SPACE SHALL BE TAMPER RESISTANT.
- G. ALL 120-VOLT SINGLE-PHASE, 15 AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BED ROOMS, SUNROOMS RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6)"

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 120V RECEPTACLES FOR MICROWAVE AND KITCHEN HOOD AS REQUIRED. COORDINATE EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
- 2. PROVIDE 120V RECEPTACLES FOR DRYER. VERIFY EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.
- 3. PROVIDE 40A, 240V BREAKER FOR OVEN. VERIFY EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.
- 4. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR/FEEDER BRANCH CIRCUIT INFORMATION.
- 5. PROVIDE 1/2" C.O.(S) FOR LOCAL AREA THERMOSTAT CONTROL AND CONNECTION TO FACP FOR HVAC SHUTDOWN AS REQUIRED. REFER TO THE MECHANICAL DRAWINGS OR EQUIPMENT CONTROL WIRING DIAGRAMS FOR MORE INFORMATION.
- 6. PROVIDE 1/2" C.O.(S) FOR CIRCUITS "15, 17"; 3#12 FOR CIRCUITS "19 & 21". ALL CIRCUITS TO BE INSTALLED IN CONDUIT.
- 7. PROVIDE 1/2" C.O.(S) FOR CIRCUITS "11, 13"; 3#12, FOR CIRCUITS "7 & 9"; ALL CIRCUITS TO UTILIZE 1/2" C.O.(S).
- 8. PROVIDE GFCI BREAKER AT PANEL.
- 9. SEE SHEET E304, DETAIL #2 FOR CONTINUATION.
- 10. SEE SHEET E304, DETAIL #1 FOR CONTINUATION.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

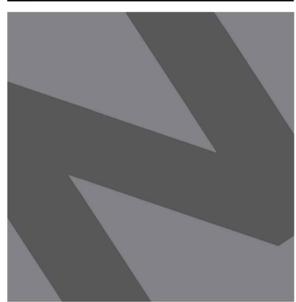
#	DESCRIPTION	DATE
1	1ST SUBMITTAL	10/04/21
2	UTILITY COORDINATION	04/08/22
3	PC RESUBMITTAL	05/18/22
4	PC RESUBMITTAL	10/28/22
5	HCD REVISION 1	12/16/22
6	PC RESUBMITTAL	02/02/23
7	HCD & PC RESUBMITTAL	06/06/23
8	HCD RESUBMITTAL	06/14/23
9	PC RESUBMITTAL	07/10/23
10	CLIENT REVISIONS	07/11/23
11	CLIENT REVISIONS	08/04/23
12	PC RESUBMITTAL (ELEC)	09/12/23
13	PC RESUBMITTAL (ELEC)	10/05/23
14	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:19:16 PM

SHEET TITLE:
ENLARGED UNIT POWER TYPICAL PLANS

SHEET NO:

E302



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

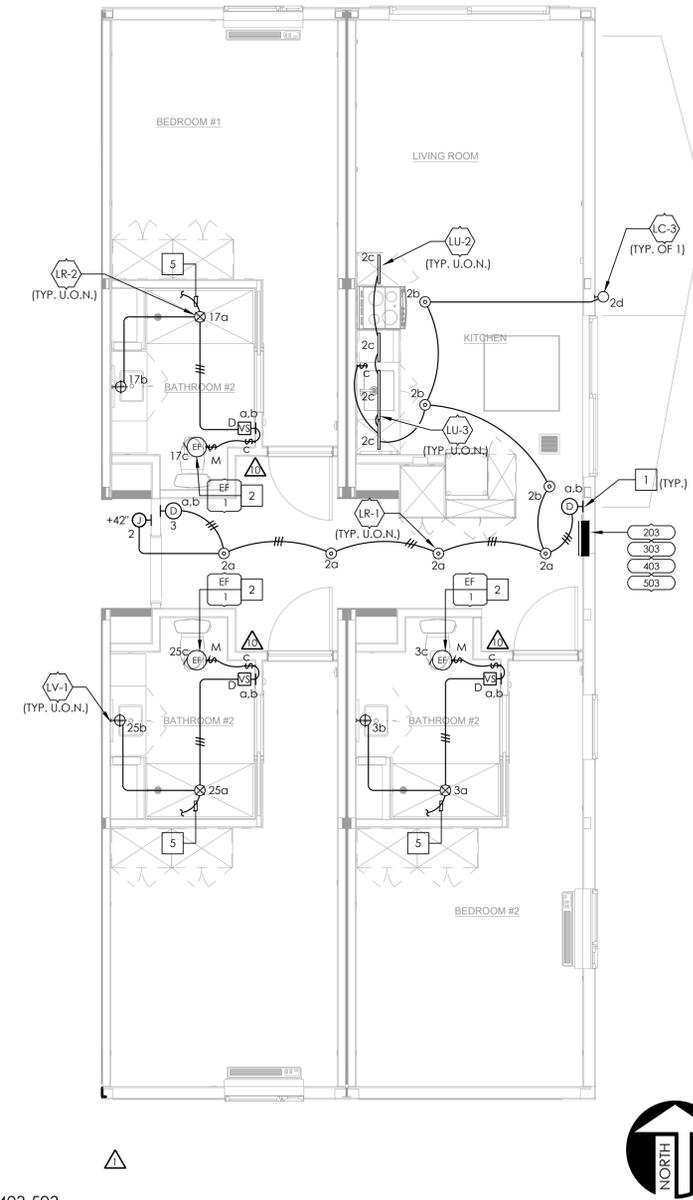
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:27:36 PM

SHEET TITLE:
**ENLARGED UNIT
LIGHTING TYPICAL
PLANS**

SHEET NO:

E303

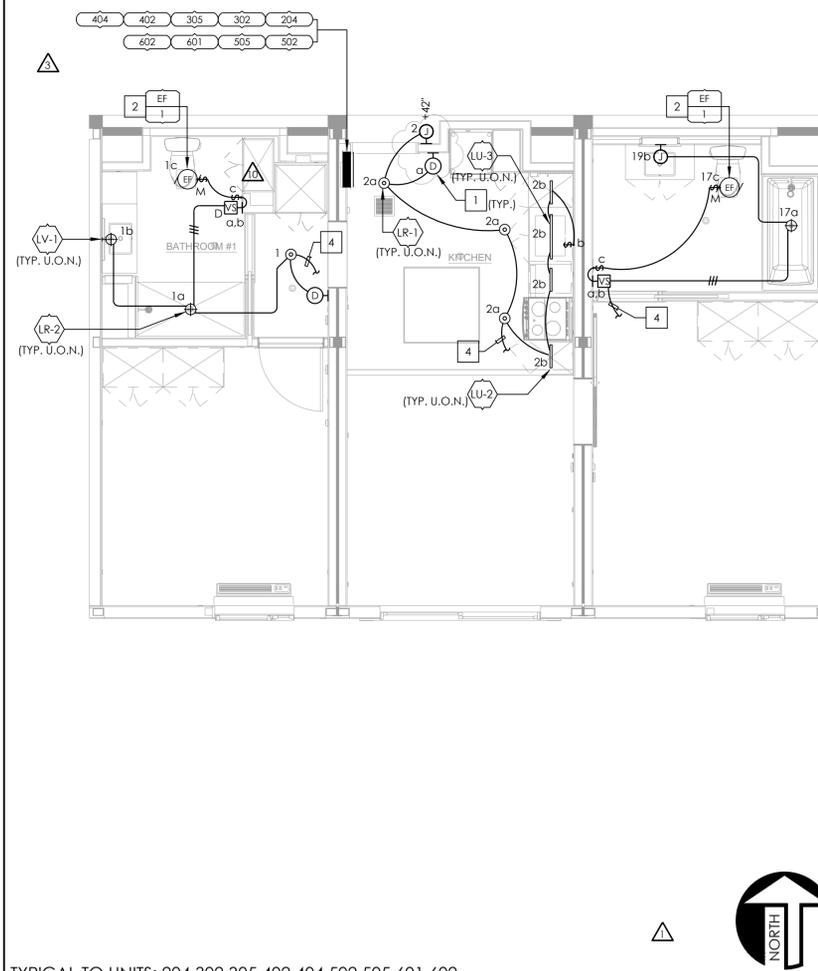


UNIT: 203,303,403,503

UNIT TYPE 3 ENLARGED LIGHTING PLAN

SCALE
1/4" = 1'-0"

1

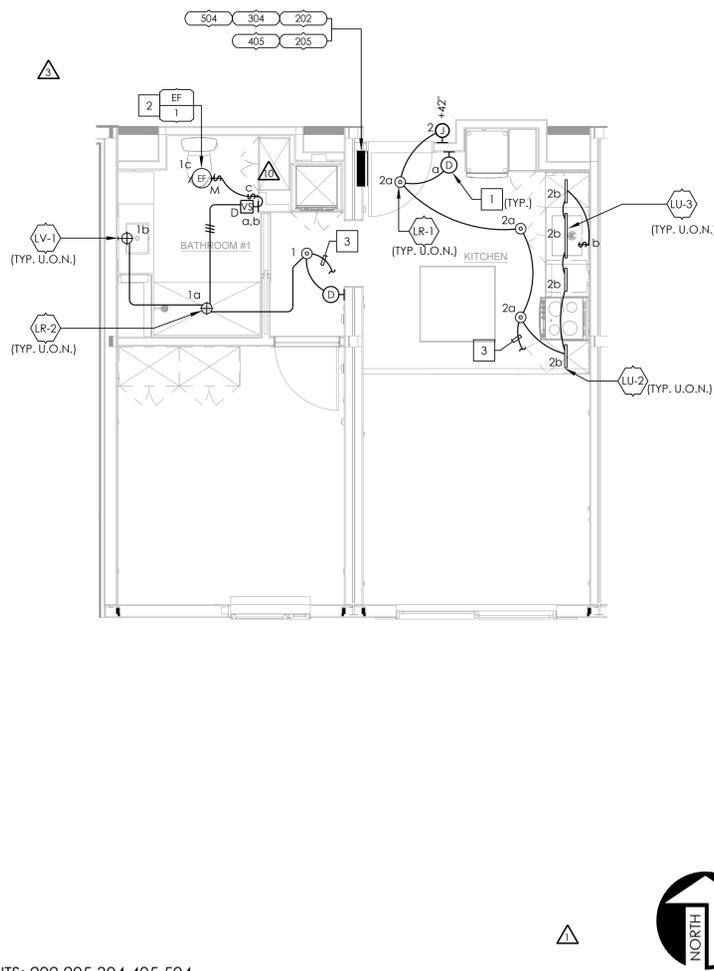


TYPICAL TO UNITS: 204,302,305,402,404,502,505,601,602

UNIT TYPE 2 ENLARGED LIGHTING PLAN

SCALE
1/4" = 1'-0"

2



TYPICAL TO UNITS: 202,205,304,405,504

UNIT TYPE 1A ENLARGED LIGHTING PLAN

SCALE
1/4" = 1'-0"

3

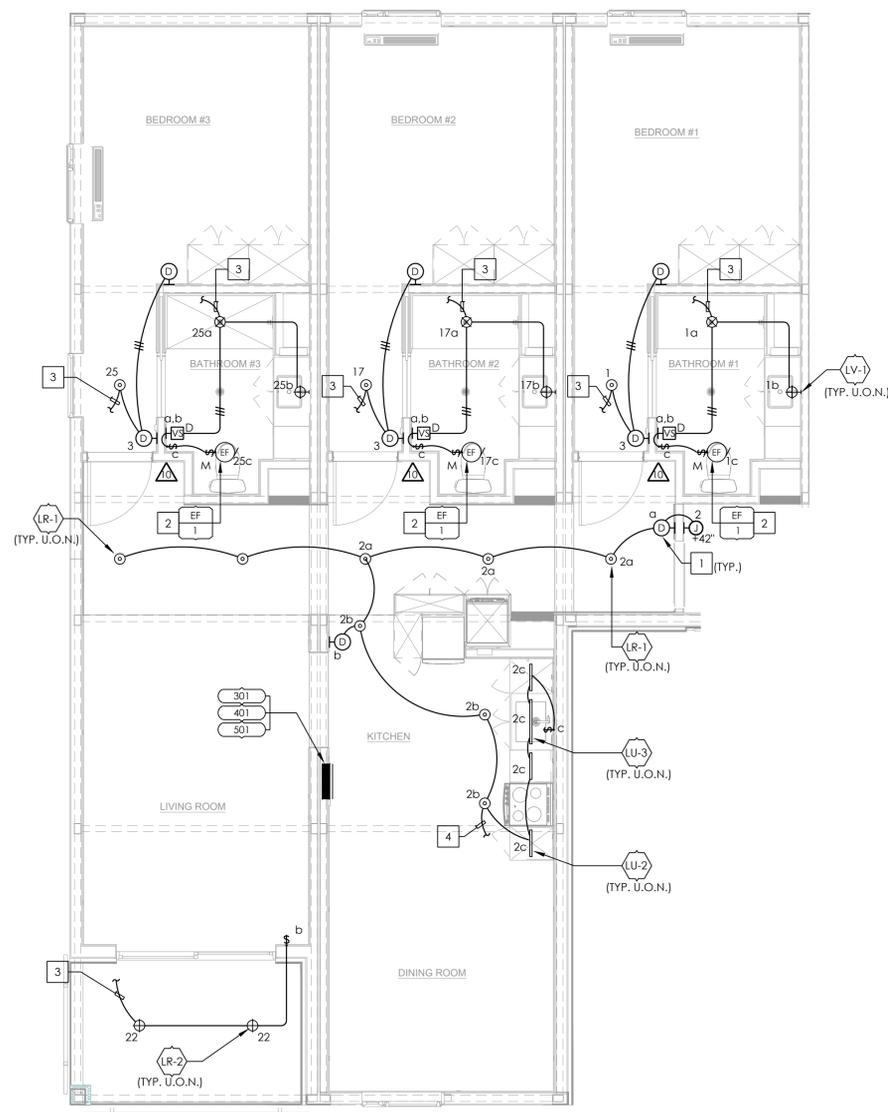
PLAN NOTES

- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
- B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
- C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
- D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
- E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
- F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
- G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
- H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
- I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
- J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
- K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
- L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).
- E. ARC-FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED IN 210.12(A),(B),(C) AND (D). THE ARC-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.

- F. ALL 120-VOLT, SINGLE-PHASE, 15 AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BED ROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, R SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6)

KEY NOTES

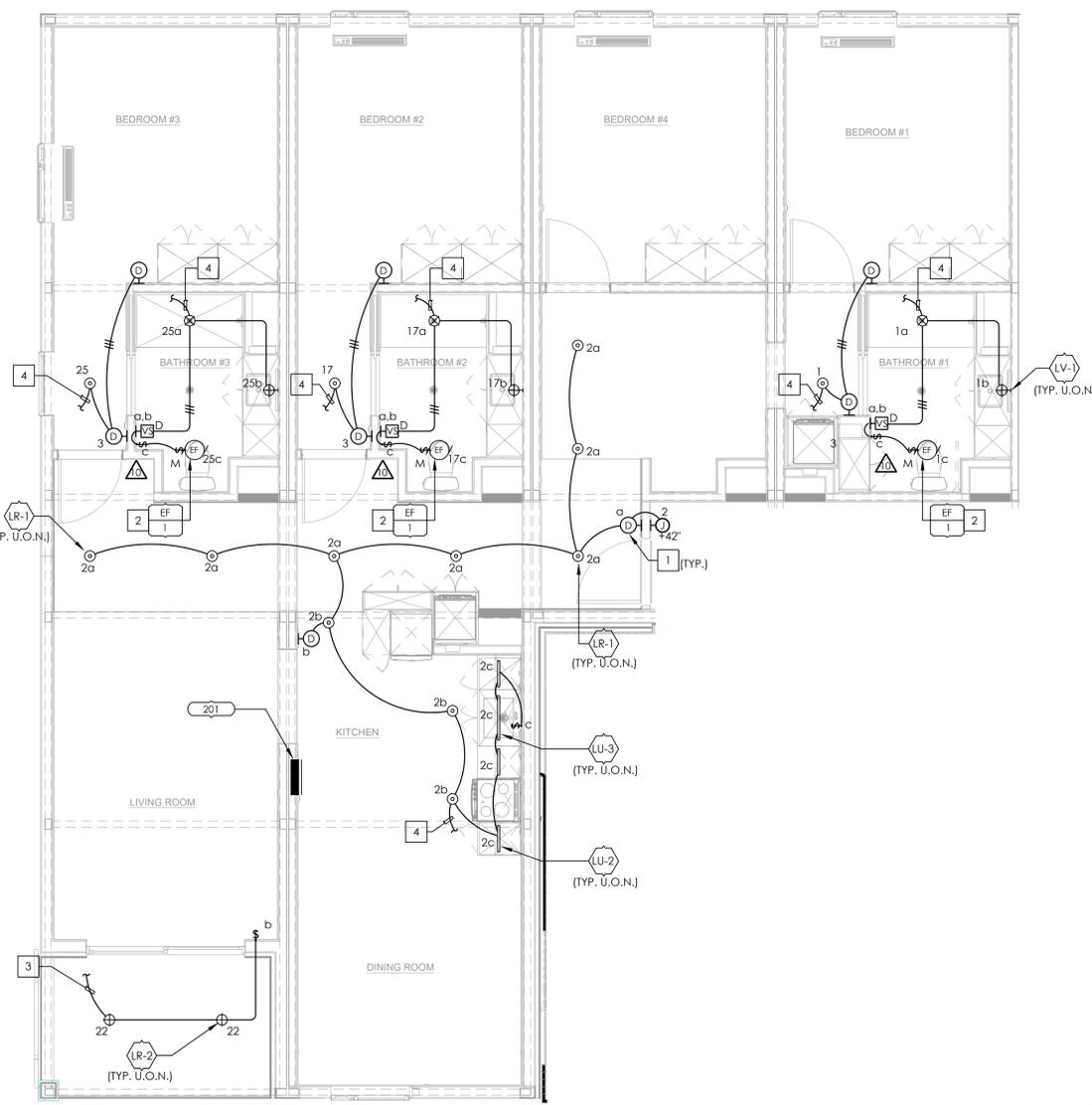
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 120V LINE-VOLTAGE DIMMER SWITCH. COORDINATE WITH LIGHT FIXTURE MANUFACTURER EXACT DIMMER SWITCH COMPATIBILITY PRIOR TO PROCUREMENT.
- 2. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR/FEEDER BRANCH CIRCUIT INFORMATION.
- 3. SEE SHEET E301, DETAIL #3, FOR CONTINUATION.
- 4. SEE SHEET E301, DETAIL #2, FOR CONTINUATION.
- 5. SEE SHEET E301, DETAIL #2, FOR CONTINUATION.



TYPICAL TO UNITS: 201,301,401,501

UNIT TYPE 4 ENLARGED LIGHTING PLAN SCALE 1/4" = 1'-0" 2

UNIT: 201



UNIT TYPE 5 ENLARGED LIGHTING PLAN SCALE 1/4" = 1'-0" 1

PLAN NOTES

- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
- B. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT & DUCT WORK PRIOR TO ROUGH-IN.
- C. CONTRACTOR TO VERIFY EXACT CEILING CONSTRUCTION WITH ARCHITECT PRIOR TO ORDERING LIGHTING FIXTURES AND SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE AND SUPPORTS.
- D. ALL RECESSED FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY ADOPTED ISSUE OF IBC, AS WELL AS ANY LOCAL CODES.
- E. BRANCH CIRCUITS OF LIGHTING WITH DIMMING SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE OR CHANNEL.
- F. FLUORESCENT / LED DIMMING ZONE OR CHANNEL SHALL BE PROVIDED WITH 3 LINE-VOLTAGE CONDUCTORS (DIMMED HOT, SWITCHED HOT AND NEUTRAL) OR AS REQUIRED BY THE CONTROL OR BALLAST TYPE.
- G. EXIT SIGNS SHOWN SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS FOR QUANTITY, CHEVRONS AND NUMBER OF FACES PRIOR TO ORDERING.
- H. ALL EMERGENCY LIGHTING SHOWN INCLUDING EXIT SIGNS POWERED BY STORAGE BATTERIES OR ON-SITE EMERGENCY GENERATORS SHALL BE ILLUMINATED AT ALL TIMES WHEN THE BUILDING IS OCCUPIED AND SHALL HAVE A MINIMUM OF 90-MINUTE EMERGENCY POWER DURATION.
- I. ALL LOW VOLTAGE LIGHTING SYSTEMS SHALL COMPLY WITH 2019 CEC ART. 411 AND SHALL BE LISTED PER ART. 411.3.
- J. ALL ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
- K. ALL LIGHTING FIXTURES SHOWN WITH EMERGENCY BALLAST SHALL BE PROVIDED WITH AN UNSWITCHED HOT CONNECTION TO THE CHARGING LEAD.
- L. ALL WORK SHOWN SHALL BE IN ACCORDANCE WITH 2019 CALIFORNIA ELECTRICAL CODE (CEC).
- E. ARC-FAULT CIRCUIT INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED IN 210.12(A),(B),(C) AND (D). THE ARC-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.



- F. ALL 120-VOLT, SINGLE-PHASE, 15 AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BED ROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, R SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6)

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 120V LINE-VOLTAGE DIMMER SWITCH. COORDINATE WITH LIGHT FIXTURE MANUFACTURER EXACT DIMMER SWITCH COMPATIBILITY PRIOR TO PROCUREMENT.
- 2. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E207 FOR MOTOR/FEEDER BRANCH CIRCUIT INFORMATION.
- 3. SEE SHEET E302, DETAIL #2, FOR CONTINUATION.
- 4. SEE SHEET E302, DETAIL #1, FOR CONTINUATION.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

JAIME PARTNERS OF CALIFORNIA, INC.

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

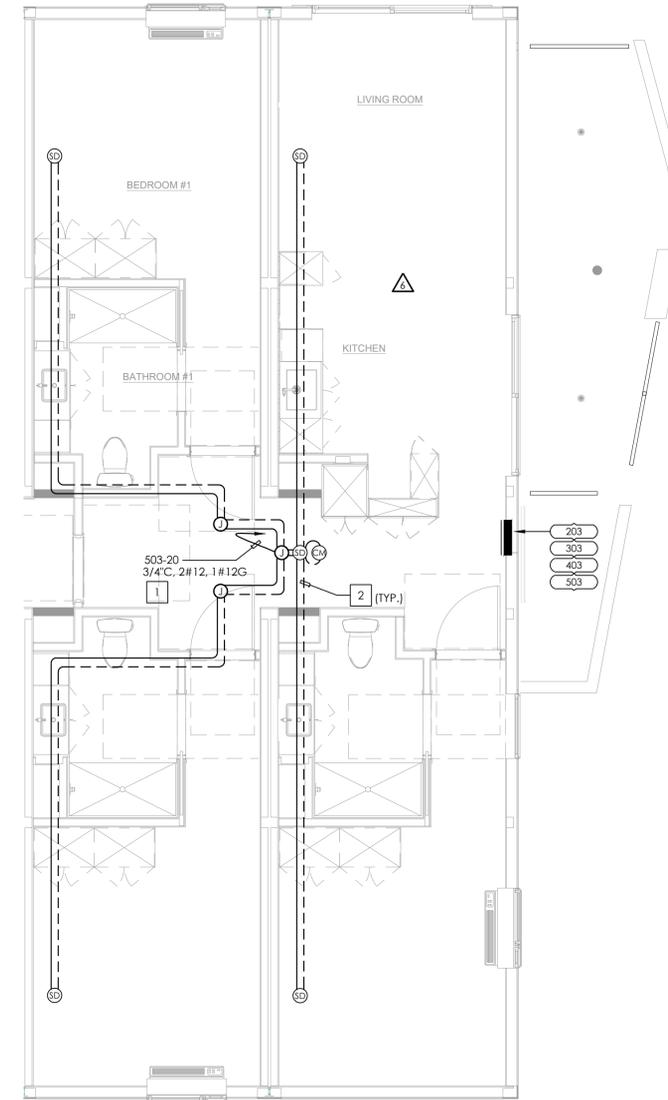
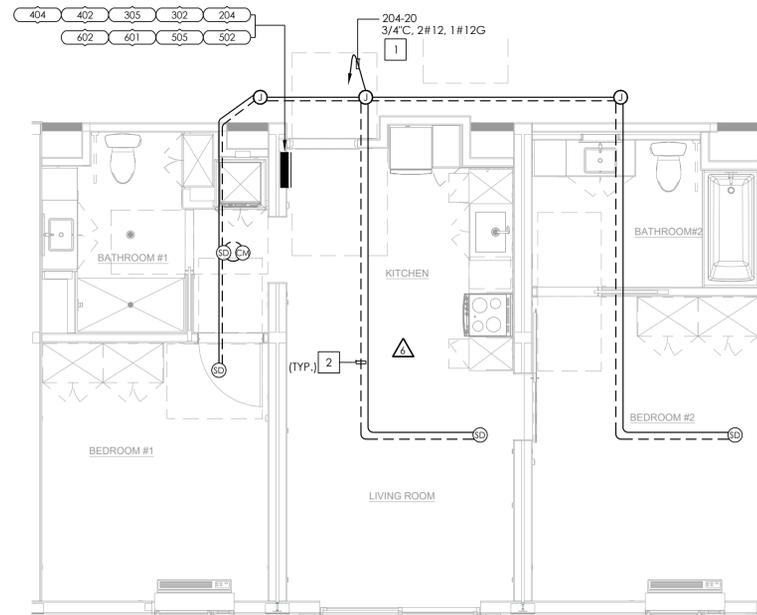
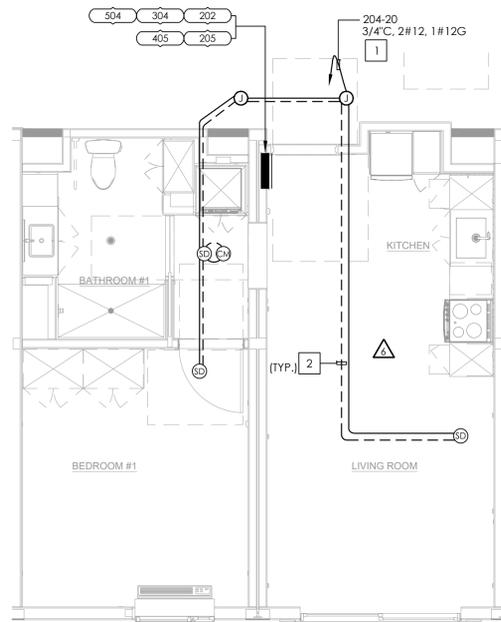
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:18:01 PM

SHEET TITLE:
ENLARGED UNIT LIGHTING TYPICAL PLANS

SHEET NO:

E304



△ TYPICAL TO UNITS: 202,205,304,405,504



UNIT TYPE 1A ENLARGED SMOKE DETECTOR PLAN

SCALE
1/4" - 1'-0"

3

△ TYPICAL TO UNITS: 204,302,305,402,404,502,505,601,602



UNIT TYPE 2 ENLARGED SMOKE DETECTOR PLAN

SCALE
1/4" - 1'-0"

2

UNIT: 203,303,403,503



UNIT TYPE 3 ENLARGED SMOKE DETECTOR PLAN

SCALE
1/4" - 1'-0"

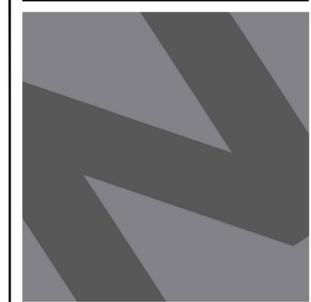
1

PLAN NOTES

- A. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- B. ALL BRANCH CIRCUITS WITHIN A DWELLING UNIT SHALL BE CONNECTED TO CIRCUIT BREAKERS WITH AFCI PROTECTION PER CEC 210.12.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 120V POWER TO SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED. CONTRACTOR TO ENSURE ALL SMOKE AND CARBON MONOXIDE DETECTORS ARE INSTALLED PER CBC 907.2.11.
- 2. CONTRACTOR TO ENSURE ALL SMOKE AND CARBON MONOXIDE DETECTORS ARE INTERCONNECTED WITHIN INDIVIDUAL UNITS PER CBC 907.2.11.5.



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

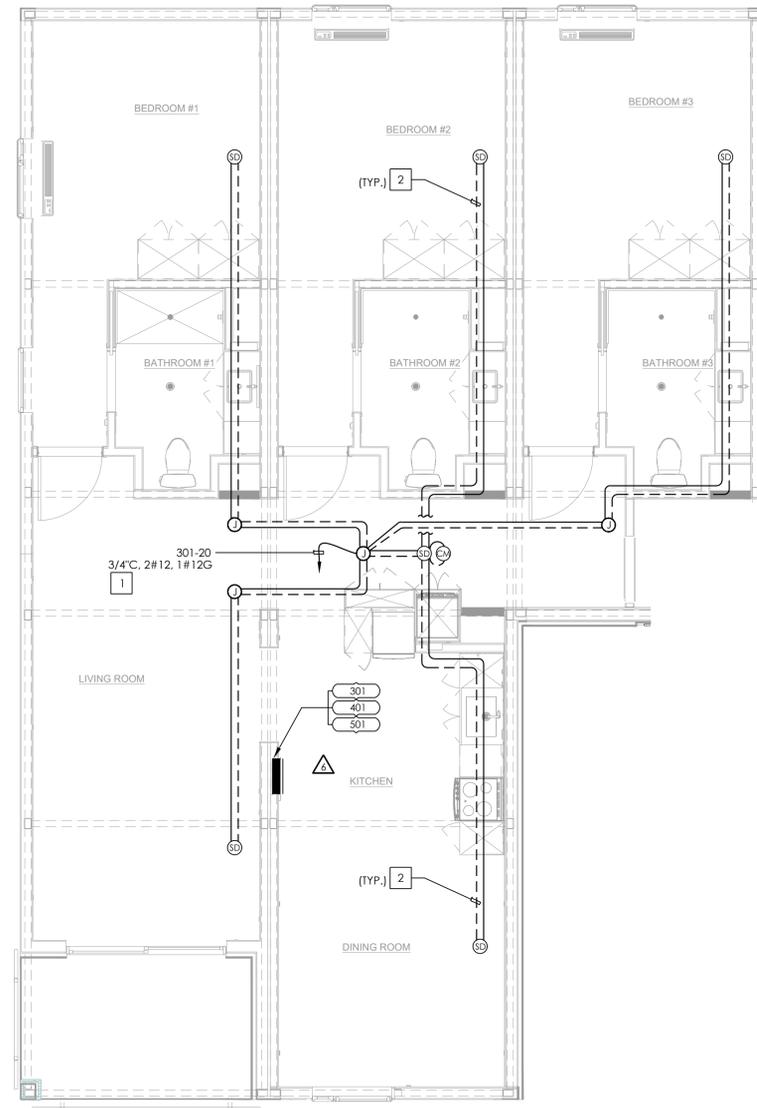
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:26:18 PM

SHEET TITLE:
**ENLARGED UNIT
SMOKE DETECTOR
TYPICAL PLANS**

SHEET NO:

E305



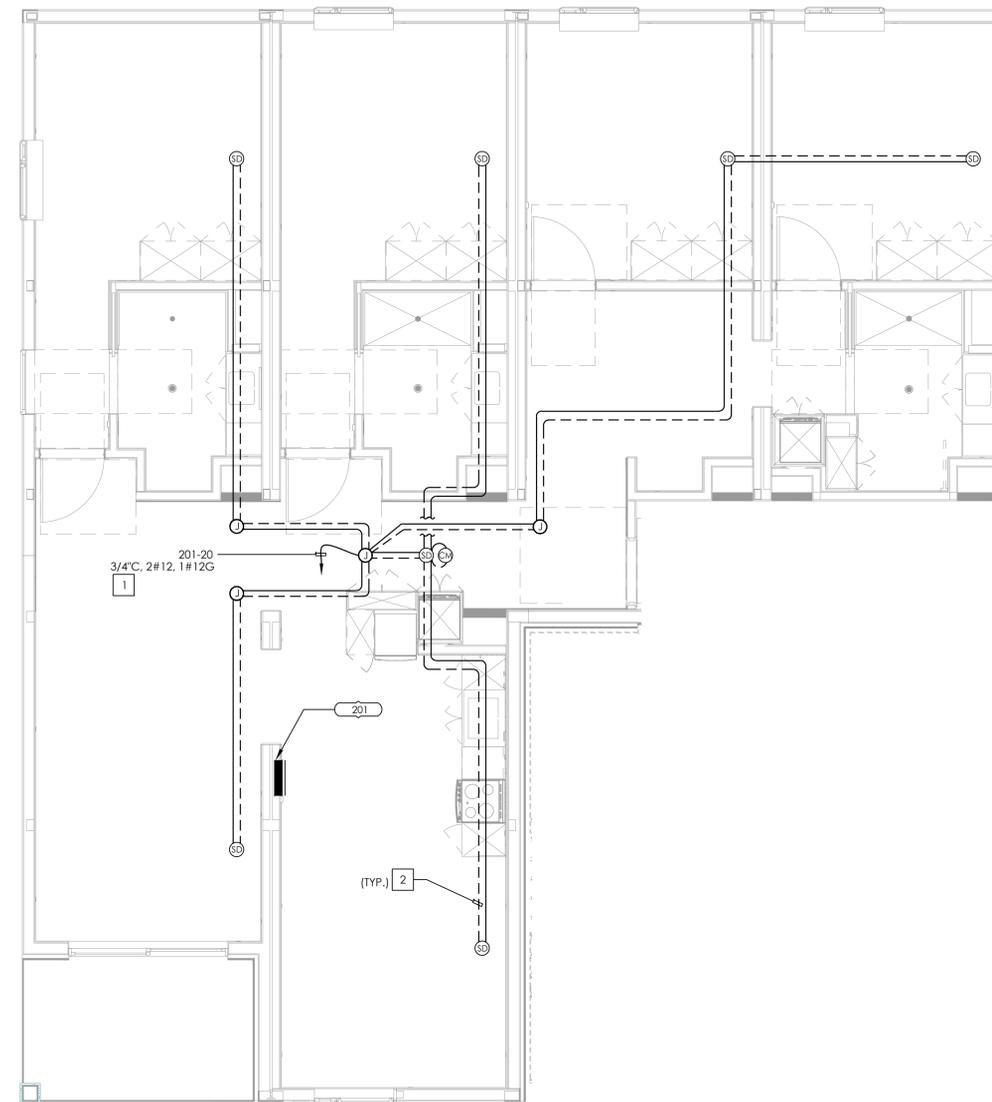
△ TYPICAL TO UNITS: 301, 401, 501

UNIT TYPE 4 ENLARGED SMOKE DETECTOR PLAN

SCALE
1/4" = 1'-0"

2

UNIT: 201



UNIT TYPE 5 ENLARGED SMOKE DETECTOR PLAN

SCALE
1/4" = 1'-0"

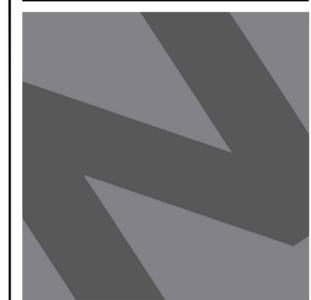
1

PLAN NOTES

- A. AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL SHALL BE PROVIDED AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS.
- B. ALL BRANCH CIRCUITS WITHIN A DWELLING UNIT SHALL BE CONNECTED TO CIRCUIT BREAKERS WITH AFCI PROTECTION PER CEC 210.12.

KEY NOTES

- # NUMBERS INDICATE NOTES SHOWN ON PLAN
- 1. PROVIDE 120V POWER TO SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED.
- 2. CONTRACTOR TO ENSURE ALL SMOKE AND CARBON MONOXIDE DETECTORS ARE INTERCONNECTED WITHIN INDIVIDUAL UNITS PER CBC 907.2.11.5.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE :
COPYRIGHT IS RETAINED BY NATIONAL
ENGINEERING & CONSULTING INC. FROM THE
DATE OF ISSUANCE OF THESE DOCUMENTS.
DUPLICATION OF THESE DOCUMENTS OR THE
BUILT-WORK REPRESENTED BY THEM IS
PROHIBITED WITHOUT THE EXPRESS, WRITTEN
CONSENT NATIONAL ENGINEERING &
CONSULTING INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD

LOS ANGELES, CA 90016

C-JAIME-001

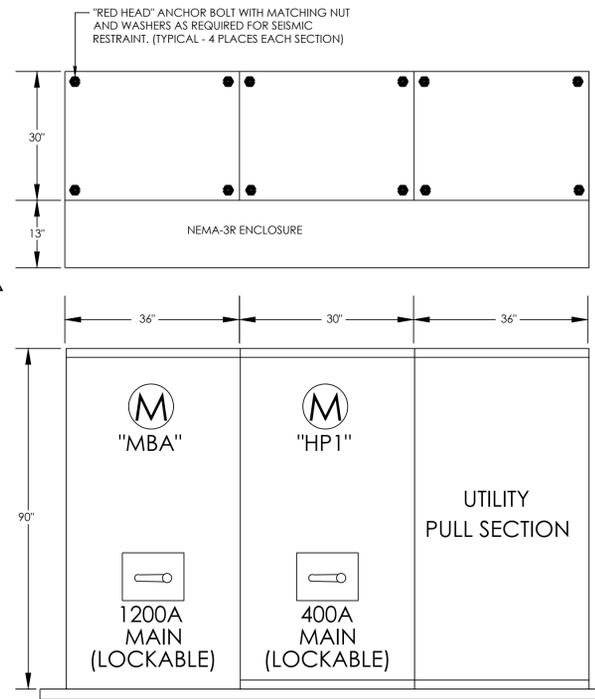
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:07:58 PM

SHEET TITLE:
**ENLARGED UNIT
SMOKE DETECTOR
TYPICAL PLANS**

SHEET NO: △

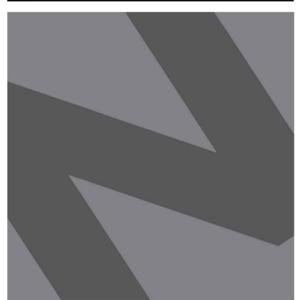
E306



SWITCHBOARD "MS1"

ELEVATION NOTES:

- THIS EQUIPMENT ELEVATION IS SHOWN FOR SCHEMATIC INFORMATION PURPOSES ONLY. CONTRACTOR TO REFER TO THE FLOOR PLANS FOR EXACT EQUIPMENT ORIENTATION.
- PROVIDE A 1-1/2" HIGH HOUSEKEEPING PAD. PAD SHALL BE FLUSH WITH THE FACE OF EQUIPMENT WHEN LOCATED INDOOR AND EXTEND 4" FROM THE FACE OF THE EQUIPMENT WHEN LOCATED OUTDOOR. PRIOR TO PAD ROUGH-IN, CONTRACTOR SHALL:
 - VERIFY ALLOWABLE MAXIMUM METER HEIGHT REQUIREMENT WITH THE SERVING UTILITY COMPANY. ADJUST HEIGHT OF THE HOUSEKEEPING PAD ACCORDINGLY TO COMFORM WITH THE UTILITY REQUIREMENTS.
 - VERIFY WITH THE LOCAL INSPECTOR PRIOR TO FORMING PAD(S) TO ENSURE ANY LOCAL CODE INTERPRETATIONS/CONDITIONS REGARDING HOUSEKEEPING PADS ARE MET.
- CONTRACTOR TO SUBMIT SWITCHBOARD SHOP DRAWINGS TO THE SERVING UTILITY COMPANY FOR APPROVAL PRIOR TO FABRICATION. CONTRACTOR SHALL SECURE WRITTEN APPROVAL FROM THE SERVING UTILITY COMPANY THAT THE PROPOSED SWITCHGEAR CONFORMS TO THE ELECTRIC UTILITY COMPANY REGULATIONS.
- CONTRACTOR TO INCLUDE IN BASE BID TO VERIFY EXISTING CONDITIONS INCLUDING SECONDARY FEEDERS FROM UTILITY TRANSFORMER AND ANY OTHER ASSOCIATED EXISTING FEEDERS. IF BEING REUSED, TO ENSURE LENGTH OF FEEDERS IS SUFFICIENT TO LAND IN LUGS OF NEW EQUIPMENT. COORDINATE WITH SERVING UTILITY COMPANY APPROVED METHODS OF EXTENDING FEEDERS AS REQUIRED.
- ALLOWABLE DIMENSIONS IN THE MAIN ELECTRICAL ROOM IS A CRITICAL COORDINATION ITEM. CONTRACTOR SHALL PROVIDE 1/4" = 1'-0" SCALE DRAWING WITH THE SWITCHGEAR SUBMITTALS SHOWING THAT ALL THE PROPOSED EQUIPMENT WILL FIT IN THE ALLOTTED SPACE INCLUDING FUTURE EQUIPMENTS AS NOTED.
- SERVICE SERVICE ENTRANCE EQUIPMENT DIMENSIONS ARE BASED UPON EATON SWITCHBOARD. CONTACT MR. JOHN JANSEN TEL. NO. (951) 316-5242. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST TO THE JOB DUE TO THE USE OF ALTERNATE EQUIPMENT.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:21:05 PM

SHEET TITLE:

**FEEDER SCHEDULE
AND DETAILS**

SHEET NO:

E402

SWITCHBOARD ELEVATION

SCALE
NTS 2

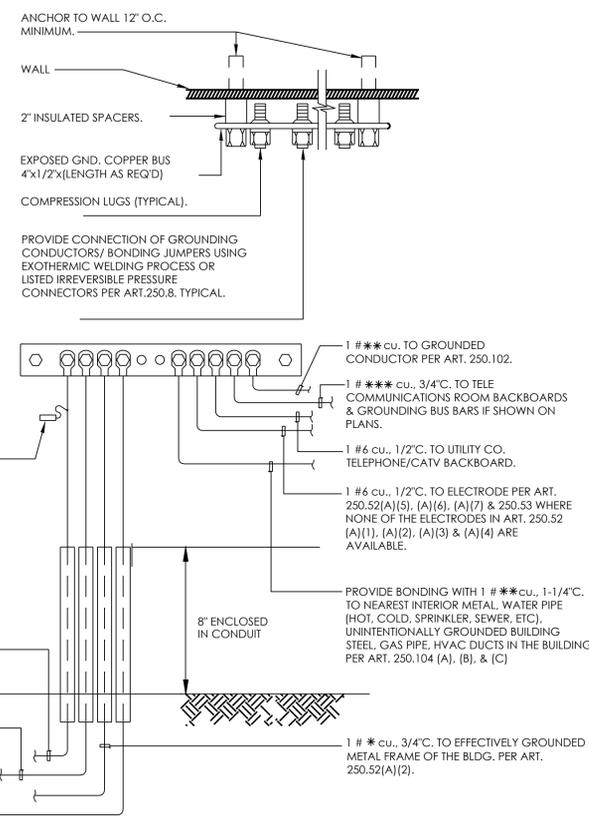
FEEDER	PANEL	CONDUIT & CONDUCTORS	DIST. IN FT	V.D. %	A.F.C.	NOTES
MS1-1	MBA	{3} SETS OF 4" C WITH 4 #600KCMIL CU. 1#3/O GND CU IN EACH	120	0.89	23.2K	-
MS1-2	HP1	4" C, 4#600KCMIL CU. 1#3 GND CU	130	0.77	14.3K	-
MBA-1	201	2" C, 3#1/O CU. 1#6 GND CU	231	2.70	3.5K	-
MBA-2	202	1-1/2" C, 3#1 CU. 1#8 GND CU	186	2.18	4.3K	-
MBA-3	203	2" C, 3#1/O CU. 1#6 GND CU	191	2.23	4.2K	-
MBA-4	204	1-1/2" C, 3#1 CU. 1#8 GND CU	168	1.97	4.6K	-
MBA-5	205	1-1/2" C, 3#1 CU. 1#8 GND CU	177	2.07	4.4K	-
MBA-6	301	2" C, 3#1/O CU. 1#6 GND CU	242	2.83	3.4K	-
MBA-7	302	1-1/2" C, 3#1 CU. 1#8 GND CU	197	2.31	4.1K	-
MBA-8	303	2" C, 3#1/O CU. 1#6 GND CU	202	2.36	4.0K	-
MBA-9	304	1-1/2" C, 3#1 CU. 1#8 GND CU	179	2.09	4.4K	-
MBA-10	305	1-1/2" C, 3#1 CU. 1#8 GND CU	188	2.20	4.2K	-
MBA-11	401	2" C, 3#1/O CU. 1#6 GND CU	253	2.96	3.3K	△
MBA-12	402	2" C, 3#1/O CU. 1#6 GND CU	208	2.43	3.9K	ADJUSTED FOR VOLTAGE DROP
MBA-13	403	2" C, 3#1/O CU. 1#6 GND CU	213	2.49	3.8K	△
MBA-14	404	2" C, 3#1/O CU. 1#6 GND CU	190	2.22	4.2K	ADJUSTED FOR VOLTAGE DROP
MBA-15	405	1-1/2" C, 3#1 CU. 1#8 GND CU	199	2.33	4.0K	△

FEEDER SCHEDULE GENERAL NOTES:

- ALL FEEDERS SHOWN, UNLESS SPECIFICALLY NOTED OTHERWISE, ARE PRESUMED TO BE ROUTED IN METAL RACEWAYS. IF P.V.C. CONDUITS ARE UTILIZED, THE CONTRACTOR SHALL PROVIDE AN EQUIPMENT GROUND PER NEC, OR CEC WHERE ADOPTED, TABLE 250.122 OR, WHERE REQUIRED, PROVIDE A MAIN BONDING JUMPER PER TABLE 250.66 AND INCREASE THE CONDUIT SIZE ACCORDINGLY.
- THE VALUE INDICATED IS THE VOLTAGE DROP AT THE END OF THE FEEDER.
- DISTANCE SHOWN IS FOR DESIGN PURPOSES ONLY AND IS NOT INTENDED FOR MATERIAL TAKEOFF.
- CALCULATIONS ARE BASED UPON INITIAL VALUES RECEIVED FROM THE SERVING UTILITY OR ASSUMED WORST-CASE VALUE AND LENGTH/IMPEDANCE OF THE FEEDER. THE VALUE INDICATED IS THE AVAILABLE FAULT CURRENT AT THE END THE FEEDER.

FEEDER SCHEDULE

SCALE
NTS 1



SYSTEM GROUNDING DETAIL

SCALE
NTS 3

HOUSE PANEL SCHEDULES

		PANEL HP4																
MOUNTING	<u>SURFACE</u>	DOUBLE LUG		<u>NO</u>		VOLTS		120/208		MAIN		100A						
NEMA 3R	<u>NO</u>	200% NEUTRAL		<u>NO</u>		PHASE		3		BUS		125A						
FEED THRU	<u>NO</u>	1/0 BUS		<u>NO</u>		WIRE		4		A.I.C.		10,000						
NOTES	LOCATION	A			B			C			LOCATION			NOTES				
		L	C	V	K	R	M	B	C	I	R	C	I		R	C		
	4TH FLOOR HALL RECEPT	900			5			20/1	1		2	20/1	11	163			4TH FLOOR LTG	
	5TH FLOOR HALL RECEPT		900		5			20/1	3	4	20/1	9		99			4TH FLOOR EM LTG	
	6TH FLOOR RECEPT			720	4			20/1	5	6	20/1	12					5TH FLOOR LTG	
	6TH FLOOR EXTERIOR RECEPT	540			3			20/1	7	8	20/1	9		99			5TH FLOOR EM LTG	
	PLCP#1		200		1			20/1	9	10	20/1	6		79			6TH FLOOR LTG	
	SPARE							20/1	11	12	20/1	1					4TH FLOOR CEF-2	
	SPARE							20/1	13	14	20/1	1					5TH FLOOR CEF-2	
	SPARE							20/1	15	16	20/1	1					6TH FLOOR CEF-2	
	SPARE							20/1	17	18	20/1						SPACE	
	SPARE							20/1	19	20	20/1	1		350			INVERTER-INV2	
	SPARE							20/1	21	22	20/1	1		25			CP-1 3RD FLOOR	
	ROOF RECEPT			180	1			20/1	23	24	20/1	1					CP-1 5TH FLOOR	
	4TH FLR REMOTE METERS, EDM	300			8			20/1	25	26	20/1	7		700			4TH FLOOR FSD & SMOKE DETECTORS	
	5TH FLR REMOTE METERS		250		5			20/1	27	28	20/1	7		700			4TH FLOOR FSD & SMOKE DETECTORS	
	6TH FLR REMOTE METERS			50	1			20/1	29	30	20/1	7		700			5TH FLOOR FSD & SMOKE DETECTORS	
	SPACE							20/1	31	32	20/1	7		700			5TH FLOOR FSD & SMOKE DETECTORS	
	SPACE							20/1	33	34	20/1	1		696			SF-1	
	SPACE							20/1	35	36	20/1						SPACE	
	SPACE							20/1	37	38	20/1						SPACE	
	SPACE							20/1	39	40	20/1						SPACE	
	SPACE							20/1	41	42	20/1						SPACE	
		A= 3864			B= 2988			C= 1893										
TOTAL VA=		8745			W/LCL= 8987			AMPS= 25.0			TOTAL LCL= 969 X .25 = 242							
HIGH PHASE VA=		3864			W/LCL= 4017			HIGH PHASE AMPS= 33.5			HIGH PHASE LCL= 612 X .25 = 153							

		INVERTER INV1 (RECESSED MOUNTED)																		
INPUT VOLTAGE	120	OUTPUT VOLTAGE		120		KW/KVA		0.125		FAX MODEM		NO								
INPUT PHASE	1	OUTPUT PHASE		1		REMOTE CONTROL		-		MB SWITCH		NO								
INPUT WIRE	2	OUTPUT WIRE		2		REMOTE ALARM		-		A.I.C.		22,000								
NOTES	DESCRIPTION	WATTS	LTG	GEN	KIT	LCL	MIS	BKR	CIRC	PHASE	CIRC	BKR	MIS	LCL	KIT	GEN	LTG	WATTS	DESCRIPTION	NOTES
-	EXTERIOR EGRESS DOOR LIGHTS	51	3	-	-	-	-	20/1	1	A	2	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	5	A	6	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	7	B	8	-	-	-	-	-	-	-	-	-
TOTAL WATTS =		64			AMPS =			0.53			LCL =			13						

		INVERTER INV2 (RECESSED MOUNTED)																		
INPUT VOLTAGE	120	OUTPUT VOLTAGE		120		KW/KVA		0.350		FAX MODEM		NO								
INPUT PHASE	1	OUTPUT PHASE		1		REMOTE CONTROL		-		MB SWITCH		NO								
INPUT WIRE	2	OUTPUT WIRE		2		REMOTE ALARM		-		A.I.C.		10,000								
NOTES	DESCRIPTION	WATTS	LTG	GEN	KIT	LCL	MIS	BKR	CIRC	PHASE	CIRC	BKR	MIS	LCL	KIT	GEN	LTG	WATTS	DESCRIPTION	NOTES
1	6TH FLOOR STAIR LANDING BOLLARD	98	8	-	-	-	-	20/1	1	A	2	-	-	-	-	-	-	-	-	-
2	6TH FLOOR PATIO LIGHTS	142.2	12	-	-	-	-	20/1	3	B	4	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	5	A	6	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	7	B	8	-	-	-	-	-	-	-	-	-
TOTAL WATTS =		240.2			AMPS =			2.5			LCL =			60						

		PANEL EHP1																
MOUNTING	<u>SURFACE</u>	DOUBLE LUG		<u>NO</u>		VOLTS		120/208		MAIN		MLO						
NEMA 3R	<u>NO</u>	200% NEUTRAL		<u>NO</u>		PHASE		3		BUS		250A						
FEED THRU	<u>NO</u>	1/0 BUS		<u>NO</u>		WIRE		4		A.I.C.		22,000						
NOTES	LOCATION	A			B			C			LOCATION			NOTES				
		L	C	V	K	R	M	B	C	I	R	C	I		R	C		
	BATTERY CHARGER	1000			1	20/1	1		2	250/3	1		18000				ELEVATOR ELEV-1	
	JACKET WATER HEATER		1200		1	20/1	3		4	-	-						----	
	SPACE						5		6	-	-						----	
	SPACE						7		8	20/1	1		100				ELEV-1 SHUNT RELAY	
	SPACE						9		10								SPACE	
	SPACE						11		12								SPACE	
	SPACE						13		14								SPACE	
	SPACE						15		16								SPACE	
	SPACE						17		18								SPACE	
		A= 19100			B= 19200			C= 18000										
TOTAL VA=		56300			W/LCL= 56300			AMPS= 156.4			TOTAL LCL= 0 X .25 = 0							
HIGH PHASE VA=		19200			W/LCL= 19200			HIGH PHASE AMPS= 160.0			HIGH PHASE LCL= 0 X .25 = 0							

		PANEL HP1																		
MOUNTING	<u>SURFACE</u>	DOUBLE LUG		<u>NO</u>		VOLTS		120/208		MAIN		400A								
NEMA 3R	<u>NO</u>	200% NEUTRAL		<u>NO</u>		PHASE		3		BUS		400A								
FEED THRU	<u>NO</u>	1/0 BUS		<u>NO</u>		WIRE		4		A.I.C.		22,000								
NOTES	LOCATION	A			B			C			LOCATION			NOTES						
		L	C	V	K	R	M	B	C	I	R	C	I		R	C				
	UNDERCOUNTER FRIDGE	900			5			20/1	1		2	40/2		1	3328				EV CHARGER	
	COMMON SPACE DOWN RECEPT		900		5			20/1	3	4	-					3328			EV CHARGER	
	UNDERCOUNTER RECEPT			720	4			20/1	5	6	40/2					3328			EV CHARGER	
	LOBBY DOWN RECEPT	540			3			20/1	7	8	-					3328			EV CHARGER	
	UTILITY TRASH RM DOWN RECEPT		540		3			20/1	9	10	40/2					3328			EV CHARGER	
	2ND FLOOR HALL RECEPT			900	5			20/1	11	12	-							3328		
	3RD FLOOR HALL RECEPT	900			5			20/1	13	14	20/1	1			360			RECEPT TEL BACKBD		
	PARKING GARAGE LTG		264		6			20/1	15	16	20/1				163			2ND FLOOR LTG		
	PARKING GARAGE EM LTG			264	6			20/1	17	18	20/1			10			132	2ND FLOOR EM LTG		
	STAIR #1 LTG	341			11			20/1	19	20	20/1			10	130			3RD FLOOR LTG		
	STAIR #2 LTG		310		10			20/1	21	22	20/1			9			99	3RD FLOOR EM LTG		
	1ST FLOOR WALL LTG			184	8			20/1	23	24	20/1			5			900	STAIR #1 RECEPITS		
	SPARE							20/1	25	26	20/1			4			720	STAIR #2 RECEPITS		
	1ST FLOOR EXTERIOR LTG		104		13			20/1	27	28	20/1			1	2		268	ELEVATOR PIT LTS, RECEPT		
	1ST FLOOR COMMON SPACE LTG			279	17			20/1	29	30	20/1	1					180	ELEVATOR MACHINE RM RECEPT		
	BRE STORAGE/BUILD SERVICES LTG	310			10			20/1	31	32	20/1	1			200			SECURITY KEYPAD		
	CORRIDOR/MAIL/JANITOR LTG		227		17			20/1	33	34	20/1			1			100	INVERTER "INV1"		
	"LCP" 1							20/1	35	36	20/1			1			180	PARKING GARAGE GFI		
	VRF-1	67			200			1	15/2	37	38	20/1			1		100	EE-1		
	VRF-2		67					1	15/2	41	42	20/1	1				2880	WH-1 WATER HEATER		
	CP-1							1	15/2	43	44	40/2			1	3328	25	CP-1 2ND FLOOR EV CHARGER		
	2ND FLOOR CEF-2		39					1	20/1	45	46	-					3328	----		
	3RD FLOOR CEF-2			39				1	20/1	47	48	20/1	2				360	BIKE REPAIR RECEPITS		
	"FACP"	200						1	20/1	49	50	30/2	1			1415		CU-1		
	"PBS"		200					1	20/1	51	52	-				1415		----		
	"PBS"							1	20/1	53	54	-						CEP-3		
	PARKING GARAGE GATE			800				1	100/3	55										

TYPICAL UNIT PANEL SCHEDULES

LOAD CENTER 202,205,304,405,504															
MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	100A								
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	100A								
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	10,000								
LOCATION	A	B	L T G N V	C O I N V	R E I S C P	M I S C P	B K R R C	C I R C	C I R C	B K R R C	M I S C P	C O I N V	L T G N V	LOCATION	NOTE
T.G. BEDROOM #1 LTS/RECS	1080		3	7	1	20/1	1	2	20/1	1	5	7	1488	KITCHEN LTS/LIVING ROOM RECS	G
- BATHROOM #1 GFCI RECEPT		180				20/1	3	4	20/1	1				REFRIGERATOR	G
G WASH/DRYER COMBO	1240				1	20/1	5	6	20/1	1			1176	GARBAGE DISPOSAL	G
HPAC-1		1103			1	15/2	7	8	20/1	1				DISHWASHER	G
VHP-1		1040			1	20/2	11	12	40/2	1			1800	MICROWAVE	G
						13	14							OVEN	G
SPACE	1040					15	16	20/1	2	2			4050	SMALL APPLIANCE RECEPT	T.G
SPACE						17	18	20/1	1	2			1500	SMALL APPLIANCE RECEPT	-G
SPACE						19	20	20/1	3				150	SMOKE DETECT & CARBON MONOXIDE	G
SPACE						21	22							SPACE	
SPACE						23	24							SPACE	
SPACE						25	26							SPACE	
SPACE						27	28							SPACE	
SPACE						29	30							SPACE	

LOAD CENTER 301,401,501																
MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	125A									
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	125A									
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	10,000									
LOCATION	A	B	L T G N V	C O I N V	R E I S C P	M I S C P	B K R R C	C I R C	C I R C	B K R R C	M I S C P	C O I N V	L T G N V	LOCATION	NOTE	
T.G. BEDROOM #1 LTS/RECS	1260		3	8	1	20/1	1	2	20/1	1	5	12	1125	KITCHEN LTS/LIVING ROOM RECS	G	
- BATHROOM #1 GFCI RECEPT		180				20/1	3	4	20/1	1				REFRIGERATOR	G	
G WASH/DRYER COMBO	1240				1	20/1	5	6	20/1	1			1176	GARBAGE DISPOSAL	G	
HPAC-1		1103			1	15/2	7	8	20/1	1				DISHWASHER	G	
VHP-1		1103			1	20/2	11	12	40/2	1			1800	MICROWAVE	G	
						13	14							OVEN	G	
SPACE	1040					15	16	20/1	15	16	20/1	2	2	4050	SMALL APPLIANCE RECEPT	T.G
SPACE						17	18	20/1	17	18	20/1	1	2	1500	SMALL APPLIANCE RECEPT	-G
SPACE						19	20	20/1	6	2				300	SMOKE DETECT & CARBON MONOXIDE	G
SPACE						21	22	20/1	6	2			1282	LIVING ROOM RECS/CONV LTS	G	
SPACE						23	24							SPACE		
SPACE						25	26							SPACE		
SPACE						27	28							SPACE		
SPACE						29	30							SPACE		

LOAD CENTER 204,302,305,402,405,502,505,601,602																
MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	100A									
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	100A									
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	10,000									
LOCATION	A	B	L T G N V	C O I N V	R E I S C P	M I S C P	B K R R C	C I R C	C I R C	B K R R C	M I S C P	C O I N V	L T G N V	LOCATION	NOTE	
T.G. BEDROOM #1 LTS/RECS	1080		3	7	1	20/1	1	2	20/1	1	6	7	1488	KITCHEN LTS/LIVING ROOM RECS	G	
- BATHROOM #1 GFCI RECEPT		180				20/1	3	4	20/1	1				REFRIGERATOR	G	
G WASH/DRYER COMBO	1240				1	20/1	5	6	20/1	1			1176	GARBAGE DISPOSAL	G	
HPAC-1		1103			1	15/2	7	8	20/1	1				DISHWASHER	G	
VHP-1		1040			1	20/2	11	12	40/2	1			1800	MICROWAVE	G	
						13	14							OVEN	G	
SPACE	1040					15	16	20/1	15	16	20/1	2	2	4050	SMALL APPLIANCE RECEPT	T.G
SPACE						17	18	20/1	17	18	20/1	1	2	1500	SMALL APPLIANCE RECEPT	-G
SPACE						19	20	20/1	4					200	SMOKE DETECT & CARBON MONOXIDE	G
SPACE						21	22							SPACE		
SPACE						23	24							SPACE		
SPACE						25	26							SPACE		
SPACE						27	28							SPACE		
SPACE						29	30							SPACE		

LOAD CENTER 201																
MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	125A									
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	125A									
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	10,000									
LOCATION	A	B	L T G N V	C O I N V	R E I S C P	M I S C P	B K R R C	C I R C	C I R C	B K R R C	M I S C P	C O I N V	L T G N V	LOCATION	NOTE	
T.G. BEDROOM #1 LTS/RECS	1260		3	8	1	20/1	1	2	20/1	1	5	14	1147	KITCHEN LTS/LIVING ROOM RECS	G	
- BATHROOM #1 GFCI RECEPT		180				20/1	3	4	20/1	1				REFRIGERATOR	G	
G WASH/DRYER COMBO	1240				1	20/1	5	6	20/1	1			1176	GARBAGE DISPOSAL	G	
HPAC-1		1560			1	15/2	7	8	20/1	1				DISHWASHER	G	
VHP-1		1040			1	20/2	11	12	40/2	1			1800	MICROWAVE	G	
						13	14							OVEN	G	
SPACE	1040					15	16	20/1	15	16	20/1	2	2	4050	SMALL APPLIANCE RECEPT	T.G
SPACE						17	18	20/1	17	18	20/1	1	2	1500	SMALL APPLIANCE RECEPT	-G
SPACE						19	20	20/1	7	2				350	SMOKE DETECT & CARBON MONOXIDE	G
SPACE						21	22	20/1	7	2			1282	LIVING ROOM RECS/CONV LTS	G	
SPACE						23	24							1620	BEDROOM #3 CONV LTS/RECS	G
SPACE						25	26	15/2						1103	HPAC-1 BR#4	G
SPACE						27	28								SPACE	
SPACE						29	30								SPACE	

LOAD CENTER 203,303,403,503																
MOUNTING	RECESSED	DOUBLE LUG	NO	VOLTS	120/208	MAIN	125A									
NEMA 3R	NO	200% NEUTRAL	NO	PHASE	1	BUS	125A									
FEED THRU	NO	I/G BUS	NO	WIRE	3	A.I.C.	10,000									
LOCATION	A	B	L T G N V	C O I N V	R E I S C P	M I S C P	B K R R C	C I R C	C I R C	B K R R C	M I S C P	C O I N V	L T G N V	LOCATION	NOTE	
T.G. BEDROOM #1 LTS/RECS	1080		3	7	1	20/1	1	2	20/1	1	6	12	1305	KITCHEN LTS/LIVING ROOM RECS	G	
- BATHROOM #1 GFCI RECEPT		180				20/1	3	4	20/1	1				REFRIGERATOR	G	
G WASH/DRYER COMBO	1240				1	20/1	5	6	20/1	1			1176	GARBAGE DISPOSAL	G	
HPAC-1		1103			1	15/2	7	8	20/1	1				DISHWASHER	G	
VHP-1		1040			1	20/2	11	12	40/2	1			1800	MICROWAVE	G	
						13	14							OVEN	G	
SPACE	1040					15	16	20/1	15	16	20/1	2	2	4050	SMALL APPLIANCE RECEPT	T.G
SPACE						17	18	20/1	17	18	20/1	1	2	1500	SMALL APPLIANCE RECEPT	-G
SPACE						19	20	20/1	5					250	SMOKE DETECT & CARBON MONOXIDE	G
SPACE						21	22							SPACE		
SPACE						23	24							SPACE		
SPACE						25	26							SPACE		
SPACE						27	28							SPACE		
SPACE						29	30							SPACE		

- KEY NOTES**
- # NUMBERS INDICATE NOTES SHOWN ON PLAN
 - 1. CIRCUIT BREAKER WITH AFCI PROTECTION.
 - 2. PROVIDE APPROVED HANDLE-TIE FOR MULTIWIRED BREAKERS
- PANEL SCHEDULE NOTES:**
- "E" EXISTING BREAKER WITH NEW LOAD
 - "G" PROVIDE GFCI TYPE DEVICE.
 - "H" PROVIDE HACR BREAKER
 - "L" PROVIDE LOCK-ON DEVICE.
 - "N" PROVIDE A NEW BREAKER TO MATCH THE EXISTING
 - "O" DEVICE CAPABLE OF BEING LOCK IN THE OPEN POSITION
 - "R" PROVIDE A RED CIRCUIT BREAKER.
 - "S" PROVIDE SHUNT TRIP DEVICE
 - "T" PROVIDE APPROVED HANDLE-TIE FOR MULTIWIRED BREAKERS

LOAD CENTER	LOAD CENTER	
202,205,304,405,504	301,401,501	-
204,302,305,402,405,502,505,601,602	201	-
203,303,403,503	-	-

NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:

COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
	PC RESUBMITTAL	05/18/22
	PC RESUBMITTAL	10/28/22
	HCD REVISION 1	12/16/22
	PC RESUBMITTAL	02/02/23
	HCD & PC RESUBMITTAL	06/06/23
	HCD RESUBMITTAL	06/14/23
	PC RESUBMITTAL	07/10/23
	CLIENT REVISIONS	07/11/23
	CLIENT REVISIONS	08/04/23
	PC RESUBMITTAL (ELEC)	09/12/23
	PC RESUBMITTAL (ELEC)	10/05/23
	CLIENT REVISIONS	10/12/23

GENERATOR SYSTEM SPECIFICATIONS

1. THIS SYSTEM SHALL BE MTU ONSITE ENERGY OR EQUAL WHO HAS BEEN REGULARLY ENGAGED IN THE PRODUCTION OF ENGINE-ALTERNATOR SETS AND ASSOCIATED CONTROLS FOR A MINIMUM OF TWENTY YEARS, THEREBY IDENTIFYING ONE SOURCE OF SUPPLY AND RESPONSIBILITY. EQUAL MEANS, HAVING THE SAME SYSTEM CONFIGURATION, OPERATION, FOOTPRINT OF THE GENSET, SKVA RATING, FUEL CONSUMPTION, SAME SOUND EMISSIONS AT THE SAME PROXIMITY SOLUTIONS OR EQUIPMENT THAT UTILIZES ALTERNATE MANUFACTURER MUST SUBMIT EQUIPMENT FOR APPROVAL 7 DAYS PRIOR TO BID. AS PART OF QUALIFICATION PROCESS; AN AUTHORIZED DEALER/SUPPLIER, HEREIN KNOWN AS THE SUPPLIER SHALL REPRESENT THE MANUFACTURER. TO QUALIFY AS THE DEALER/SUPPLIER, IT MUST BE A FULL PRODUCT LINE DISTRIBUTOR OF "CATERPILLAR" OR "MTU ONSITE ENERGY". THE DEALER/SUPPLIER MUST HAVE CERTIFIED GENERATOR SERVICE TECHNICIANS, INVENTORY OF PARTS AND GENERATOR RENTAL UNITS TO SUPPORT AFTER SALES SERVICE AND CAN PROVE 5 YEARS OF EXPERIENCE. PRIME CONTACT IS SOUTHY CHANSIRIK AT QUINN POWER. PHONE NUMBER (562) 484-4816.

ALL EQUIPMENT SHALL BE NEW, OF CURRENT DESIGN, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF IEEE, NEMA, UL, ANSI AS WELL AS LOCAL JURISDICTION REQUIREMENTS. ALL EQUIPMENT SHALL BE FACTORY ASSEMBLED AND TESTED. THE FOLLOWING DOCUMENTS SHALL APPLY TO THE MANUFACTURING AND INSTALLATION OF THE GENERATOR SYSTEM:

- IEEE 587 SURGE TESTING
- NEMA ICS MOTORS AND GENERATORS
- NFPA 110 EMERGENCY/STANDBY SYSTEMS
- NFPA 37 INSTALLATION AND USE
- UL 142 FUEL TANKS
- UL 2200 GENERATOR SET
- UL 489 CIRCUIT BREAKERS
- UFC (OR CFC WHERE ADOPTED) ART 79
- UL 2085 FIRE RATED FUEL TANKS (WHEN REQUIRED BY AHJ)

2. ALL PRODUCTS SHALL BE WARRANTED AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR 5 YEARS FROM START UP INCLUDING PARTS, LABOR AND TRAVEL EXPENSES.

3. ENGINE SHALL BE PROVIDED WITH THE FOLLOWING EQUIPMENT:

- OIL PRESSURE, WATER TEMPERATURE, OIL TEMPERATURE, RPM, HOURS OF OPERATION, ENGINE STARTS COUNTER AND DC VOLTAGE METERS.
- POSITIVE DISPLACEMENT OIL AND FUEL PUMPS WITH REPLACEABLE SPIN ON CANISTER ELEMENTS
- ENGINE MOUNTED BATTERY CHARGING ALTERNATOR, 45-AMPERE MINIMUM, WITH SOLID STATE VOLTAGE REGULATOR, PROVIDE ALTERNATOR ANTI CONDENSATION HEATER WHEN LOCATED WITHIN 1/4 MILE OF AN OCEAN OR IN AREA WHERE THE AMBIENT TEMP. IS 32 DEGREES OR LOWER IN ANY TWO CONSECUTIVE DAYS.
- JACKET WATER HEATER. SIZE AS REQUIRED TO MAINTAIN 90°F AT LOWEST AMBIENT TEMPERATURE FOR PROJECT SITE.
- ELECTRONIC GOVERNOR WITH ADJUSTABLE CONTROL.
- ENGINE MOUNTED RADIATOR, PUSHER FAN, WATER PUMP AND THERMOSTAT.
- PROVIDE ELECTRIC STARTER, LEAD ACID TYPE 24VDC BATTERY.
- FULL LOAD OPERATION AT 122°F AMBIENT CONDITIONS AND 1,000FT ABOVE MEAN SEA LEVEL. DESIRED FOR HOUSING IS UNACCEPTABLE
- FOR GENERATORS 900KW CAPACITY OR LARGER, PROVIDE PACKAGED PRIMARY FUEL FILTER SYSTEM ALLOWING FUEL FILTER REPLACEMENT DURING GENERATOR OPERATION. (DAHL#300 OR EQUAL).
- FOR GENERATORS, WITH LESS THAN 900KW CAPACITY, PROVIDE IN-LINE SINGLE PRIMARY FUEL FILTER SYSTEM ALLOWING FUEL FILTER TO BE DRAINED OF WATER AND SEDIMENT DURING GENERATOR OPERATION.
- PROVIDE BATTERY HEATER, LUBE OIL HEATER(S) AND OIL PAN HEATER IN AREAS WHERE THE AMBIENT TEMP. IS 32 DEGREES OR LOWER IN ANY TWO CONSECUTIVE DAYS.

4. GENERATOR SHALL BE PROVIDED WITH THE FOLLOWING CHARACTERISTICS:

- LESS THAN 5% THD AT FULL LOAD AND 3% FOR SINGLE HARMONICS.
- TELEPHONE INFLUENCE FACTOR LESS THAN 0% OR EQUAL AS DETERMINED BY MGL.
- BRUSHLESS, THREE PHASE EXCITER WITH FULL WAVE SILICON DIODES, SURGE SUPPRESSOR AND EXCITER CIRCUIT BREAKER.
- PERMANENT MAGNET GENERATOR SHALL SUSTAIN 300% SHORT CIRCUIT FOR AT LEAST 10 SECONDS. ELECTRONIC OR CT BOOST METHODS ARE UNACCEPTABLE.
- TEMPERATURE RISE AT FULL LOAD SHALL NOT EXCEED 105°C.
- VOLTAGE REGULATOR SHALL BE 3 PHASE RMS SENSING, TEMPERATURE COMPENSATED, PULSE WIDTH MODULATED WITH 0.5% REGULATION.
- PROVIDE COMPLETE RFI SHIELDING.
- 100% LOAD TRANSFER IN ONE STEP.
- RESET SWITCH.
- TRANSIENT VOLTAGE PERFORMANCE: NOT MORE THAN 20% VARIATION FOR A 50% STEP - LOAD INCREASE OR DECREASE. VOLTAGE RECOVERS TO REMAIN WITHIN THE STEADY STATE OPERATING BAND WITHIN THREE SECONDS.
- TRANSIENT FREQUENCY PERFORMANCE: LESS THAN 5% VARIATION FOR A 50% STEP LOAD INCREASE OR DECREASE. FREQUENCY RECOVERS TO REMAIN WITHIN THE STEADY STATE OPERATING BAND WITHIN 5 SECONDS.

5. GENERATOR CONTROL PANEL SHALL PROVIDE THE FOLLOWING FUNCTIONS:

- SHUTDOWN FUNCTIONS: OVERCRANK, OVERSPEED, LOW OIL PRESSURE, HIGH ENGINE TEMP, LOW COOLANT LEVEL, OVERVOLTAGE, UNDERVOLTAGE, UNDER FREQUENCY, AND REMOTE STOP
- LOAD SHED FUNCTIONS: OVERLOAD AND UNDERFREQUENCY.
- ALARM/SHUTDOWN ALERT INDICATION: NOT-IN-AUTO, LOW OIL PRESSURE, PRE-HIGH ENGINE TEMP, PRE-LOW OIL PRESSURE, HIGH/LOW ENGINE TEMP, LOW FUEL, LOW DC LOAD VOLTAGE, OVERLOAD CIRCUIT BREAKER TRIP, LOW COOLANT LEVEL, OVERCRANK, OVERSPEED OVER/UNDER VOLTAGE, UNDER FREQUENCY, PLUS (2) SPARE INDICATORS.
- DIGITAL: VOLTMETER, AMMETER, FREQUENCY METER, KW, POWER FACTOR, WITH PHASE-TO-PHASE AND PHASE-TO-NEUTRAL SELECTOR SWITCH
- VOLTAGE/FREQUENCY TRIM CONTROLS +/- 5%.
- ANTI CONDENSATION HEATER WHEN LOCATED WITHIN 1/4 MILE OF AN OCEAN OR IN AREA WHERE THE AMBIENT TEMPERATURE IS 32 DEGREES OR LOWER IN ANY TWO CONSECUTIVE DAYS.

6. GENERATOR CIRCUIT BREAKERS 400 AMP FRAME OR SMALLER SHALL BE 80% RATED, THERMAL-MAGNETIC TRIP WITH INVERSE TIME CURRENT CHARACTERISTICS UNLESS OTHERWISE NOTED. GENERATOR CIRCUIT BREAKERS LARGER THAN 400A FRAME SHALL BE 100% RATED, SOLID-STATE TYPE WITH MINIMUM FIVE FUNCTION COMPLETE WITH BUILT-IN CURRENT TRANSFORMERS. THE FIVE FUNCTIONS SHALL BE INDEPENDENTLY ADJUSTABLE AND CONSIST OF OVERLOAD/LONG TIME AMP RATING, LONG TIME DELAY, SHORT TIME DELAY, SHORT CIRCUIT INSTANTANEOUS PICKUP, BUT MAY ALSO INCLUDE SHUNT TRIP AND/OR GROUND FAULT IF SO INDICATED ON THE DRAWINGS. RATING PLUGS SHALL BE INTERLOCKED SO THEY ARE NOT INTERCHANGEABLE BETWEEN FRAMES. RATING PLUGS SHALL BE INTERCHANGEABLE (FIXED OR ADJUSTABLE) TYPE AS INDICATED, TO HAVE A REJECTION FEATURE TO PREVENT INTERCHANGING BETWEEN CIRCUIT BREAKER FRAMES, AND INTERLOCKED SUCH THAT A BREAKER CANNOT BE CLOSED AND LATCHED WITH THE RATING PLUG REMOVED. BREAKER SHALL HAVE BUILT-IN TEST POINTS FOR TESTING LONG DELAY AND INSTANTANEOUS, AND GROUND FAULT (WHERE SHOWN) FUNCTIONS OF THE BREAKER BY MEANS OF A 120-VOLT OPERATED TEST KIT.

7. SUB BASE DIESEL FUEL TANK SHALL BE DOUBLE WALL, INCLUDE A LEVEL GAUGE, LOW 20%, 90%, AND 95% LEVEL CONTACTS, RUPTURE BASIN ALARM CONTACTS, BASIN DRAIN, FUEL LINES, LOCKABLE FILL CAP, DRAIN VALVE, VENTS, 5 GALLON SPILLY OVERTILL CONTAINMENT, SOUNDING/CLEANOUT PORT AND ULL LABEL. ADDITIONALLY ALL SUB BASE TANKS SHALL COMPLY WITH THE FOLLOWING:

- ALL TANKS SHALL BE PROVIDED WITH AN EMERGENCY VENT THAT RELEASES TO THE OUTSIDE OF THE BUILDING OR ENCLOSURE.
- ALL TANKS SHALL BE PROVIDED WITH SIGNAGE READING "COMBUSTIBLE LIQUID II. ALL LETTERING SHALL BE IN CAPITAL LETTERS ON A CONTRASTING BACKGROUND. SIGNS SHALL BE OF DURABLE CONSTRUCTION AND SUITABLE FOR THE ENVIRONMENT IN WHICH THEY ARE INSTALLED. LETTERS SHALL NOT BE LESS THAN 3" IN HEIGHT. TANKS SHALL BE POSTED WITH HAZARDOUS MATERIALS IDENTIFICATION SIGNS LOCATED SO IT IS VISIBLE FROM ALL ANGLES OF APPROACH.
- PROVIDE BOTH EMERGENCY FUEL VENT PIPES (PER UL 142) AND NORMAL FUEL VENT PIPES, SIZED AS REQUIRED, SUCH THAT VAPORS ARE RELEASED 12 FEET ABOVE ADJACENT GRADE AND A MINIMUM OF 10 FEET FROM ANY BUILDING. VERIFY AND MEET ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) PRIOR TO ROUGH-IN. IF THE AHJ ALLOWS EMERGENCY VENT TO TERMINATE AT A LOWER LEVEL, GENERATOR MANUFACTURER SHALL TERMINATE THE EMERGENCY VENT AT THE LOWER LEVEL.

ALL SUB-BASE TANKS SHALL EQUIPPED WITH AN OVERTILL PREVENTION SYSTEM CONSISTING OF ENGINE BATTERY-POWERED HORN THAT SOUNDS AND AUDIBLE ALARM WHEN THE TANK IS 90% FULL AND AN ENGINE BATTERY-POWERED SOLENOID VALVE THAT CLOSSES WHEN THE TANK REACHES 95% FULL.

- ALL SUB-BASE TANKS SHALL BE UL142-LISTED AS A MINIMUM. PROVIDE UL2085-LISTED FIRE-RATED, VAULTED TANKS IF REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THIS REQUIREMENT WITH THE AHJ AND INCLUDE ALL COSTS IN BASE BID.

- WHEN REMOTE ABOVE GROUND STORAGE TANK(S) (AST) IS SPECIFIED FOR THE PROJECT, THE GENERATOR SUB BASE TANK(S) SHALL BE EQUIPPED WITH A DUPLEX FUEL RETURN PUMP TO RETURN EXCESS FUEL FROM THE SUB-BASE TANK(S) TO THE REMOTE ABOVE GROUND STORAGE TANK(S) IN CASE OF EMERGENCY. WHEN A FUEL MAINTENANCE SYSTEM IS SPECIFIED ON THE PROJECT, THE FUEL PIPING SYSTEM SHALL ALLOW MANUAL OPERATION OF SUB-BASE RETURN PUMPS AND ANY AST-MOUNTED SUPPLY PUMPS FOR FUEL MAINTENANCE ALLOWING RETURN OF SUB-BASE FUEL TO ASTS AND DRAWING FILTERED/POLISHED AS FUEL TO SUB-BASE TANKS.

8. WHEN THE GENERATOR SCHEDULE INDICATES REMOTE ANNUNCIATOR PANEL(S) SHALL BE PROVIDED, EACH PANEL SHALL INDICATE ALL "ALARM/SHUTDOWN" EVENTS AS THE GENERATOR CONTROL PANEL AND SHALL INCLUDE THE FOLLOWING ADDITIONAL INDICATORS: LOW LEVEL FUEL, HIGH LEVEL FUEL, FUEL TANK LEAK ALARM, SHUTDOWN, LOW BATTERY VOLTAGE, BATTERY CHARGER MALFUNCTION, ALARM SILENCE, ATS POSITION INDICATION, AND LAMP TEST SWITCH. WHEN A FIBER OPTIC NETWORK IS INDICATED PROVIDE THE FOLLOWING ADDITIONAL INDICATORS: FIBER NETWORK POWER SUPPLY LOW VOLTAGE AND FAILURE FOR EACH AUTOMATIC TRANSFER SWITCH. REMOTE ANNUNCIATOR PANEL(S) SHALL BE PROVIDED PER THE FLOOR PLAN(S). WHEN REMOTE ANNUNCIATOR PANEL(S) IS NOT SHOWN ON FLOOR PLAN(S), THE E.C. SHALL INCLUDE ALL COSTS TO PROVIDE 1 REMOTE GENERATOR ANNUNCIATOR PANEL PER GENERATOR W/ CONDUIT AND CONDUCTORS AS REQUIRED TO LOCATE FLUSH-MOUNTED REMOTE GENERATOR ANNUNCIATOR PANEL(S) A MINIMUM OF 300 FT. FROM THE POINT OF ENTRANCE INTO THE FACILITY OF THE REMOTE GENERATOR ANNUNCIATOR PANEL CONDUIT(S) WITH FINAL LOCATION BY THE OWNER/ARCHITECT.

9. WHEN THE GENERATOR SCHEDULE INDICATES A "NETWORK" OPTION, ONE OR MORE OF THE FOLLOWING SHALL BE PROVIDED:

- "COPPER" - GENERATOR-TO-ATS COMMUNICATIONS SYSTEM VIA COPPER COPPER CONDUCTORS IN CONDUIT AS REQUIRED.
- "FIBER" - GENERATOR-TO-ATS COMMUNICATIONS SYSTEM VIA FIBER OPTICS IN CONDUIT AS REQUIRED. FIBER OPTICS SHALL BE INSTALLED, TERMINATED AND OTR-TESTED PER EIA/TIA STANDARDS BY INSTALLERS CERTIFIED BY FIBER OPTIC CABLING MANUFACTURER. PROVIDE ALL NECESSARY FIBER-TO-COPPER TRANSCEIVERS, PATCH CABLES, PATCH PANELS ETC. FOR A COMPLETE AND USEABLE SYSTEM TO INCLUDE SUITABLE BATTERY BACK-UP POWER SOURCE POWER TO ALLOW TRANSCEIVERS TO FUNCTION DURING A POWER OUTAGE.

10. WHEN THE GENERATOR SCHEDULE INDICATES A "COMMUNICATION" OPTION, ONE OR MORE OF THE FOLLOWING SHALL BE PROVIDED:

- "SNMP" - PROVIDE SNMP OUTPUT VIA BRIDGE OR INTERFACE DEVICE WITH GENSET MANUFACTURER HTML WEB BROWSER SERVER SOFTWARE. PROVIDE SNMP TRAPS FOR INTEGRATION INTO OWNER MANAGEMENT SYSTEM SOFTWARE AS REQUIRED. REPORTING/MONITORING PARAMETERS SHALL BE, AT MINIMUM, THE SAME POINTS MONITORED BY THE GENERATOR ANNUNCIATOR PANEL UNLESS OTHERWISE NOTED. INSTALL 1 COPY OF WEB BROWSER SOFTWARE ON OWNER FURNISHED SERVER AND MAKE FULLY FUNCTIONAL IN ALL ASPECTS TO INCLUDE FULL TEXT PAGINGS AND EMAIL NOTIFICATION FEATURES. ADDITIONALLY, PROGRAM AND INTEGRATE INPUT/OUTPUT MODULE(S) AS REQUIRED TO REPORT ATIS POSITION(S), SUB-BASE TANK(S) ALARMS AND FUEL LEVEL(S), REMOTE FILL STATION(S), ABOVEGROUND STORAGE TANK(S) (AST) ALARMS IF PROVIDED ON PROJECT - SEE AST SPECIFICATIONS) AND FUEL MAINTENANCE SYSTEM(S) (FMS) ALARMS IF PROVIDED ON PROJECT - SEE FMS SPECIFICATIONS).
- "BMS" - PROVIDE OUTPUT TO (BUILDING MANAGEMENT SYSTEM) BMS VIA BMS GATEWAY INTERFACE DEVICE. PROVIDE OUTPUT REGISTERS IN THE APPROPRIATE PROTOCOL FOR INTEGRATION INTO PROJECTS BUILDING MANAGEMENT SYSTEM SOFTWARE. MONITORING PARAMETERS FOR THE BMS SYSTEM SHALL BE, AT MINIMUM, THE SAME POINTS MONITORED BY THE GENERATOR ANNUNCIATOR PANEL. SEE BMS DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. THE E.C. SHALL INCLUDE ALL COSTS IN THE BASE BID TO INTEGRATE THE ITEMS UNDER DIVISION 16 WITH THE BMS SYSTEM WHICH INCLUDES, BUT IS NOT LIMITED TO, COMMUNICATIONS INTERFACE MODULES, DRY CONTACTS ETC ALONG WITH POINT ID LISTS/REGISTERS, BITMAPS AND/OR CADD FILES OF EACH PIECE OF ELECTRICAL EQUIPMENT (PLAN VIEW AND ELEVATION VIEW) AND MAN-HOURS AS NECESSARY TO ASSIST THE BMS CONTRACTOR IN COMMISSIONING THE BMS SYSTEM AS IT RELATES TO THE DIVISION 16 ITEMS WITH WHICH IT COMMUNICATES.

"TELE" - A PROGRAMMABLE FAX MODEM SHALL BE PROVIDED TO COMMUNICATE WITH GENSET MANUFACTURER GENERATOR SYSTEM MONITORING AND CONTROL SOFTWARE. GENERATOR SYSTEM SHALL BE PROGRAMMED TO SEND ALERT NOTIFICATIONS AND RECEIVE COMMANDS FROM SYSTEM SOFTWARE. E.C. SHALL INCLUDE ALL COSTS TO PROVIDE AN ANALOG LINE/PHONE JACK AS REQUIRED FOR THIS CONNECTION. INSTALL 1 COPY OF SOFTWARE ON OWNER-FURNISHED COMPUTER AND MAKE SYSTEM SOFTWARE FULLY FUNCTIONAL IN ALL ASPECTS.

"STD" - A GENERATOR MANUFACTURER-STANDARD GENERATOR/ATS/GAP/AST (MONITORING AND CONTROL SYSTEM TO MONITOR ATIS POSITION(S), SUB-BASE TANK(S), AST (ABOVE-GROUND STORAGE TANK) IF PROVIDED ON PROJECT - SEE ATIS SPECIFICATION FOR MORE INFORMATION), ALARMS AND FUEL LEVEL(S).

11. THE GENERATOR SET SHALL BE PROVIDED WITH A WEATHERPROOF HOUSING, AT MINIMUM, WHICH ALLOWS THE GENERATOR SET TO OPERATE AT FULL RATED LOAD IN THE AMBIENT CONDITIONS PREVIOUSLY SPECIFIED. ENCLOSURE SHALL BE CONSTRUCTED IN EITHER OF 2-WAYS:

- A. WHEN GENERATOR IS LOCATED MORE THAN 1/4 MILE OF AN OCEAN OR OTHER SALT WATER BODY, PROVIDE ENCLOSURES OF 14 GAUGE STEEL, ALL WELDED CONSTRUCTION WITH SEMI RIGID ACOUSTIC SOUND BOARD HAVING A UL FLAME SPREAD OF 25 OR LESS ARE ACCEPTABLE. INTERIOR SHALL BE FULLY LINED WITH A GALVANIZED PERFORATED SHEET, RIVETED TO THE FRAMEWORK AT 24" ON CENTER. SCREW FASTENERS ARE NOT ACCEPTABLE. PROVIDE STAINLESS STEEL EXTERIOR HARDWARE.
- B. PRE-PAINTED FORMED ALUMINUM PANELS. WALLS SHALL BE CONSTRUCTED OF MARINE GRADE 0.80 MINIMUM FORMED ALUMINUM PANELS. ROOF SHALL BE CONSTRUCTED OF MARINE GRADE MILL FINISH 0.125 MINIMUM THICKNESS FORMED ALUMINUM PANELS USING AN INTERLOCKING STANDING SEAM DESIGN CAPABLE OF SUPPORTING 75 POUNDS PER SQUARE FOOT. ALL EXTERNAL ATTACHING HARDWARE SHALL BE STAINLESS STEEL SCREW TYPE MECHANICAL FASTENERS.
- C. THE FOLLOWING ADDITIONAL REQUIREMENTS APPLY TO GENERATOR ENCLOSURES:

- ENCLOSURE SHALL BE DESIGNED FOR 100 MPH WINDS AND SEISMIC ZONE-4 CONDITIONS.
- ENCLOSURE SHALL HAVE A MINIMUM OF FIVE COMMON KEY LOCKING DOORS. DOORS SHALL HAVE CROSS BRACING, DOOR HOLDBACKS, GUITERS, BUBBLE TYPE GASKET, PANIC HARDWARE (INTERIOR) AND 2-POINT LOCKING ROLLER HARDWARE (EXTERIOR). ALL DOORS SHALL BE EQUIPPED WITH STAINLESS STEEL HARDWARE/HINGES, DOOR POSITION SWITCHES/CONTACTS (SENTRIROL OR EQUAL) FOR CONNECTION TO SECURITY SYSTEM, A DOOR SHALL BE LOCATED DIRECTLY IN FRONT OF EACH GENERATOR MOUNTED CIRCUIT BREAKER TO PROVIDE CODE-REQUIRED CLEARANCES.

ENCLOSURE SHALL HAVE A COMPLETE PRE-FABRICATED EXHAUST SYSTEM FOR INTERNAL MOUNTING OF THE SILENCER INCLUDING STAINLESS STEEL FLEX CONNECTOR, SILENCER, ELBOW, RAIN CAP, RAIN SHIELD AND STRUCTURAL SUPPORT AS REQUIRED. PROVIDE INSULATION BLANKETS ON EXHAUST PIPING AND SILENCER, WITH SILENCER MOUNTING BRACKETS. IF VERTICAL RADIATOR DISCHARGE IS INDICATED IN GENERATOR SCHEDULE THEN THE EXHAUST PIPE OUTLET SHALL BE CENTERED IN THE SLIPSTREAM OF THE VERTICAL DISCHARGE DUCT. EXTERNAL MOUNTING OF THE SILENCER IS UNACCEPTABLE. IF PARTICULATE MATTER FILTER IS REQUIRED BY LOCAL AIR QUALITY MANAGEMENT AUTHORITY, A COMBINATION SILENCER/PARTICULATE MATTER FILTER SHALL BE MOUNTED INTERNALLY WITHIN THE ENCLOSURE.

ENCLOSURE INTAKE AIR SHALL ENTER THE ENCLOSURE THROUGH AN ACOUSTIC BAFFLE SECTION LOCATED IN THE REAR SIDEWALLS AND/OR ROOF TOP OF THE ENCLOSURE AND SHALL INCLUDE AND 1/2" X 1/2" STAINLESS STEEL OR ALUMINUM RODENT/BIRD SCREEN. AIR INTAKE SHALL BE 1250 FEET PER MINUTE OR LESS TO MINIMIZE WATER INTRUSION.

ENCLOSURE RADIATOR DISCHARGE AIR SHALL PASS THROUGH A HORIZONTAL OR VERTICAL DISCHARGE PLENUM SECTION AS INDICATED IN GENERATOR SCHEDULE. EITHER TYPE SHALL INCLUDE A 1/2" X 1/2" STAINLESS STEEL OR ALUMINUM RODENT/BIRD SCREEN. ADDITIONALLY, WHEN LOCATED IN AREAS WHERE AMBIENT TEMPERATURE REACHES 20 DEGREES F, PROVIDE A GRAVITY DAMPER(S). THE AIR HANDLING SYSTEM SHALL BE ENGINEERED AND CONSTRUCTED SO AS NOT TO EXCEED A TOTAL OF 80 INCHES OF WATER GAUGE STATIC PRESSURE DROP (INTAKE AND DISCHARGE COMBINED TO INCLUDE UNIT-MOUNTED LOAD BANK, IF REQUIRED) WITH MINIMAL WATER INTRUSION. VERTICAL RADIATOR DISCHARGE DUCTING SHALL BE EQUIPPED WITH A RAIN GUTTER AND RAIN PORTS TO ALLOW WATER TO DRAIN OUT THE BOTTOM OF THE DUCT. INCLUDE ALL COSTS TO EXTEND HORIZONTAL RADIATOR DISCHARGE PLENUM FROM THE GENERATOR ENCLOSURE TO ANY ARCHITECTURAL SCREEN WALL AND ENCOMPASS ARCHITECTURAL SCREEN WALL LOUVERED OPENING(S) AS REQUIRED.

ENCLOSURE ROOF SHALL BE PITCHED MINIMUM OF 1/2" ON 12".

ENCLOSURE FOR 600KW OR LARGER GENERATOR OR GENERATORS WITH "WALK-IN" STYLE ENCLOSURES, PROVIDE INTEGRAL UNIT-MOUNTED 3-PHASE, 4-WIRE UNIT MOUNTED LOAD CENTER. HOUSING SHALL BE PRE-WIRED TO ALL NECESSARY JACKET HEATERS, BATTERY CHARGERS, RETURN PUMPS, ANTI CONDENSATE HEATERS ALONG WITH A MINIMUM OF (4) 120V, 100W, INCANDESCENT A19 LAMP VAPOR PROOF FIXTURES. (2) 120V, 15A GFCI WEATHER PROOF RECEPTACLES EVENLY DISTRIBUTED ON EACH SIDE OF THE GENSET LOCATED TO MAINTAIN A CODE CLEARANCES. EC TO PROVIDE FEEDER, AS REQUIRED, FROM NEARBY PANELBOARD.

ENCLOSURE SHALL HAVE OPENINGS FOR FUME DISPOSAL, OIL DRAIN, AND RADIATOR DRAIN SHALL BE PROVIDED.

LIFTING RINGS SHALL BE WELDED TO EACH CORNER OF ENCLOSURE BASE FRAME FOR LIFTING ENCLOSURE.

WHEN ENCLOSURE IS PAD MOUNTED, ANGLES BRACKETS SHALL BE SUPPLIED ON OUTSIDE OF ENCLOSURE FRAME FOR CONNECTION TO PAD. SUB BASE TANK MOUNTED ENCLOSURES HAVE HOLES DRILLED IN STRUCTURAL BASE FRAME TO MATCH THE TOP OF THE TANK.

U.O.N. ENCLOSURES AND SUB BASE TANKS SHALL HAVE: a) (2) COATS OF IRON OXIDE ALKYD PRIMER (TOTALING 2.5 MILS) APPLIED TO ALL NON-GALVANIZED STEEL SURFACES WITH FINISH COAT OF A 3 MIL HIGH QUALITY ALKYD ENAMEL, SUITABLE FOR INLAND ENVIRONMENTS, OR B) DUAL COAT CATHODIC ELECTRO-DEPOSITION PROCESS WITH 1.2 MIL BAKE-CURED EPOXY PRIMER AND A 2.7 MIL BAKE-CURED ACRYLIC TOP COATING. SUB-BASE TANK BOTTOMS SHALL BE FINISHED WITH A COAL TAR-BASED EPOXY OF 3 MILS. ENCLOSURE COLOR SHALL BE EITHER STANDARD FACTORY COLOR OR CUSTOM COLOR AS INDICATED IN GENERATOR SCHEDULE. CUSTOM COLORS SHALL BE WHITE, BEIGE OR OTHER LIGHT COLOR TO MATCH/COMPLEMENT BUILDING FINISH AS SELECTED BY THE ARCHITECT.

WHEN INDICATED IN THE GENERATOR SCHEDULE, ENCLOSURE SHALL HAVE PROVISIONS FOR ADDING AN UNIT-MTD LOAD BANK AND LOAD BANK CONTROL PANEL.

D. WHEN INDICATED IN THE GENERATOR SCHEDULE PROVIDE ONE OF THE FOLLOWING SOUND ATTENUATION LEVELS TO THE GENERATOR SYSTEM ENCLOSURE:

"STD" - MINIMUM ACCEPTABLE SOUND LEVEL SHALL BE STANDARD GENERATOR MANUFACTURER'S WEATHER HOUSING.

"STAGE 1" - MINIMUM ACCEPTABLE SOUND LEVEL SHALL BE:

- 81 dBA AT 23 FEET IN A FREE FIELD ENVIRONMENT (600KW AND LARGER)
- 85 dBA AT 23 FEET IN A FREE FIELD ENVIRONMENT (SMALLER THAN 600KW)

"STAGE 2" - MINIMUM ACCEPTABLE SOUND LEVEL SHALL BE:

- 77 dBA AT 23 FEET IN A FREE FIELD ENVIRONMENT (600KW AND LARGER)
- 74 dBA AT 23 FEET IN A FREE FIELD ENVIRONMENT (SMALLER THAN 600KW)

"CUSTOM" - MINIMUM ACCEPTABLE SOUND LEVEL SHALL BE AS SPECIFIED IN THE GENERATOR SCHEDULE AND SHALL BE ACHIEVED BASED ELECTRICAL CONTRACTOR-PROVIDED ACOUSTICAL ANALYSIS AND MODELING OF ALL NEARBY EXISTING AND/OR NEW STRUCTURES IN ADDITION TO CUSTOM SOUND ATTENUATION GENSET ENCLOSURE. ANALYSIS SHALL DEMONSTRATE COMPLIANCE WITH ATTENUATION REQUIREMENTS AS REQUIRED TO MEET ALL LOCAL NOISE ORDINANCE REQUIREMENTS AND/OR SPECIFIC OWNER REQUIREMENTS U.O.N.

E. ENCLOSURES SHALL BE MANUFACTURED BY LISTED GENERATOR MANUFACTURERS, ALL METAL FABRICATION CO., OR SURROUND TECHNOLOGIES INC.

12. WHEN INDICATED IN THE GENERATOR SCHEDULE PROVIDE ONE OF THE FOLLOWING LOAD BANK TYPES:

"PORTABLE" - PROVIDE CIRCUIT BREAKER TO FEED PORTABLE LOAD BANK. BREAKER SHALL SIZED TO SUPPORT A LOAD BANK RATED FOR 60% OF THE GENERATOR KW OUTPUT RATING. BREAKER SHALL BE SHUNT TRIP EQUIPPED INCLUDING NECESSARY CONTROLS TO OPEN UPON UTILITY FAILURE PRIOR TO A.T.S. TRANSFER TO GENERATOR.

"UNIT-MOUNTED" - PROVIDE INTEGRAL, RADIATOR-MOUNTED, UNITY POWER FACTOR, RESISTIVE LOAD BANK SIZED TO PROVIDE 40% OF THE GENERATOR FULL KW OUTPUT. LOAD BANK FRAME SHALL BE CONSTRUCTED OF ALUMINIZED STEEL. RESISTANCE LOAD ELEMENTS SHALL CONSIST OF CHROMIUM ALLOY WIRE AND DERATED TO 50% OF THE MAX. CONTINUOUS RATING OF THE WIRE. LOAD BANK COOLING SHALL BE PROVIDED BY THE GENERATOR'S ENGINE-DRIVEN FAN. LOAD BANK CONTROL POWER SHALL BE PROVIDED VIA CONTROL POWER TRANSFORMER SUPPLIED BY THE GENERATOR. LOAD BANK CONTROL PANEL SHALL BE MOUNTED REMOTELY WITHIN THE GENSET ENCLOSURE AS NEAR THE GENSET CONTROL PANEL AS POSSIBLE. CONTROL PANEL SHALL BE EQUIPPED WITH AUTO LOAD DUMP FEATURE TO DUMP LOAD BANK UPON LOSS OF COMMERCIAL POWER. CONTROL PANEL SHALL ADD/SHED LOAD IN 5 EQUAL STEPS. EACH STEP SHALL BE PROVIDED WITH BRANCH CIRCUIT FUSING. GENERATOR-MOUNTED CIRCUIT BREAKER SHALL SIZED TO SUPPORT THE LOAD BANK AS REQUIRED.

"REMOTE" - PROVIDE REMOTE, FREE STANDING, OUTDOOR RATED, UNITY POWER FACTOR, RESISTIVE LOAD BANK SIZED TO PROVIDE 60% OF THE GENERATOR FULL KW OUTPUT. LOAD BANK SHALL BE VERTICAL DISCHARGE TYPE WITH ANGLED EXHAUST HOOD FOR 750KW AND GREATER. LOAD BANK ENCLOSURE SHALL BE CONSTRUCTED OF ALUMINIZED STEEL WITH STAINLESS STEEL EXTERIOR FASTENERS AND POLYETHYLENE ENAMEL FINISH - GALVANIZED STEEL CONSTRUCTION IS UNACCEPTABLE. RESISTANCE LOAD ELEMENTS SHALL CONSIST OF CHROMIUM ALLOY WIRE AND DERATED TO 50% OF THE MAX. CONTINUOUS RATING OF THE WIRE. LOAD BANK COOLING SHALL BE PROVIDED BY INTEGRALLY MOUNTED BLOWER FANS POWERED FROM THE GENERATOR. LOAD BANK CONTROL POWER SHALL BE PROVIDED VIA CONTROL POWER TRANSFORMER SUPPLIED BY THE GENERATOR. REMOTE NEMA 3R LOAD BANK CONTROL PANEL SHALL BE MOUNTED REMOTELY WITHIN THE LOAD BANK OR GENSET ENCLOSURE PER PLAN. CONTROL PANEL SHALL BE EQUIPPED WITH AUTO LOAD DUMP FEATURE TO DUMP LOAD BANK LOAD UPON LOSS OF COMMERCIAL POWER WHILE ALLOWING LOAD BANK FANS TO CONTINUE COOL-DOWN OPERATION. CONTROL PANEL SHALL ADD/SHED LOAD IN 5 EQUAL STEPS. EACH STEP SHALL BE PROVIDED WITH BRANCH CIRCUIT FUSING. GENERATOR-MOUNTED CIRCUIT BREAKER SHALL SIZED TO SUPPORT THE LOAD BANK AS REQUIRED.

UNIT MOUNTED AND REMOTE LOAD BANKS SHALL BE BY AVTRON OR EQUAL BY LOADTEC OR SIMPLEX.

13. GENERATOR SYSTEM HEIGHT, INDICATED IN THE GENERATOR SCHEDULE, SHALL BE THE MAXIMUM ALLOWED HEIGHT OF THE GENERATOR TO INCLUDE THE HEIGHT OF THE GENERATOR HOUSING, SUB-BASE TANK, VIBRATION ISOLATORS, ETC. THIS IS A CRITICAL DIMENSION THAT HAS BEEN COORDINATED WITH SCREEN AND OR ENCLOSURE WALL HEIGHTS ETC. NO ADDITIONAL COST SHALL BE BORNE BY THE OWNER TO MODIFY OTHER STRUCTURES OR SYSTEMS TO ACCOMMODATE A GENERATOR SYSTEM TALLER THAN SPECIFIED.

14. GENERATOR SYSTEM WEIGHT, INDICATED IN THE GENERATOR SCHEDULE, SHALL BE THE MAXIMUM ALLOWED WEIGHT OF THE GENERATOR TO INCLUDE THE WEIGHT OF ENGINE/GENERATOR, GENERATOR HOUSING, ANY UNIT-MOUNTED LOAD BANK, SUB-BASE TANK FULL OF FUEL, VIBRATION ISOLATORS, ACCESSORIES, ETC.

15. WHEN LOCATED WITHIN SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD), THE ENGINE SHALL BE PRE-REGISTERED WITH SCAQMD FOR USE IN EMERGENCY GENERATORS ALLOWING FOR AN "OVER THE COUNTER" APPROVAL PROCESS. WHEN LOCATED ELSEWHERE, THE ENGINE SHALL COMPLY WITH ALL LOCAL AIR QUALITY MANAGEMENT DISTRICT REQUIREMENTS FOR USE IN EMERGENCY GENERATORS ALLOWING FOR AN "OVER THE COUNTER" APPROVAL PROCESS, IF AVAILABLE.

16. INCLUDE ALL COSTS IN BASE BID MEET THE PERMIT/FILING REQUIREMENTS OF THE LOCAL/REGIONAL WATER QUALITY CONTROL BOARD OR SIMILAR AUTHORITY GOVERNING THE PROJECT SITE.

17. IF THE PROJECT REQUIRES MORE THAN A TOTAL OF 1320 GALLONS OF FUEL, THE CONTRACTOR SHALL INCLUDE ALL COSTS IN BASE BID TO PREPARE AND FILE A SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN PER ARTICLE 40 CODE OF FEDERAL REGULATIONS (CFR) PART 112 WITH THE OWNER AND THE CA. STATE WATER RESOURCES BOARD OR APPLICABLE STATES' ENVIRONMENTAL/WATER QUALITY AGENCY. THE PLAN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER FROM THE STATE IN WHICH THE PROJECT OCCURS.

18. IF THE PROJECT GENERATOR(S) IS LOCATED WITHIN SAQMD JURISDICTION AND WITHIN 100 METERS OF A KINDERGARTEN TO 12TH GRADE SCHOOL, INCLUDE ALL COSTS IN BASE BID TO COMPLY WITH SCAQMD RULE 1470 TO INCLUDE PARTICULATE MATTER FILTERS, BACKPRESSURE/TEMPERATURE ALARM/DATA LOGGER. IF NECESSARY, PROVIDE UNIT-MOUNTED LOAD BANK, SIZED PER THIS SPECIFICATION, FOR PROPER OPERATION OF PARTICULATE MATTER FILTERS AT ALL GENERATOR OPERATING RANGES (0 TO 100% LOAD).

19. SHOP DRAWING INFORMATION SHALL BE PROVIDED PER GENERAL SPECIFICATION REQUIREMENTS SHOWING COMPLIANCE WITH THE ABOVE SPECIFICATION. INCLUDE ALL REQUIRED NETWORK WIRING DIAGRAMS, COMPONENTS, ETC.

20. FINAL INSTALLATION SHALL BE TESTED AND APPROVED BY THE MANUFACTURER'S FACTORY TRAINED TECHNICIAN. TEST TO INCLUDE 100% RESISTIVE LOAD BANK TEST FOR 2 HOURS AND ATS TRANSFER TEST.

21. GENERATOR MANUFACTURER SHALL PROVIDE AND WARRANTY ALL AUTOMATIC TRANSFER SWITCH EQUIPMENT. SEE ATIS SPECIFICATIONS FOR MORE INFORMATION.

22. GENERATOR EQUIPMENT SHALL BE PROVIDED BY MTU ONSITE ENERGY.

SPECIAL FIELD GENSET TEST PROCEDURE

THE FOLLOWING TESTS SHALL BE PERFORMED ON EACH GENSET IN CONCERT WITH RESPECTIVE SWITCHGEAR:

1. VERIFY ALL ELECTRICAL, EXHAUST, FUEL & WATER CONNECTIONS FOR PROPER SIZE CONNECTIONS FOR PROPER SIZE, CONTINUITY, PHASE ROTATION, AND TIGHTNESS OF FITTINGS. CHECK ALL FLUIDS FOR APPROPRIATE LEVELS. VERIFY OPERATION OF JACKET WATER HEATER, BATTERY CHARGER, PARALLELING SWITCHGEAR/ATS AND ANNUNCIATOR CONNECTIONS. START UP ENGINE AND MAKE INITIAL CHECK OF VOLTAGE, FREQUENCY, BATTERY CHARGING, OIL PRESSURE, WATER TEMPERATURE AND SAFETY SHUTDOWNS.
2. CONNECT PORTABLE LOAD BANK(S), IF PROVIDED, AT 100% OF GENERATOR RATING AT UNITY POWER FACTOR. ANY UNIT-MOUNTED OR REMOTE LOAD BANKS PROVIDED ON THE PROJECT SHALL NOT BE USED FOR LOAD TESTING. GENERATOR SET SHALL BE RUN FOR 1 HOUR AT 75%, THEN 1 HOUR AT 100%. RECORD WATER TEMPERATURE, OIL PRESSURE, AMBIENT AIR TEMPERATURE, VOLTAGE, CURRENT, FREQUENCY, AND KILOWATTS EVERY 15 MINUTES. TEST ALL SAFETY BEHAVIOR USING METHODS RECOMMENDED BY THE MANUFACTURER. AT CONCLUSION OF TEST ALLOW 10 MINUTE UNLOADED COOL DOWN BEFORE SHUTDOWN.
3. IF UNIT MOUNTED OR REMOTE LOAD BANKS ARE PROVIDED ON THE PROJECT, TEST LOAD DUMP FEATURE OF THE LOAD BANK(S) AS IF ROUTINE GENERATOR TESTING WAS OCCURRING USING THE LOAD BANK(S) AND COMMERCIAL POWER FAILED DURING THE ROUTINE TEST.
4. TEST GENERATOR CONTROLS IN REMOTE POSITION USING THE BUILDING LOAD. SIMULATE FAILURE OF THE NORMAL POWER SOURCE BY OPENING THE NORMAL POWER SOURCE. ENGINE GENERATOR SHALL START AND ASSUME LOAD WITHIN 10 SECONDS. TEST EACH GENSET-MOUNTED EPO.
5. TEST GENERATOR COMMUNICATIONS SYSTEM AS SPECIFIED TO INCLUDE REMOTE ANNUNCIATION OF ALARMS AND STATUS AT REMOTE ANNUNCIATOR ALARM PANELS, BMS CONTROL STATIONS AND OWNER-FURNISHED PCS. IF OWNER-FURNISHED LOCAL AREA NETWORK OR MODEM LINES ARE UNAVAILABLE, INCLUDE ALL COSTS TO DELAY THIS PORTION OF TESTING AND RETURN AT A TIME WHEN THESE COMMUNICATIONS LINKS ARE AVAILABLE FOR COMMUNICATIONS SYSTEM TESTING.
6. ANY FAILURE OR MALFUNCTION OF EQUIPMENT OR CONTROLS DURING ANY TIME OF TEST PROCEDURE SHALL BE CORRECTED AND RETESTED AT NO ADDITIONAL COST TO OWNER.
7. PRODUCTION AND FIELD TEST RESULTS SHALL BE DOCUMENTED AND FORWARDED TO THE ENGINEER.
8. PROVIDE OPERATOR TRAINING AT CONCLUSION OF TESTING TO PERSONNEL DESIGNATED BY THE OWNER AT A MINIMUM OF 4 HOURS. TRAINING SHALL COVER PROPER STARTING, TESTING AND OPERATION OF THE GENSET, PROGRAMMING/USE OF GENSET CONTROL SYSTEM TO INCLUDE ADDING/CHANGING SET/ALARM POINTS, MANIPULATING GRAPHIC SCREEN INTERFACES, ETC., REQUIRED PREVENTIVE MAINTENANCE AND APPROPRIATE RECORD KEEPING METHODS. TRAIN PERSONNEL IN PERIODIC MAINTENANCE OF THE BATTERIES.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

**1050 S. FLOWER STREET
LOS ANGELES, CA 90015**

PROJECT:

2853 WEST BLVD

LOS ANGELES, CA 90016

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:28:09 PM

SHEET TITLE:

GENERATOR SPECIFICATIONS

SHEET NO:

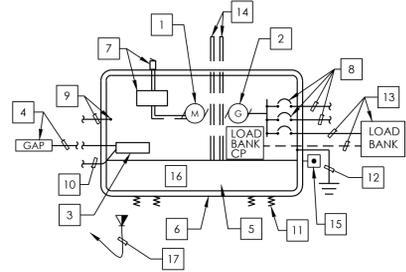
E406

GENERATOR SPECIFICATIONS

SCALE
NTS

1

GENERATOR SCHEDULE													
GENERATOR	KW KVA	VOLTAGE	PHASE	WIRE	RUN TIME	SUB-BASE TANK CAPACITY	SOUND ATTEN. LEVEL	REMOTE ANNUNC. PANEL	NETWORK/ COMMUNICATIONS (USEABLE)	LOAD BANK	GEN. SYS. HEIGHT	GEN. SYS. WEIGHT	REMARKS
G1	60 75	120/208	3	4	24 HRS	N/A	STAGE 2 OR LEVEL 2	YES	STD	NONE	53"	2416 LB	NATURAL GAS



- ENGINE SHALL BE FOUR CYCLE ONLY, 4, 6, 12 OR 16 CYLINDER, POWERED BY NATURAL GAS, WATER COOLED, TURBOCHARGED AND AFTERCOOLED. ENGINE SHALL PERFORM AS SPECIFIED UTILIZING FUEL COMPLYING WITH LOCAL AIR QUALITY MANAGEMENT DISTRICT. SEE SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- GENERATOR SHALL BE SINGLE BEARING, FOUR POLE, TWO-THIRDS PITCH DRIP PROOF AND AIR COOLED. SEE SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- GENERATOR CONTROL PANEL WITH RUN/OFF/AUTO SWITCH, MUSHROOM PUSH BUTTON "EMERGENCY STOP" AND THE SENSORS, RELAYS, CONTROLS AND WIRING TO INITIATE SHUTDOWN, AUTOMATIC TRANSFER SWITCH LOADS INDICATING ALARM AND SHUTDOWN CONDITIONS, DIGITAL METERING, AND VOLTAGE AND FREQUENCY TRIM CONTROLS AS DESCRIBED IN THE SYSTEM SPECIFICATIONS.
- REMOTE GENERATOR ANNUNCIATOR PANEL(S), LOCATED PER PLANS. SEE GENERATOR SCHEDULE AND SYSTEM SPECIFICATIONS FOR MORE INFORMATION. PROVIDE A 3/4", MINIMUM, WITH CONDUCTORS AS REQUIRED PER MANUFACTURERS RECOMMENDATIONS.
- SUB-BASE FUEL TANK NOT APPLICABLE.
- SOUND ATTENUATED AND/OR WEATHER PROTECTIVE ENCLOSURE AS INDICATED IN GENERATOR SCHEDULE.
- SILENCER (25dbA ATTENUATION) OR SILENCER/PARTICULATE MATTER FILTER, WITH RAIN CAP, CONDENSATION DRAIN AND STAINLESS STEEL CONNECTION TO ENGINE. SEE DRAWINGS AND GENERATOR SYSTEM SPECIFICATIONS FOR EXTENT OF EXHAUST SYSTEM (GT EXHAUST, NELSON OR EQUAL. PARTICULATE MATTER FILTERS BY CLEANAIRE OR EQUAL).
- PROVIDE 100% RATED, ELECTRONIC TRIP, DISTRIBUTION CIRCUIT BREAKER(S), BREAKER LUGS, BREAKER CONTACTS AND FEEDERS PER SINGLE LINE DIAGRAM. PROVIDE CODE-REQUIRED CLEARANCES AS NECESSARY. SEE ATS SYSTEM REQUIREMENTS FOR SHORT CIRCUIT COORDINATION INFORMATION.
- FOR GENERATORS WITH A CAPACITY LESS THAN 600KW, PROVIDE DEDICATED 20 AMP 120 VOLT CIRCUIT TO BATTERY CHARGER, DEDICATED 20 OR 30 AMP 120/208/240 VOLT CIRCUIT TO EACH JACKET WATER HEATER. PROVIDE ADDITIONAL CIRCUITS AS REQUIRED PER PLAN. FOR GENERATORS WITH A CAPACITY OF 600KW OR LARGER, PROVIDE DEDICATED 120/208V, 3PH, 4W 100 AMP(MIN) FEEDER CONNECTED TO INTEGRAL GENERATOR LOAD CENTER. SEE SINGLE LINE DIAGRAM AND GENERATOR SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- PROVIDE START, STOP, AND LOAD SHED CONNECTIONS TO ALL AUTOMATIC TRANSFER SWITCH(ES). PROVIDE 3/4" C. MINIMUM, WITH CONDUCTORS AS REQUIRED PER MANUFACTURERS RECOMMENDATIONS. PROVIDE COPPER OR FIBER OPTIC NETWORK AS INDICATED ON GENERATOR SCHEDULE.
- VIBRATION ISOLATION MOUNTING CERTIFIED FOR ZONE 4 INSTALLATIONS. PROVIDE NUMBER OF SUPPORTS AS REQUIRED.
- GROUNDING ELECTRODE CONDUCTOR PER NEC, OR CEC WHERE ADOPTED, ARTICLE 250.30. SEE THE GENERATOR SCHEDULE FOR GEC SIZING. SEE GENERATOR GROUNDING DETAIL FOR MORE INFORMATION.
- PORTABLE, UNIT-MOUNTED OR REMOTE LOAD BANK. SEE GENERATOR SCHEDULE AND SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- NOT USED.
- PROVIDE FACTORY-FURNISHED AND INSTALLED WEATHER-PROOF GENERATOR EMERGENCY-POWER SHUT DOWN SWITCH IN COMPLIANCE WITH NFPA37 REQUIREMENTS (60KW AND LARGER). PROVIDE A PLACARD INDICATING "GENERATOR EMERGENCY SHUTDOWN SWITCH" PERMANENTLY AFFIXED TO THE GENSET ENCLOSURE ABOVE THE SWITCH. SEE GENERAL ELECTRICAL SPECIFICATIONS FOR ADDITIONAL PLACARD REQUIREMENTS. VERIFY EXACT DEVICE LOCATION REQUIREMENTS WITH LOCAL AHJ PRIOR TO ORDERING.
- PROVIDE I/O MODULES WITH A INPUTS/OUTPUTS AS REQUIRED TO MONITOR ABOVE GROUND STORAGE TANKS, SUB BASE TANKS, FUEL MAINTENANCE SYSTEM(S) ALARMS, ETC., PLUS 4 SPARE INPUTS. I/O MODULE SHALL COMMUNICATE INPUT STATUS TO THE GENERATOR CONTROL SYSTEM AND BUILDING MANAGEMENT SYSTEM (BMS) IF PROVIDED ON PROJECT.
- PROVIDE 3/4" C WITH ANALOG FAX/MODEM LINE/DATA LINE FROM NEAREST TELEPHONE BACKBOARD TO GENERATOR GATEWAY OR INTERFACE DEVICE TO ALLOW COMMUNICATIONS PER THE GENERATOR SYSTEM SCHEDULE AND SPECIFICATIONS.

Application Data

Cooling

Radiator System	60 Hz	50 Hz
Ambient temperature, °C (°F)	45 (113)	
Radiator system capacity, including engine, L (gal)	21.3 (5.6)	
Engine jacket water flow, Lpm (gpm)	131 (34.8)	109 (28.8)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	54 (3070)	49 (2790)
Water pump type	Centrifugal	
Fan diameter, mm (in.)	Qty. 3 @ 356 (14)	
Fan power requirements (powered by engine battery charging alternator)	12VDC, 18 amps each	

Operation Requirements

Air Requirements	60 Hz	50 Hz
Radiator-cooled cooling air, m³/min. (scfm)†	62.2 (2200)	62.2 (2200)
Air over engine, m³/min. (cfm)	31.1 (1100)	31.1 (1100)
Combustion air, m³/min. (cfm)	5.5 (195)	4.6 (162)
† Air density = 1.20 kg/m³ (0.075 lbm/ft³)		

Fuel Consumption†

Natural Gas, m³/hr. (cfh) at % load	60 Hz	50 Hz
100%	28.7 (1013)	24.9 (878)
75%	21.6 (781)	18.7 (669)
50%	14.0 (493)	12.1 (427)
25%	7.0 (248)	6.1 (215)

LP Gas, m³/hr. (cfh) at % load	60 Hz	50 Hz
100%	10.1 (357)	8.8 (309)
75%	7.2 (255)	6.3 (221)
50%	5.4 (191)	4.7 (166)
25%	3.2 (113)	2.8 (98)

† Nominal Fuel Rating: Natural Gas, 37 MJ/m³ (1000 Btu/ft³)
LP Vapor, 93 MJ/m³ (2500 Btu/ft³)

LP vapor conversion factors:
8.59 ft³ = 1 lb.
0.535 m³ = 1 gal.
36.39 ft³ = 1 gal.

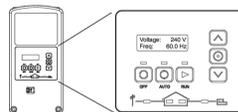
Sound Enclosure Features

- Sound-attenuating enclosure uses acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.
- Internally mounted critical silencer.
- Skid-mounted, aluminum construction with two removable access panels.
- Scratch- and corrosion-resistant Kohler® cashmere powder-based finish.

Sound Data

Model 60RCLB sound levels are 62 dB(A) during weekly engine exercise and 63 dB(A) during normal operation. All sound levels are measured at a distance of 23 ft. (7 m) from the generator set. Actual sound levels may vary based on installation parameters.

RDC2 Controller



The RDC2 controller provides integrated control for the generator set, Kohler® Model RXT transfer switch, programmable interface module (PIM), and load shed kit.

The RDC2 controller's 2-line LCD screen displays status messages and system settings that are clear and easy to read, even in direct sunlight or low light.

RDC2 Controller Features

- Membrane keypad:
 - OFF, AUTO, and RUN pushbuttons
 - Select and arrow buttons for access to system configuration and adjustment menus
- LED indicators for OFF, AUTO, and RUN modes
- LED indicators for utility power and generator set source availability and ATS position (Model RXT transfer switch required)
- LCD screen:
 - Two lines x 16 characters per line
 - Backlit display with adjustable contrast for excellent visibility in all lighting conditions
- Scrolling system status display
 - Generator set status
 - Voltage and frequency
 - Engine temperature
 - Oil pressure
 - Battery voltage
 - Engine runtime hours
- Date and time displays
- Smart engine cooldown senses engine temperature
- Digital isochronous governor to maintain steady-state speed at all loads
- Digital voltage regulation: ±1.0% RMS no-load to full-load
- Automatic start with programmed cranking cycle
- Programmable exerciser can be set to start automatically on any future day and time, and to run every week or every two weeks
- Exercise modes
 - Unloaded exercise with complete system diagnostics
 - Unloaded full-speed exercise
 - Loaded full-speed exercise (Model RXT ATS required)
- Front-access mini USB connector for SiteTech™ connection
- Integral Ethernet connector for Kohler® OnCue® Plus
- Built-in 2.5 amp battery charger
- Remote two-wire start/stop capability for optional connection of a Model RDT transfer switch

See additional controller features on the next page.

04-307 (60RCLB) 6/21

KOHLER

Model: **60RCLB**

Multi-Fuel
LPG/Natural Gas

9001
NATIONALLY REGISTERED



The Kohler® Advantage

- High Quality Power**
Kohler generators provide advanced voltage and frequency regulation along with ultra-low levels of harmonic distortion for excellent generator power quality to protect your valuable electronics.
- Extraordinary Reliability**
Kohler is known for extraordinary reliability and performance and backs that up with a 5-year/2000-hour limited warranty.
- Aluminum Enclosure**
Attractive aluminum enclosure allows installation as close as 18 inches from your home or small business. Optional 291 kph (181 mph) wind-load-rated enclosure door kit is available for field installation.
- Fast Response**
Kohler's Fast-Response® X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth permanent magnet (PM)-excited alternator.
- Quiet Operation**
Kohler home generators provide quiet, neighborhood-friendly performance.

Generator Set Ratings

Alternator	Voltage	Ph	Hz	Standby Ratings			
				Natural Gas kW/KVA	Amps	LPG kW/KVA	
4P10X	120/240	1	60	58/58	242	60/60	250
	120/208	3	60	60/75	209	60/75	209
	127/220	3	60	60/75	197	60/75	197
	120/240	3	60	60/75	181	60/75	181
4Q10X	277/480	3	60	60/75	91	60/75	91
4Q10X	120/240	1	60	58/58	242	60/60	250

* 50 Hz options available. Contact your Customer Service representative.

NOTES: All three-phase units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. Standby ratings: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for the rating. Ratings are in accordance with ISO8528-1 and ISO8529-1. Check technical information bulletin TB-101 for ratings guidelines, complete ratings definitions, and site condition details. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Availability is subject to change without notice. Contact your local Kohler generator distributor for availability.

04-307 (60RCLB) 6/21



NATIONAL
ENGINEERING & CONSULTING, INC.
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:05:19 PM

SHEET TITLE:

GENERATOR CUT SHEETS

SHEET NO:

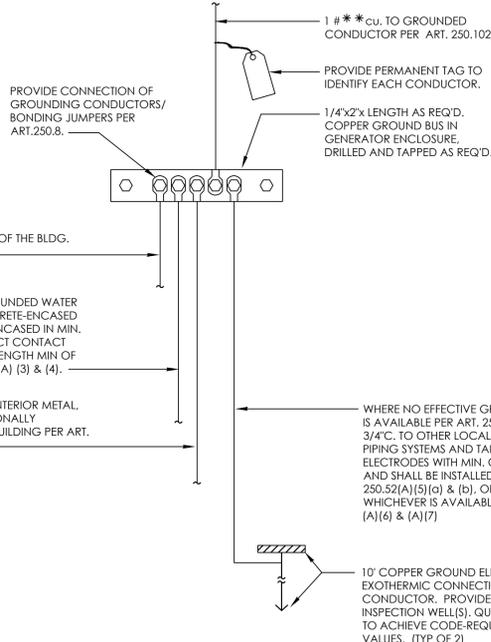
E407

GENERATOR SYSTEM DIAGRAM

SCALE
NTS 3

** MAIN BONDING JUMPER SHALL BE SIZED AS FOLLOWS:	
SERVICE SIZE	M.B.J. SIZE
0-1,000A	#3/0
1,200A	#4/0
1,600A	#250KC/MIL
2,000A	#300KC/MIL
2,500A	#500KC/MIL
3,000A	#500KC/MIL
4,000A	#600KC/MIL

* GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED AS FOLLOWS:	
SERVICE SIZE	G.E.C. SIZE
0-200A	#4
201-400A	#1/0
OVER 401A	#3/0



1 # * cu., 3/4" C, TO EFFECTIVELY GROUND METAL FRAME OF THE BLDG. PER ART. 250.52(A)(2).

WHERE GROUNDING STRUCTURAL MEMBER OR EFFECTIVE GROUNDING WATER PIPE IS UNAVAILABLE, PROVIDE 1 # * cu., 3/4" C, TO A CONCRETE-ENCASED ELECTRODE WITH MIN OF 20 FT IN LENGTH OF MIN. #4 BARE ENCASED IN MIN. 2" OF CONCRETE ALL AROUND, OR A GROUND RING IN DIRECT CONTACT WITH EARTH AT A DEPTH NOT LESS THAN 2-1/2 FT, WITH 20 FT. LENGTH MIN OF #2 BARE COPPER, WHICHEVER IS AVAILABLE. PER ART. 250.52(A) (3) & (4).

PROVIDE BONDING WITH 1 # * cu., 1/4" C, TO NEAREST INTERIOR METAL WATER PIPE (HOT, COLD, SPRINKLER, SEWER, ETC), UNINTENTIONALLY GROUNDING BUILDING STEEL, GAS PIPE, HVAC DUCTS IN THE BUILDING PER ART. 250.104 (A), (B), & (C)

WHERE NO EFFECTIVE GROUNDING ELECTRODE IS AVAILABLE PER ART. 250.50, PROVIDE 1 # * cu., 3/4" C, TO OTHER LOCAL METAL UNDERGROUND PIPING SYSTEMS AND TANKS, OR ROD AND PIPE ELECTRODES WITH MIN. OF 10 FT. IN LENGTH AND SHALL BE INSTALLED PER ART. 250.52(A)(5)(c) & (d), OR PLATE ELECTRODES, WHICHEVER IS AVAILABLE. PER ART 250.52 (A)(5), (A)(6) & (A)(7)

10' COPPER GROUND ELECTRODE(S)W/ EXOTHERMIC CONNECTION(S) TO GROUND CONDUCTOR. PROVIDE FIBER GLASS INSPECTION WELL(S). QUANTITY AS REQUIRED TO ACHIEVE CODE-REQUIRED RESISTANCE VALUES. (TYP OF 2)

GENERATOR SEPARATELY DERIVED GROUNDING SYSTEM

SCALE
NTS 2

KOHLER

KOHLER CO., Kohler, Wisconsin 53044 USA
Phone 920-457-4441 | Fax 920-459-1846
For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444
KOHLENTower.com

Additional RDC2 Controller Features

- Diagnostic messages
 - Displays diagnostic messages for the engine, generator, Model RXT transfer switch, programmable interface module (PIM), and load shed kit
 - Over 70 diagnostic messages can be displayed
- Maintenance reminders
- System settings
 - System voltage, frequency, and phase
 - Voltage adjustment
 - Measurement system, English or metric
- ATS status (Model RXT ATS required)
 - Source availability
 - ATS position (normal/utility or emergency/generator)
 - Source voltage and frequency
- ATS control (Model RXT ATS required)
 - Source voltage and frequency settings
 - Engine start time delay
 - Transfer time delays
 - Fixed pickup and dropout settings
 - Voltage calibration
- Programmable Interface Module (PIM) status displays
 - Input status (active/inactive)
 - Output status (active/inactive)
- Load control menus
 - Load status
 - Test function

Generator Set Standard Features

- Aluminum sound enclosure with enclosed silencer
- Battery rack and cables
- cULUL 2200 listed, CSA certified
- Electronic, isochronous governor
- Engine-generator set is designed and manufactured in facilities certified to ISO-9001
- Flexible fuel line
- Gas fuel system (includes fuel mixer, electronic secondary gas regulator, two gas solenoid valves, and flexible fuel line between the engine and the skid-mounted fuel system components)
- GFCl service outlet (120/240 V) for customer connections
- Integral vibration isolation
- Line circuit breaker
- NEC prime mover shutdown switch
- Oil drain extension
- OnCue® Plus Generator Management System for remote monitoring (see specification sheet G6-140)
- Operation and installation literature
- RDC2 controller with built-in battery charger
- Standard 5-year/2000-hour limited warranty

Available Options

- Electrical System
 - Battery
 - Battery Heater
 - OnCue® Plus Wireless Radio Kit

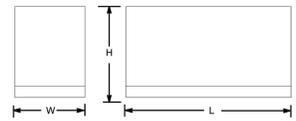
Available Options (continued)

- Enclosure Option
 - 291 kph (181 mph) wind load rated enclosure
- Starting Aids §
 - Block Heater, 120 V
 - Block Heater, 240 V
- Material
 - Temperature rise
- Recommended for ambient temperatures below 0°C (32°F)
- Controller Accessories
 - Lockable Emergency Stop (lockout/tagout)
 - Programmable Interface Module (PIM) load management board
- Automatic Transfer Switches and Accessories
 - Model RXT Automatic Transfer Switch
 - Model RXT Automatic Transfer Switch with combined interface/load management board
 - Model RDT Automatic Transfer Switch
 - Load shed kit for RDT or RXT
 - Power relay modules (use up to 4 relay modules for each load management device)
 - Other Kohler® ATS
- Miscellaneous
 - Rated Power Factor Testing
 - Maintenance kit (includes air filter, oil, oil filter, and spark plugs)
- Literature
 - General Maintenance Literature Kit
 - Overhaul Literature Kit
 - Production Literature Kit
- Warranty
 - Extended 5-Year/2000 Hour Comprehensive Limited Warranty
 - Extended 10-Year/2000 Hour Comprehensive Limited Warranty

Dimensions and Weights
Overall Size, L x W x H, mm (in.): 2280 x 836 x 1182 (89.8 x 32.9 x 46.5)

Shipping Weight, wet, kg (lb.): 659 (1894)

Weight includes generator set with engine fluids and 4Q10X alternator, sound enclosure, and silencer.



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

DISTRIBUTED BY:



© 2021 Kohler Co. All rights reserved.
04-307 (60RCLB) 6/21

Application Data

Engine	60 Hz	50 Hz
Engine Specifications		
Manufacturer	Kohler	
Engine: model, type	K6G208 6.2L Natural Aspiration	
Cylinder arrangement	V-6	
Rated rpm	1800	1500
Displacement, L (cu. in.)	6.2 (378)	6.2 (378)
Bore and stroke, mm (in.)	101.6 x 95.25 (4.00 x 3.75)	101.6 x 95.25 (4.00 x 3.75)
Compression ratio	10.5:1	10.5:1
Max. power at rated rpm, kW (HP)	77.0 (103)	64.3 (86)
Cylinder head material	Cast Aluminum	
Piston type and material	High Silicon Aluminum	
Crankshaft material	Cast Iron	
Valve (exhaust) material	Forged Steel	
Governor type	Electronic	
Frequency regulation, no-load to full-load	Isochronous	
Frequency regulation, steady state	±1.0%	
Frequency	Dry	
Air cleaner type	Fried	

Engine Electrical

Engine Electrical System	60 Hz	50 Hz
Ignition system	Electronic	
Battery charging alternator:	Electronic	
Ground (negative/positive)	Negative	
Volts (DC)	12	
Ampere rating	130	
Starter motor rated voltage (DC)	12	
Battery, recommended cold cranking amps (CCA):	Qty., rating for -18°C (0°F)	
Battery voltage (DC)	12	
Battery group size	24	

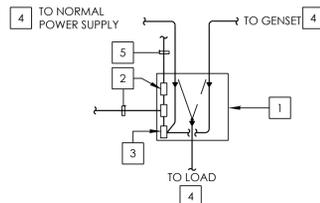
Exhaust

Exhaust System	60 Hz	50 Hz
Exhaust manifold type	Dry	
Exhaust flow at rated kW, m³/min. (cfm)	16.4 (580)	13.6 (480)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	649 (1200)	
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)	
Exhaust outlet size at engine hookup, mm (in.)	76 (3.0) OD	

F

AUTOMATIC TRANSFER SWITCH SCHEDULE									
ATS	AMPS	VOLTAGE	PHASE	WIRE	POLE	NEMA 3R	NETWORK	ISOLATION BYPASS	REMARKS
ATS1	260	120/208	3	4	4	-	-	-	-

ATS SYSTEM SCHEMATIC



ATS SYSTEM KEYED NOTES:

- 1 AUTOMATIC TRANSFER SWITCH PER AUTOMATIC TRANSFER SWITCH SCHEDULE AND SYSTEM SPECIFICATIONS.
- 2 ATS DISTRIBUTED CONTROLS, PROVIDING FOR AUTOMATIC SELECTIVE LOAD SHED/LOAD PICK-UP PER NEC (OR CEC WHERE ADOPTED) ART. 700.4(B) REQUIREMENTS, START, STOP, AND MONITORING/ALARM FUNCTIONS PER SYSTEM SPECIFICATIONS. PROVIDE 3/4" C. MINIMUM, WITH CONDUCTORS AS REQUIRED PER MANUFACTURERS RECOMMENDATIONS. PROVIDE COPPER OR FIBER OPTIC NETWORK AS INDICATED ON ATS SCHEDULE. SEE SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- 3 FACTORY INSTALLED ATS AUTOMATIC CONTROLS. SEE SYSTEM SPECIFICATIONS FOR MORE INFORMATION.
- 4 REFER TO SINGLE LINE DIAGRAM FOR MORE INFORMATION.
- 5 PROVIDE ELEVATOR PRETRANSFER CONTACTS, 1 NORMALLY OPEN, 1 NORMALLY CLOSED-EQUIPPED WITH 0-45 SEC, 2 AMP MINIMUM ADJUSTABLE TIME DELAY. PROVIDE CONDUIT AND CONDUCTORS TO ELEVATOR CONTROLLER(S) AS REQUIRED.

ATS SYSTEM REQUIREMENTS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING OF ALL FINAL DESIGN, AGENCY APPROVALS, PLAN CHECK FEES, LABOR, EQUIPMENT, MATERIALS, AND PERFORMANCE OF OPERATIONS IN CONNECTION WITH THE INSTALLATION OF A COMPLETE AND FULLY FUNCTIONING CODE APPROVED AUTOMATIC TRANSFER SWITCH SYSTEM.
2. IT IS THE INTENT OF THE CONTRACT DOCUMENTS, WHICH ARE PRESENTED IN A DIAGRAMMATIC, "DESIGN-BUILD" FORMAT, FOR THE CONTRACTOR TO DESIGN, PROVIDE AND INSTALL A COMPLETE AND FULLY FUNCTIONING, CODE APPROVED AUTOMATIC TRANSFER SWITCH SYSTEM.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIAL AND EQUIPMENT WHICH IS USUALLY FURNISHED WITH SUCH SYSTEMS, IN ORDER TO PROVIDE A COMPLETE AND FULLY FUNCTIONING INSTALLATION, WHETHER MENTIONED HEREIN OR NOT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE A.T.S. SHORT CIRCUIT WITHSTAND REQUIREMENTS WITH SWITCHGEAR, GENERATOR & ATS MFR. PROVIDE A.T.S. MFR.- APPROVED CURRENT LIMITING CIRCUIT BREAKER(S) TO PROTECT EACH A.T.S. AS REQUIRED. IF CONTRACTOR ELECTS TO INCREASE ATS AMPACITY TO MEET SHORT CIRCUIT WITHSTAND REQUIREMENTS, CONTRACTOR SHALL ENSURE ATS(S) WILL FIT IN SPACE DESIGNATED FOR ATS(S) PER PLANS.
5. REFER TO AUTOMATIC TRANSFER SWITCH SCHEDULE, SCHEMATIC AND SPECIFICATIONS FOR MORE INFORMATION.

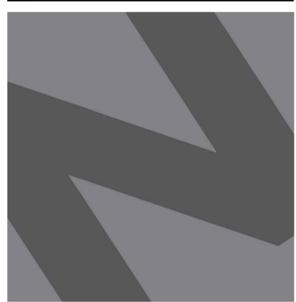
ATS SYSTEM SPECIFICATIONS:

1. ALL EQUIPMENT SHALL BE NEW, OF CURRENT DESIGN, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF IEEE, NEMA, UL, ANSI AS WELL AS LOCAL JURISDICTION REQUIREMENTS. ALL EQUIPMENT SHALL BE FACTORY ASSEMBLED AND TESTED. THE FOLLOWING DOCUMENTS SHALL APPLY TO THE MANUFACTURING AND INSTALLATION OF THE ATS SYSTEM:
 - IEEE 587 SURGE TESTING
 - NEMA MGI MOTORS AND GENERATORS
 - NFPA 110 EMERGENCY/STANDBY SYSTEMS
 - NFPA 37 INSTALLATION AND USE
 - UL 1008 AUTOMATIC TRANSFER SWITCHES
2. ALL PRODUCTS SHALL BE WARRANTED AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR 2 YEARS FROM START UP INCLUDING PARTS, LABOR AND TRAVEL EXPENSES.
3. AUTOMATIC TRANSFER SWITCH SHALL BE A 4-POLE 600 VOLT CLASS, CONTACTOR TYPE, OVER-CENTER MECHANISM, DOUBLE-THROW CONSTRUCTION, POSITIVE ELECTRICALLY AND MECHANICALLY HELD IN BOTH NORMAL AND EMERGENCY POSITIONS. TRANSFER SWITCHES WITH INTERLOCKED CIRCUIT BREAKERS OR MOLDED CASE SWITCHES ARE NOT ACCEPTABLE. 3-POLE TRANSFER SWITCHES ARE NOT ACCEPTABLE UNLESS SPECIFICALLY NOTED ON THE SCHEDULE.

THE TRANSFER SWITCH SHALL HAVE THE FOLLOWING CHARACTERISTICS:

 - FULL LOAD MANUAL TRANSFER CAPABILITIES.
 - ALL CONTACTS SHALL BE 600V HIGH PRESSURE, SILVER ALLOY TYPE WITH SEPARATE ARCING CONTACTS. ALL CONTACTS SHALL BE SIMULTANEOUSLY SWITCHED.
 - ALL LUGS SHALL BE FULL RATED.
 - PROGRAM TRANSITION SWITCHING SCHEME. IN-PHASE MONITOR SWITCHING SCHEMES ARE UNACCEPTABLE.
4. ATS DISTRIBUTED CONTROLS SHALL BE FACTORY INSTALLED IN THE ATS CABINET, AND SHALL ALLOW FOR START, STOP AND LOAD SHED FUNCTIONS. WHEN A FIBER OPTIC NETWORK IS INDICATED PROVIDE CONTACTS TO COMMUNICATE POWER SUPPLY LOW VOLTAGE AND FAILURE CONDITIONS AT THE GENERATOR ANNUNCIATOR PANEL.

5. ATS AUTOMATIC CONTROLS SHALL BE FACTORY INSTALLED IN THE ATS CABINET. ALL SENSORS AND TIME DELAYS SHALL BE SOLID STATE. ALL SENSORS SHALL MONITOR EACH PHASE OF BOTH NORMAL AND GENERATOR SOURCES. POWER FOR TRANSFER AND RE-TRANSFER SHALL BE OBTAINED FROM THE LOAD SOURCE BEING TRANSFERRED TO.
6. PROVIDE THE FOLLOWING TIME DELAYS AND COMPONENTS: START DELAY, TRANSFER TO EMERGENCY DELAY, RETRANSFER TO NORMAL DELAY, KEY OPERATED RETRANSFER DELAY BYPASS, STOP RUNNING DELAY, NEUTRAL POSITION DELAY - BOTH DIRECTIONS (ISOLATING INDUCTIVE LOADS FROM BOTH SOURCES), TEST SWITCH, PILOT LIGHTS FOR POSITION AND SOURCE AUXILIARY CONTACTS FOR BOTH SOURCES, LOAD SHED CONTROL FOR AUTOMATIC SELECTIVE LOAD PICK-UP & LOAD SHED, EXERCISER CLOCK, ADJUSTABLE DELAYS TO MFR'S RECOMMENDATIONS.
7. WHEN ISOLATION BYPASS TYPE TRANSFER SWITCHES ARE INDICATED IN THE SCHEDULE, THE FOLLOWING CONDITIONS SHALL BE MET:
 - BYPASS ISOLATION AND TRANSFER SWITCH SHALL BE IN A FACTORY ASSEMBLED ENCLOSURE.
 - SWITCHES REQUIRING ELECTRICAL OPERATION ARE NOT ACCEPTABLE.
 - NORMAL, TEST, AND FULLY ISOLATED SWITCH POSITIONS SHALL MAINTAIN CONTINUOUS FULLY RATED OPERATION.
 - SWITCH SHALL BE CAPABLE OF BY-PASSING TO EITHER SOURCE.
 - AUTOMATIC, SOLENOID PER THE GENERAL SPECIFICATIONS REQUIREMENTS ACTIVATED MECHANICAL STOPS SHALL BE PROVIDED TO PREVENT DEAD SOURCE BYPASS.
8. SHOP DRAWING INFORMATION SHALL BE PROVIDED SHOWING COMPLIANCE WITH THE ABOVE SPECIFICATION PER GENERAL SPECIFICATION REQUIREMENTS. INCLUDE ALL REQUIRED NETWORK WIRING DIAGRAMS, COMPONENTS, ETC.
9. FINAL INSTALLATION SHALL BE TESTED AND APPROVED BY THE MANUFACTURER'S FACTORY TRAINED TECHNICIAN. TEST TO INCLUDE LOAD BANK AND ATS TRANSFER TEST.
10. ATS SYSTEM SHALL BE PROVIDED AND WARRANTED BY THE GENERATOR SYSTEM EQUIPMENT MANUFACTURER. SEE GENERATOR SPECIFICATIONS FOR MORE INFORMATION.
11. ATS EQUIPMENT SHALL BE PROVIDED BY ASCO OR EQUAL BY ONAN OR GE/ZENITH.



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:

COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

JAIME PARTNERS OF CALIFORNIA, INC.

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:22:23 PM

SHEET TITLE:

ATS SPECIFICATIONS & CUT SHEETS

SHEET NO:

E408

Automatic transfer switch (ATS) – contactor-based

Technical Data TD01602018E
Effective February 2013

Automatic transfer switch—open transition



ATC-300+ Controller

Product description

Eaton's automatic transfer switch (ATS) provides unmatched performance, reliability, and versatility for critical standby power applications. All switches can be equipped with the ATC-100, ATC-300+, and ATC-800 controllers to match any application need. Each controller offers rock-solid monitoring, status reporting, and transfer control operation.

Superior design and robust construction make Eaton's transfer switch the industry benchmark for critical and distributed power systems.

Electrical ratings

- Ratings 40, 80, 100, 150, 200, 225, 260, 400, 600, 800, 1000, 1200, and 1600A
- Two-, three-, or four-pole
- Up to 600 Vac, 50/60 Hz
- NEMA® 1, 12, 3R, 4X, open
- UL® 1008 Listed
- CSA® C22.2 No. 178 Certified

Industrial design highlights

- Double-throw, mechanically interlocked transfer mechanism, preventing connection of both sources
- Field-selectable multi-tap transformer panel permits operation on a wide range of system voltages
- Methods of transfer include: open in-phase transition, time delay in neutral transition, or in-phase with a default to time delay in neutral transfer

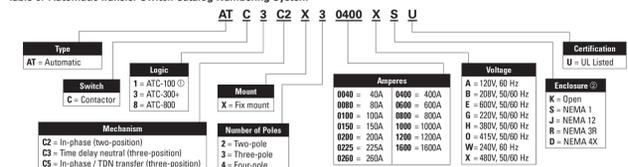
Standard features (ATC-300+)

- Source present relays:
 - Source 1 present 2NO and 2NC
 - Source 2 present 2NO and 2NC
- Switch position indication contacts:
 - Source 1 position 1NO and 1NC
 - Source 2 position 1NO and 1NC
- Source 1 and Source 2 sensing:
 - Undervoltage/underfrequency
 - Overvoltage/overfrequency
 - Three-phase rotation protection
 - Three-phase voltage unbalance
 - Pre-transfer signal contacts 1NO/1NC (with three-position mechanism)
- Go to Emergency (Source 2)
- Seven field-programmable time delays
- LCD-based display for programming, system diagnostics, and Help message display
- Mimic diagram with source available and connected LED indication
- Time-stamped history log
- System test pushbutton
- Programmable plant exerciser—OFF daily, 7-, 14-, 28-day interval selectable run time 0-800 minutes no load/load with fail-safe

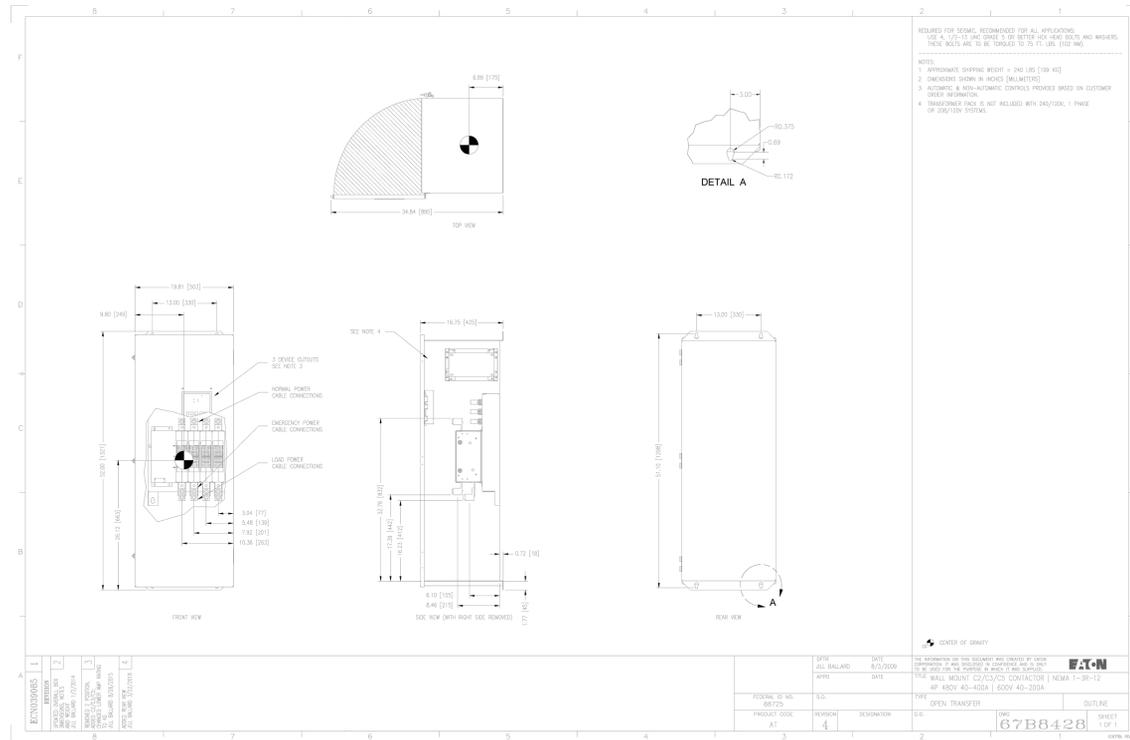
Optional features

- Available surge suppression device for power/controller, engine start circuit, phone, and cable connections
- Space heater with thermostat
- Eaton IQ and Power Xpert® Series metering
- Stainless steel cover for controller
- Open in-phase transition, time delay neutral, or in-phase with a default to time delay neutral transfer
- ATC-100 and ATC-800 controllers available
- Modbus® RTU via RS-485
- Source 2 inhibit
- Manual re-transfer to normal
- Remote annunciator with control
- Ethernet communication (PXG 400 Gateway)

Table 6. Automatic Transfer Switch Catalog Numbering System



© ATC-100 applies to 400A and below.
© NEMA 12 and 4X, 40-1200A only.



GO/NEG-AN Date:	LAED1202X2K1-0000-12/5/2022	Job Name:	2853 WEST BLVD.
Item Number:	ATC3C2X4026BSU	Designation:	ATS 260amp 120/208v 4 pole

AUTOMATIC TRANSFER SWITCH (ATS) SPECIFICATIONS

SCALE
NTS 1

CUST	1
ENGR (VP)	1
ESR (314)	2
DDFT	1
FILE	1
TOTAL	6

- INSPECTION:**
- FULL INSPECTION AND APPROVAL BY A DEPARTMENT OF WATER AND POWER (DWP) ELECTRIC SERVICE REPRESENTATIVE IS REQUIRED PRIOR TO THE INSTALLATION OF CABLE AND EQUIPMENT.
 - NOTIFY THE DWP ELECTRIC SERVICE REPRESENTATIVE, AREA 314 TELEPHONE NUMBER (213) 367-6248, FIVE (5) NORMAL WORKING DAYS IN ADVANCE OF CONSTRUCTION.
 - THE CUSTOMER SHALL ARRANGE FOR ELECTRICAL INSPECTION BY THE LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY FOR THEIR ELECTRICAL WORK. THE SERVICE WILL NOT BE ENERGIZED UNTIL NOTIFICATION OF APPROVAL HAS BEEN RECEIVED BY THE DWP.

- GENERAL:**
- ALL FACILITIES MUST BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE DWP'S ELECTRIC SERVICE REQUIREMENTS.
 - CONDUITS AND STRUCTURES SHALL BE INSTALLED PER DWP'S UNDERGROUND SPECIFICATION 104 AND APPENDIX 1 AS LAST REVISED.

- SCHEDULE:**
- IN ORDER TO AVOID SCHEDULING DELAYS IN THE INSTALLATION OF DWP EQUIPMENT FOR YOUR PROJECT, THE CUSTOMER MUST COMPLETE THE INSTALLATION AND DWP'S INSPECTION OF THE CONDUIT, TRANSFORMER PAD AND SWITCHBOARD A MINIMUM OF SIX (6) WEEKS PRIOR TO THE RELEASE FROM THE DEPARTMENT OF BUILDING AND SAFETY.
 - DWP WILL INSTALL ELECTRICAL METERS AND ENERGIZE THE ELECTRICAL SERVICE TYPICALLY WITHIN TEN (10) WORKING DAYS, AFTER ALL RELEASES HAVE BEEN OBTAINED FROM BOTH DWP AND THE DEPARTMENT OF BUILDING AND SAFETY.

- CONDUIT:**
- PRIMARY CONDUITS: 2-5" PLASTIC ENCASED BURIED TYPE (EB-35) CONDUITS ENCASED IN 3" OF CONCRETE. MINIMUM COVER FROM TOP OF CONCRETE ENVELOPE TO FINISHED GRADE, EXCEPT AT TRANSFORMER PAD, SHALL BE 30 INCHES IN PAVED AREAS AND 36 INCHES IN LANDSCAPED AREAS.
 - WHEN TERMINATING CONDUIT FOR SUBSEQUENT CONNECTION BY THE DWP, THE DEPTH AT THE PROPERTY LINE MUST BE A MINIMUM OF 30 INCHES IN AREAS SUPPLIED FROM UNDERGROUND DISTRIBUTION FACILITIES. DEPTH MEASUREMENTS AT PROPERTY LINE ARE TO BE TAKEN FROM GUTTER GRADE.
 - WHERE UNDERGROUND SERVICE IS TO BE SUPPLIED FROM OVERHEAD FACILITIES, THE MINIMUM DEPTH FOR THE POINT OF CONNECTION AT THE PROPERTY LINE SHALL BE 36 INCHES FOR CONDUIT NOT EXCEEDING 4 INCHES AND 60 INCHES FOR CONDUIT EXCEEDING 4 INCHES. DEPTH MEASUREMENTS AT PROPERTY LINE ARE TO BE TAKEN FROM GUTTER GRADE.
 - SECONDARY CONDUITS: 4-5" PLASTIC ENCASED BURIED TYPE (EB-35) CONDUITS. CONDUITS SHALL HAVE A MINIMUM COVER OF 24 INCHES.
 - WHEN THE PRIMARY CONDUITS ARE BEING INSTALLED ON FILLED GROUND, FOUR #4 REINFORCING BARS SHALL BE INSTALLED IN THE CONCRETE ENVELOPE.
 - ALL PLASTIC CONDUITS SHALL BE IN ACCORDANCE WITH RECOGNIZED STANDARDS, FOR PVC THE STANDARD IS ASTM F-512 AS LAST REVISED, CONDUIT MAY BE SUBJECTED TO TESTING BY THE DWP AT THE REQUEST OF THE DWP ELECTRIC SERVICE REPRESENTATIVE.
 - CONDUIT SHALL BE MANDRELLED WITH A MANDREL PROVIDED BY THE DWP. INSTALL A FLAT, WOVEN MULTI-FIBER POLYESTER RIBBON, MINIMUM 3/8-INCH NOMINAL WIDTH AND 1250 POUND MINIMUM TENSILE STRENGTH PULLING TAPE IN ALL DUCTS. THE PULLING TAPE SHALL BE PRINTED WITH THE RATED TENSILE STRENGTH AND SEQUENTIAL FOOTAGE MARKINGS WITH LEGIBLE AND STABLE PRINT. THE TAPE SHALL BE IN ONE CONTINUOUS LENGTH THROUGH EACH DUCT WITH NO CUTS, SPLICES OR TIES ALLOWED.
 - CUSTOMER TO PROVIDE STRUCTURAL DRAWINGS STAMPED AND SIGNED BY A REGISTERED STRUCTURAL ENGINEER DETAILING THE ENCASED GALVANIZED CONDUIT RUN EXPOSED ON THE GARAGE WALL OR CEILING. DRAWINGS SHALL BE SUBMITTED PRIOR TO START OF CONSTRUCTION.

- STRUCTURE:**
- PROVIDE AND INSTALL ONE 6' X 8' TRANSFORMER PAD WITH HANDHOLE AND PROTECTIVE BARRIERS IN ACCORDANCE WITH DWP DRAWINGS C721-01, C721-01.1 THROUGH C721-01.8 AND UB721-03 AS LAST REVISED.
 - THE DEPARTMENT OF BUILDING AND SAFETY REQUIRES A BUILDING PERMIT FOR STRUCTURES EXCEEDING 48 INCHES IN DEPTH, INSTALLED ON PRIVATE PROPERTY.
 - THE CUSTOMER'S STRUCTURAL ENGINEER IS RESPONSIBLE FOR THE DESIGN OF FOUNDATIONS IN THE VICINITY OF THE VAULT TO ELIMINATE SURCHARGE LOADING ON THE WALLS OF THE VAULT.
 - THE CONDUIT, STRUCTURE(S) AND SERVICE POINT(S) SHALL BE LOCATED AS SHOWN UNLESS CHANGES ARE APPROVED BY THE DWP DESIGN ENGINEER AND CONFIRMED BY THE CUSTOMER.

FAULT CURRENT:
THE MAXIMUM AVAILABLE SYMMETRICAL FAULT CURRENT WILL BE AS FOLLOWS:

SERVICE PS	AMPS 1200A	VOLTAGE 208Y/120V	PHASE 3Ø	WIRE 4W	FAULT CURRENT 32,000A
------------	------------	-------------------	----------	---------	-----------------------

SWITCHBOARD APPROVAL:
PRIOR TO FABRICATION OF NONSTANDARD SWITCHBOARDS AND SWITCHBOARDS RATED ABOVE 800 AMPS, THE MANUFACTURER MUST SUBMIT DRAWINGS SHOWING THE PROPOSED SERVICE AND METERING FACILITIES. MAIL THREE COPIES OF SWITCHBOARD DRAWINGS TO:
METRO WEST SERVICE PLANNING
ATTENTION: VICTOR PEREZ CCEST 2345082 / P306225
2633 ARTESIAN STREET RM 250
LOS ANGELES, CA 90031

- CUSTOMER CHARGES:**
- THE DWP WILL BILL THE CUSTOMER \$9,137 FOR TRANSFORMER DEPOSIT FEE, DEPOSIT FEE ELIGIBLE FOR REFUND AFTER FIVE YEARS PER DWP RULE 16-E, ELECTRIC SYSTEM OF THE RULES GOVERNING WATER AND ELECTRIC SERVICE.
 - THE DWP WILL BILL THE CUSTOMER FOR CONDUIT CONSTRUCTION AT A FUTURE DATE.
 - A SEPARATE BILL TO BE SENT FOR PERMIT FEES ONCE THE LOS ANGELES DEPARTMENT OF PUBLIC WORKS ISSUES THE PERMIT IS TO BE BILLED AT A LATER DATE.
 - YOUR PAYMENT OF A STREET DAMAGE RESTORATION FEE (SDRF), PAID DIRECTLY TO THE DEPARTMENT OF PUBLIC WORKS, IS TO BE BILLED AT A LATER DATE.

PERMIT NOTE:
AN APPROVED TRAFFIC CONTROL PLAN MAY BE REQUIRED FOR LADWP TO OBTAIN A CONSTRUCTION PERMIT FROM LOS ANGELES DEPARTMENT OF PUBLIC WORKS. THE CUSTOMER MAY BE REQUIRED TO HIRE A CONTRACTOR TO DEVELOP A TRAFFIC CONTROL PLAN AND PROVIDE LABOR AND MATERIALS TO MANAGE TRAFFIC DURING CONSTRUCTION. THE CUSTOMER SHALL OBTAIN APPROVAL OF THE PLAN BY THE LOS ANGELES DEPARTMENT OF TRANSPORTATION AND PROVIDE A COPY TO LADWP IF REQUIRED.

NON-STANDARD STAGING AREA:
THE DEPARTMENT HAS APPROVED A NON-STANDARD STAGING AREA FOR THE INSTALLATION AND MAINTENANCE OF THE LADWP TRANSFORMER IN THE CUSTOMER'S PROPOSED LOCATION. ANY REPAIRS NECESSARY TO THE SIDEWALKS, DRIVEWAYS, AND CURBS DURING THE INSTALLATION AND FUTURE MAINTENANCE OF THIS TRANSFORMER WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER IN ACCORDANCE WITH LOS ANGELES MUNICIPAL CODE SECTION 62.104.

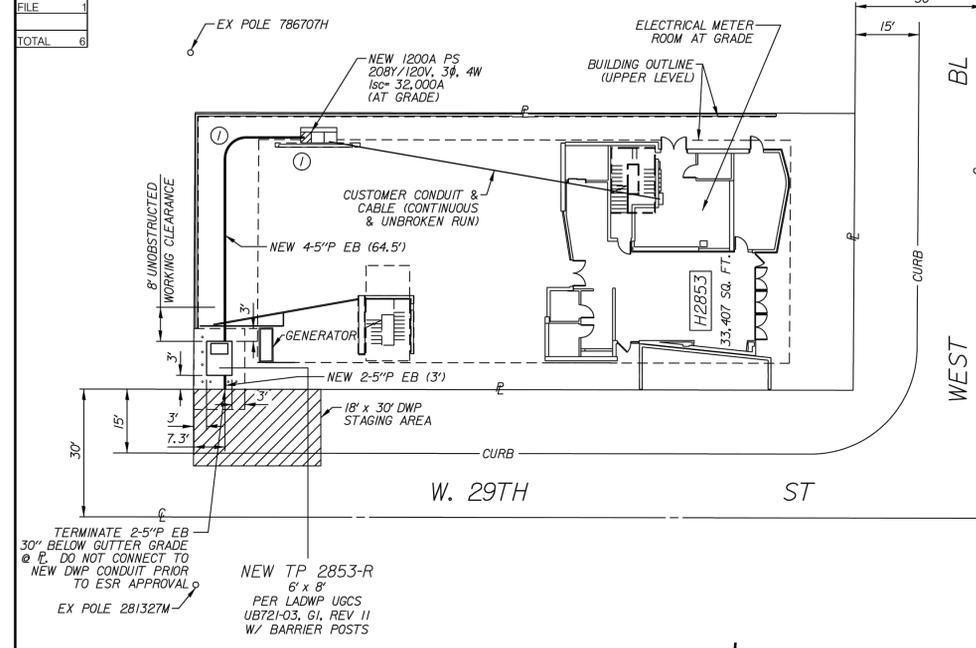
THIS COMMITMENT IS VALID FOR SIX MONTHS ONLY.
ANY CHANGE IN LOAD OR DESIGN WILL REQUIRE REVISED PLANS TO BE SUBMITTED FOR RE-EVALUATION

No.	DATE	INITL	REVISION	APP'D

CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER POWER SYSTEM ENGINEERING		IR # 2345082	PROJECT # P306225	TO # 633-D7
		4.8KV CUSTOMER REQUIREMENTS 2853 WEST BL 22-UNIT RESIDENTIAL BUILDING AFFORDABLE HOUSING		
DESIGN V. PEREZ	PHONE (213) 367-6231	22P0561		SHEET 1 OF 2
DRAWN Adan Vargas 3/28/23	DRAFTING E. MOSQUEDA			
APPROVED Marco Maldonado/AV	DATE 03/17/23			

CUST	1
ENGR (VP)	1
ESR (314)	2
DDFT	1
FILE	1
TOTAL	6

CURVE DATA	
①	$\Delta = 90^\circ$ R = 5' L = 7.85'



- REFERENCES:**
- NBCD 2267025, 23H5020 (4.8KV LINE EXT)
 - NBU2 2443543, 23E2036
 - NB02 2443551, 22F1445
 - NBIAC 2419952 (HSE)

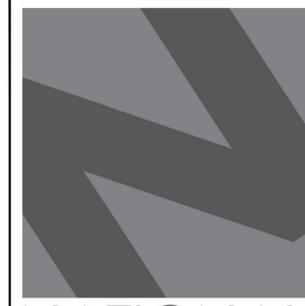
- TRANSFORMER PAD NOTES:**
- MINIMUM 3' WORKSPACE CLEARANCE REQUIRED AROUND THE PAD (LEVELLED & UNOBSTRUCTED).
 - NO ARCHITECTURAL PROJECTIONS (I.E. AWNINGS, OVERHANGS, BALCONIES, ETC.) ALLOWED ABOVE CLEARANCE AREA.
 - NO BUILDING PROJECTION (I.E. SUBTERRANEAN GARAGE,) ALLOWED UNDERNEATH THE CLEARANCE AREA.
 - PAD SHALL MAINTAIN A 10' RADIAL DISTANCE FROM ANY WINDOWS, DOORS, FIRE ESCAPES, AIR INTAKES AIR EXHAUST VENTS OR EGRESS PATH.
 - ACCESS TO PAD SHALL BE 12' IN WIDTH & 14' IN LENGTH MINIMUM AND BE ABLE TO WITHSTAND A TRUCK WEIGHT OF 24 TONS. DEPARTMENT TRUCKS MUST BE ABLE TO BACK WITHIN 5' ALONG THE SIDE OF THE PAD.
 - FOR MORE DETAILS REFER TO DWP DESIGN STANDARD C721-01 THRU C721-01.8 FOR TRANSFORMER PAD REQUIREMENTS.
 - IF INSTALLING METALLIC OBJECTS IN PROXIMITY TO NEW TRANSFORMER PAD, I.E. CHAIN-LINK FENCE OR IRONGATE, REFER TO UB721-12 FOR GROUNDING REQUIREMENTS.

FOR LOCATION OF EXISTING UNDERGROUND SUBSTRUCTURES, NOTIFY THE UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
DIGALERT
CONTACT DIGALERT AT
WWW.DIGALERT.ORG OR 811
AT LEAST TWO WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

THIS COMMITMENT IS VALID FOR SIX MONTHS ONLY.
ANY CHANGE IN LOAD OR DESIGN WILL REQUIRE REVISED PLANS TO BE SUBMITTED FOR RE-EVALUATION

No.	DATE	INITL	REVISION	APP'D

CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER POWER SYSTEM ENGINEERING		IR # 2345082	PROJECT # P306225	TO # 633-D7
		4.8KV CUSTOMER REQUIREMENTS 2853 WEST BL 22-UNIT RESIDENTIAL BUILDING AFFORDABLE HOUSING		
DESIGN V. PEREZ	PHONE (213) 367-6231	22P0561		SHEET 2 OF 2
DRAWN Adan Vargas 3/28/23	DRAFTING E. MOSQUEDA			
APPROVED Marco Maldonado/AV	DATE 03/17/23			



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:06:32 PM
SHEET TITLE:

LADWP APPROVED DRAWINGS

SHEET NO: △

E409

- VERIFY THE EXACT MOUNTING REQUIREMENTS AND CEILING CONFIGURATION WITH ARCHITECTURAL PLANS PRIOR TO ORDERING OF THE LIGHT FIXTURES. CONTRACTOR TO PROVIDE ALL NECESSARY MOUNTING HARDWARE INCLUDING HANGERS, CLIPS AND/OR SUPPORT CABLES, ETC AS REQUIRED TO PROVIDE A COMPLETE INSTALLATION. PROVIDE STRUCTURAL SUPPORTS AS REQUIRED TO MEET THE CURRENT INTERNATIONAL BUILDING CODE (IBC), AS WELL AS ANY APPLICABLE LOCAL CODES.
- ALL WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATION PLANS PRIOR TO ROUGH-IN. EXTERIOR MOUNTED FIXTURES SHALL HAVE U.L. LABEL LISTED FOR WET LOCATION APPLICATION.
- ALL FIXTURE FINISHES AND COLORS, UNLESS SPECIFIED AS CUSTOM COLOR, SHALL BE SELECTED BY THE ARCHITECT FROM THE AVAILABLE MANUFACTURER STANDARD COLOR OPTIONS. ALL FIXTURES SPECIFIED WITH CUSTOM COLOR SHALL BE SELECTED BY THE ARCHITECT. CONTRACTOR TO PROVIDE COLOR SAMPLE CHIP AND PRIOR APPROVAL FROM THE ARCHITECT PRIOR TO PLACING THE ORDER.
- LIGHT FIXTURES INDICATED AS EMERGENCY, IDENTIFIED WITH "EB" SHALL BE PROVIDED WITH INTEGRAL BATTERY PACK UNIT AS FOLLOWS:
 - LED LAMPS: 1100 LUMENS MINIMUM
 - LINEAR T8 FLUORESCENT LAMPS: 1400 LUMENS MINIMUM
 - LINEAR T5 FLUORESCENT LAMPS: 1200 LUMENS MINIMUM
 - COMPACT FLUORESCENT LAMPS: 1000 LUMENS MINIMUM
 EMERGENCY BALLAST SHALL BE AS MANUFACTURED BY IOTA, ILB-CP12, I-232, I-320, ISL-540 & I-420-EM-A RESPECTIVELY OR OTHER MANUFACTURER MEETING THE MINIMUM LUMEN OUTPUT REQUIREMENTS.
- ALL RECESSED LED/COMPACT FLUORESCENT DOWN LIGHT SUPPLIED WITH BATTERY PACK UNIT SHALL BE PROVIDED WITH AN INTEGRAL TEST SWITCH / CHARGING INDICATOR LIGHT MOUNTED INSIDE THE REFLECTOR.
- ALL FLUORESCENT BALLAST SHALL BE ELECTRONIC TYPE, HIGH POWER FACTOR, MAXIMUM TOTAL HARMONIC DISTORTION OF 20%, CLASS "A" OR BETTER SOUND RATING AND 0° FAHRENHEIT FOR OUTDOOR APPLICATION.
- LED DRIVERS SHALL HAVE 0-10V DIMMING CAPABILITIES AT MINIMUM.
- DIMMING FLUORESCENT BALLAST - REFER TO LIGHTING FIXTURE SCHEDULE.
- HIGH INTENSITY DISCHARGED BALLAST SHALL BE HIGH POWER FACTOR, CONSTANT WATTAGE TYPE WITH A MAXIMUM 20% TOTAL HARMONIC DISTORTION, CLASS "A" OR BETTER SOUND RATING AND 0° FAHRENHEIT RATING FOR FIXTURES MOUNTED OUTDOOR.
- ALL EXIT SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE PREVENTION CODE AND LOCAL AUTHORITIES. CONTRACTOR TO PROVIDE ALL NECESSARY MOUNTING HARDWARE AS REQUIRED. CONTRACTOR TO VERIFY CHEVRONS AND NUMBER OF FACES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND THE ELECTRICAL PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND CONFIRMED PRIOR TO PLACEMENT OF THE ORDER.
- ALL FIXTURE VOLTAGES SHALL BE VERIFIED PRIOR TO PLACING THE ORDER. CONTRACTOR TO REFER TO THE LIGHTING PLAN BRANCH CIRCUIT INFORMATION TO CONFIRM VOLTAGE.

- LAMP MODEL INDICATED ON THE LAMP SECTION SHALL BE AS MANUFACTURED BY G.E., OSRAM SYLVANIA, OR PHILIPS ONLY. ALL OTHERS SHALL BE REJECTED.
- ANY DISCREPANCIES AND/OR CONFLICTS BETWEEN CATALOG NUMBERS (LAMP/FIXTURE) AND FIXTURE DESCRIPTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO SUBMITTING BID AND/OR PLACING ORDER.
- PROVIDE SHOP DRAWING SUBMITTALS FOR APPROVAL PRIOR TO PLACING THE ORDER. SHOP DRAWING SUBMITTAL SHALL INCLUDE MANUFACTURER'S CUT SHEETS FOR EACH LIGHT FIXTURE, LAMP AND BALLAST. SUBSTITUTIONS OF SPECIFIED PRODUCTS ARE STRICTLY PROHIBITED - UNLESS PRIOR WRITTEN APPROVAL FROM THE ENGINEER IS PROVIDED AND THAT ALL CONDITIONS STATED HEREIN ARE MET:
 - LIGHTING FIXTURE SUBSTITUTIONS SHALL BE FORMALLY PRESENTED TO THE ENGINEER. CONTRACTOR SHALL MAKE ARRANGEMENT WITH THE ENGINEER 10 WORKING DAYS PRIOR TO BID TIME.
 - A COMPLETE AND OPERATING SAMPLE OF EACH SUBSTITUTED FIXTURES, WIRED FOR 120V OPERATION, WITH LAMP, CORD AND PLUG.
 - PROVIDE COMPLETE PHOTOMETRIC CALCULATION WITH THE PROPOSED SUBSTITUTE PRODUCT FOR ALL EXTERIOR LIGHTING AND INTERIOR LIGHTING SUBSTITUTIONS, USING THE SPECIFIED LAMP TYPE AND WATTAGE. A POINT-BY-POINT SCALED COMPUTER PRINTOUT SHALL BE PROVIDED INDICATING THE ILLUMINATION LEVELS ARE MET. THE PROPOSED SUBSTITUTE SHALL PROVIDE PERFORMANCE EQUAL TO, OR BETTER THAN THE SPECIFIED PRODUCTS. THE PHOTOMETRIC REPORT MUST BE DONE IN ACCORDANCE WITH PUBLISHED I.E.S. TESTING PROCEDURES AND CERTIFIED BY A REGISTERED ELECTRICAL ENGINEER.
 - A CURRENT ORIGINAL CATALOG DATA SHEET WITH LUMINAIRE CATALOG NUMBERS SHALL BE PROVIDED. MODIFIED CATALOG DATA SHEETS WILL NOT BE ACCEPTED.
 - ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS/PAYMENTS OF ANY ESTABLISHED LIQUIDATED DAMAGES IF THE PROJECT SCHEDULE OR COMPLETION OF PROJECT IS DELAYED DUE TO THE APPROVED SUBSTITUTION.
- PROVIDE INTERNAL DISCONNECT FOR ALL DOUBLE-ENDED FLUORESCENT OR BALLASTED LIGHT FIXTURES THAT ARE SUPPLIED BY A MULTI-WIRE BRANCH CIRCUIT AND CONTAIN BALLAST WHICH CAN BE SERVICED IN PLACE. PROVIDE AN INTERNAL DISCONNECTING MEANS CAPABLE OF SIMULTANEOUSLY DISCONNECTING FROM THE SOURCE OF SUPPLY ALL CONDUCTORS OF THE BALLAST, INCLUDING THE GROUNDING CONDUCTOR IF ANY. THE LINE SIDE OF THE DISCONNECTING MEANS SHALL BE GUARDED. THE DISCONNECTING MEANS SHALL BE LOCATED SO AS TO BE ACCESSIBLE TO QUALIFIED PERSONS BEFORE SERVICING OR MAINTAINING THE BALLAST PER NEC 410.130(G). INTERNAL DISCONNECTS SHALL BE BY "IDEAL POWERPLUG DISCONNECTS", "LINEAR DISCONNECT" OR EQUAL.

LIGHTING FIXTURE SCHEDULE

TYPE	FIXTURE MANUFACTURER	RATED WATTS /LAMPS	INPUT WATTS	VOLT	LAMP MANUFACTURER		LIGHTING FIXTURE DESCRIPTION
					LAMP MODEL #		
(LC-1)	RAYON LIGHTING #RPA-6-CY-12-DL-25L-30-UNV-ID-55-S-BL-SM	31	31	120	LED		6" CYLINDER LED DOWNLIGHT WITH 0-10V DIMMING.
						INCL. IN FIXTURE	
(LC-1E)	RAYON LIGHTING #RPA-6-CY-12-DL-25L-30-UNV-ID-55-S-BL-SM-EMW	31	31	120	LED		SAME AS TYPE "LC-1" WITH 90MIN. INTEGRAL BATTERY BACK-UP
						INCL. IN FIXTURE	
(C-2)	LIGHTOLIER #C6WDL25930NZ10UCLB WITH #CASK36BK	27	27	120	LED		4" CYLINDER LED NARROW BEAM WITH 0-10V DIMMING, BLACK FINISH. PENDANT MOUNT WITH 36" STEM KIT BLACK FINISH.
						INCL. IN FIXTURE	
(C-3)	LIGHTOLIER #C6WDL25930WZ10UCLB	23	23	120	LED		6" WALL-MOUNT LED DOWNLIGHT WITH 0-10V DIMMING. BLACK FINISH.
						INCL. IN FIXTURE	
(LG-1)	COOPER LIGHTING #4VRVT3-LD5-4-P-UNV-L835-CD1-WL-MSWL20	31	31	120	LED		4" SURFACE-MOUNT VANDAL RESISTANT LED. PARKING GARAGE DISTRIBUTION, WET-LOCATION LISTED WITH 0-10V DIMMING AND INTEGRAL OCCUPANCY SENSOR.
						INCL. IN FIXTURE	
(LG-1E)	COOPER LIGHTING #4VRVT3-LD5-4-P-UNV-EL10W-L835-CD1-WL-MSWL20	31	31	120	LED		SAME AS TYPE "LG-1" WITH 90MIN. INTEGRAL BATTERY BACK-UP, 1100 MIN. LUMENS (EM).
						INCL. IN FIXTURE	
(C-2)	COLORGRAZE #123-000080-	20	20	120	LED		4" LINEAR EXTERIOR LED WALL GRAZING WITH RGB. WET LOCATION-LISTED.
						INCL. IN FIXTURE	
(G-3)	COOPER LIGHTING #4VRVT3-LD5-4-G-UNV-L835-CD1-WL	31	31	120	LED		4" SURFACE-MOUNT VANDAL RESISTANT LED. GENERAL DISTRIBUTION, WET-LOCATION LISTED.
						INCL. IN FIXTURE	
(LL-1)	DAY-BRITE #CSW48-2835UDZTZO	31	31	120	LED		48" SURFACE-MOUNT LINEAR LED WITH 0-10V DIMMING.
						INCL. IN FIXTURE	
(LL-1E)	DAY-BRITE #CSW48-2835UDZTZO-EM	31	31	120	LED		SAME AS TYPE "LL-1" WITH 90MIN. INTEGRAL BATTERY BACK-UP, 1100 MIN. LUMENS (EM).
						INCL. IN FIXTURE	
(LL-2)	DAY-BRITE #CSW48-2835UDZTZO-B-EM	31	31	120	LED		48" SURFACE-MOUNT LINEAR LED WITH 0-10V DIMMING WITH BLACK PAINTED HOUSING AND 90 MIN. INTEGRAL BATTERY BACK-UP, 1100 MIN. LUMENS (EM).
						INCL. IN FIXTURE	
(P-1)	METALUMEN #M4P-2L30K-4-NN-B-L31-SS-4-NR-C	48.6	48.6	120	LED		4" LINEAR PENDANT LED WITHOUT LENS, OPEN LUMINAIRE DESIGN WITH 0-10V DIMMING.
						INCL. IN FIXTURE	
(R-1)	RAYON LIGHTING #RPA4-10L-30-UNV-ID-80-NC-RFA-B WITH #4RFO-W-W	11	11	120	LED		4" LED DOWNLIGHT WITH FROSED FILTER AND 0-10V DIMMING, WHITE FINISH
						INCL. IN FIXTURE	
(R-1E)	RAYON LIGHTING #RPA4-10L-30-UNV-ID-80-F-NC-RFA-B-EB WITH #4RFO-W-W	11	11	120	LED		SAME AS TYPE "R-1" EXCEPT WITH INTEGRAL 90-MINUTE BATTERY BACKUP.
						INCL. IN FIXTURE	
(R-2)	LUTRON #FPDT-R-30X-65-MW WITH #FPH-NX-F1	14	14	120	LED		ROUND LED DOWNLIGHT WITH DIMMING DRIVER. MATTE WHITE TRIM.
						INCL. IN FIXTURE	
(R-3)	COOPER LIGHTING #RA406930WH-CA WITH #H245ICAT	10	10	120	LED		4" LED ADJUSTABLE GIMBAL WITH DIMMABLE DRIVER
						INCL. IN FIXTURE	
(R-3E)	COOPER LIGHTING #RA406930WH-CA WITH #H245ICAT	10	10	120	LED		SAME AS TYPE "R-3" EXCEPT CONNECTED TO EMERGENCY CIRCUIT.
						INCL. IN FIXTURE	
(R-4)	LUTRON #FPDT-R-30X-30-MW WITH #FPH-IS-F1	13	13	120	LED		ROUND LED DOWNLIGHT WITH SHALLOW IC HOUSING AND 2-WIRE DIMMING SYSTEM.
						INCL. IN FIXTURE	
(S-1)	TECH LIGHTING #700OSIKN-92730-B-120	12.2	12.2	120	LED		OUTDOOR WALL/STEP LIGHT WET LOCATION LISTED. BLACK FINISH
						INCL. IN FIXTURE	
(S-2)	BEGA #84672-79825	12.3	12.3	120	LED		LED BOLLARD WITH ASYMMETRICAL SHIELDED LIGHT DISTRIBUTION AND 0-10V DIMMING
						INCL. IN FIXTURE	
(LU-1)	LUTRON #LMLD06127XS	5W/FT	2.5	120	LED		6" UNDERCABINET LED LINEAR LIGHTING
						INCL. IN FIXTURE	
(LU-2)	LUTRON #LMLD12L27XSXXWH	5W/FT	5	120	LED		12" UNDERCABINET LED LINEAR LIGHTING
						INCL. IN FIXTURE	
(LU-3)	LUTRON #LMLD24L27XSXXUWH	5W/FT	10	120	LED		24" UNDERCABINET LED LINEAR LIGHTING
						INCL. IN FIXTURE	
(LV-1)	TECH LIGHTING #700VNRFL-LED930-120V	17.6	17.6	120	LED		LED REFLECTION MIRROR
						INCL. IN FIXTURE	
(IE-1)	CHLORIDE #ER46L-1-W-G	2.5	2.5	120	LED		UNIVERSAL MOUNTED GREEN LED EXIT SIGN WITH SINGLE FACE AND 90 MINUTE BATTERY BACKUP
						INCL. IN FIXTURE	
(IE-2)	CHLORIDE #ER46L-2-W-G	2.5	2.5	120	LED		UNIVERSAL MOUNTED GREEN LED EXIT SIGN WITH DOUBLE FACE AND 90 MINUTE BATTERY BACKUP
						INCL. IN FIXTURE	

NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**

1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:16:01 PM

SHEET TITLE:

**LIGHTING
FIXTURE
SCHEDULES**

SHEET NO:

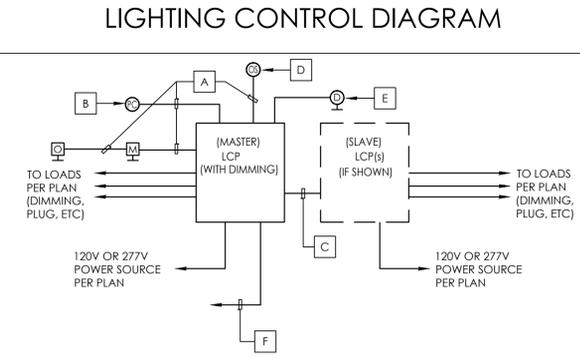
E501

MASTER PANEL: LCP1		SLAVE LIGHTING CONTROL PANEL					LCP4	
MOUNTING: SURFACE								
RELAY	PNL & CKT #	LOAD DESCRIPTION	MASTER SWITCH	OVERRIDE SWITCH	ZONE NUMBER	DIM NON-DIM PLUG-LOAD	NOTES	
1	HP4-10a	6TH FLOOR ELEVATOR LOBBY LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL	
2	HP4-10b	6TH FLOOR EXTERIOR CORRIDOR LTG	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL	
3	INV2-1	6TH FLOOR STAIR LANDING LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL	
4	INV2-2	6TH FLOOR PATIO LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL	
5	-	SPARE	-	-	-	-	-	
6	-	SPARE	-	-	-	-	-	
7	-	SPARE	-	-	-	-	-	
8	-	SPARE	-	-	-	-	-	

MOUNTING: SURFACE		DEMAND RESPONSE: YES		LIGHTING CONTROL PANEL					LCP1	
PHOTOCELL: YES		NETWORK: -								
RELAY	PNL & CKT #	LOAD DESCRIPTION	MASTER SWITCH	OVERRIDE SWITCH	ZONE	DIM NON-DIM PLUG-LOAD	NOTES			
1	HP1-23a	1ST FLOOR PARKING GARAGE WALKWAY LTG	A	23a	1	DIM	-			
2	HP1-23b	EXTERIOR WALL-MOUNTED LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL			
3	HP1-23c	EXTERIOR WALL-MOUNTED LIGHTING	A	-	3	NON-DIM	VIA EXTERIOR PHOTOCELL			
4	HP1-25	1ST FLOOR PARKING GARAGE COVE LTG	A	25	1	NON-DIM	-			
5	HP1-27a	EXTERIOR CANOPY & STEP-LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL			
6	HP1-27b	EXTERIOR CANOPY & STEP-LIGHTING	A	-	3	NON-DIM	VIA EXTERIOR PHOTOCELL			
7	HP1-29a	1ST FLOOR COMMON AREA LIGHTING	A	29a	1	DIM	VIA DAYLIGHTING PHOTOCELL			
8	HP1-29b	1ST FLOOR COMMON AREA LIGHTING	A	29b	1	DIM	VIA DAYLIGHTING PHOTOCELL			
9	HP1-29c	1ST FLOOR COMMON AREA LIGHTING	A	29c	1	DIM	-			
10	HP1-33c	1ST FLOOR ELEVATOR ENTRY & MAILBOXES LTG	A	33c	1	DIM	-			
11	INV1-1	EGRESS DOORS EXTERIOR LIGHTING	A	-	2	NON-DIM	VIA EXTERIOR PHOTOCELL			
12	HP1-3a	COMMON SPACE PLUG CONTROL	A	-	1	PLUG-LOAD	-			
13	-	SPARE	-	-	-	-	-			
14	-	SPARE	-	-	-	-	-			
15	-	SPARE	-	-	-	-	-			
16	-	SPARE	-	-	-	-	-			

ZONE	TIME		PHOTOCELL		REMARKS
	ON	OFF	ON	OFF	
1	8AM	12AM	-	-	NORMAL HOURS**
2	-	-	YES	YES	SECURITY LIGHTING**
3	-	12AM	YES	-	ONE HALF OF EXTERIOR LIGHTING**
4	-	-	-	-	-

**SCHEDULE SHALL BE DETERMINED BY OWNER



- LIGHTING CONTROL KEYED NOTES:**
- A PROVIDE 3/4" CONDUIT MINIMUM, OR LARGER, WITH CONDUCTORS PER MANUFACTURER'S RECOMMENDATION.
 - B EXTERIOR PHOTOCELL MOUNTED AT THE ROOFTOP LOCATION FACING NORTH, OR INDOOR PHOTOCELL, OR PHOTOSENSOR MOUNTED INSIDE THE SPACE WHERE SHOWN FOR DAYLIGHTING.
 - C PROVIDE 3/4" CONDUIT MINIMUM, OR LARGER AS REQUIRED, WITH QUANTITY AND TYPE OF CONDUCTORS, PER MANUFACTURER'S RECOMMENDATIONS, FOR INTERCONNECTION MASTER AND SLAVE PANELS. REFER TO MASTER RELAY SCHEDULE FOR NETWORKING TYPE.
 - D LOW-VOLTAGE OCCUPANCY SENSOR.
 - E LOW-VOLTAGE PROGRAMMABLE/ADDRESSABLE DIMMING AND ON/OFF SWITCH(ES).
 - F DEMAND RESPONSE PROTOCOL AS REQUIRED.

LIGHTING CONTROL SPECIFICATIONS

- LIGHTING CONTROL SYSTEM SHALL BE DIGITAL AND CONSIST OF A MASTER LCP WITH UP TO 48 INDIVIDUAL RELAYS, SLAVE LCPs WITH UP TO 48 INDIVIDUAL RELAYS IN EACH PANEL WHICH CAN BE SWITCHABLE OR 0-10VDC DIMMABLE, DIGITAL SWITCHES AND DIGITAL INTERFACE CARDS. ALL SYSTEM COMPONENTS SHALL CONNECT IN A DAISY CHAIN STYLE CONFIGURATION AND BE CONTROLLED VIA CATEGORY 5 PATCH CABLE WITH RJ45 CONNECTORS, PROVIDING REAL-TIME TWO-WAY COMMUNICATION WITH EACH SYSTEM COMPONENT. ANALOG SYSTEMS ARE NOT ACCEPTABLE. IF INDICATED ON THE PLANS, LIGHTING CONTROL SYSTEM SHALL BE ABLE TO FULLY INTEGRATE SMARTBREAKER PANELBOARDS. ALL CABLES SUPPLIED BY CONTRACTOR.
- RELAY PANELS SHALL BE PRE-WIRED, PRE-ASSEMBLED, PREPROGRAMMED AND LISTED TO UL 916 (NORMAL) OR ETL LISTED TO UL924 (EMERGENCY). PANELS SHALL BE PROVIDED WITH DUAL VOLTAGE POWER SUPPLY AND 1/4 GAUGE BARRIERS TO SEPARATE HIGH AND LOW VOLTAGE, NORMAL AND EMERGENCY POWER.
- STANDARD RELAYS SHALL HAVE NORMALLY CLOSED (NC) CONTACTS RATED FOR 120/277V 20A TUNGSTEN, BALLAST OR HID. STANDARD RELAYS SHALL BE ZERO-CROSS TYPE. NO EXCEPTIONS. OPTIONAL 600V, 2-POLE RELAY, NO OR NC, AND 347 SINGLE POLE RELAY SHALL BE AVAILABLE.
- ALL INCANDESCENT LIGHTING CIRCUITS SHALL BE CONTROLLED BY A NC/SOFTSTART RELAY. NO EXCEPTIONS.
- RELAY PANEL ELECTRONICS SHALL PROVIDE CURRENT VISUAL STATUS AND CONTROL OF EACH RELAY OR ZONE. ALL SYSTEM CONTROL ELECTRONICS SHALL STORE PROGRAMMING IN A NON-VOLATILE MEMORY AND PROVIDE 10 YEAR BATTERY BACK UP FOR TIME OF DAY.
- LIGHTING CONTROL SYSTEM SHALL CONSIST OF MASTER AND SLAVE PANEL(S) CONTROLLED BY A 32-CHANNEL DIGITAL TIME CLOCK (DTC) THAT CONTROLS AND PROGRAMS THE ENTIRE LIGHTING CONTROL SYSTEM. THE DTC SHALL SUPPLY ALL TIME FUNCTIONS AND ACCEPT OTHER INPUTS. THE DTC SHALL ACCEPT CONTROL LOCALLY USING BUILT IN BUTTON PROMPTS AND USE OF AN 8 LINE 21-LETTER DISPLAY, FROM A COMPUTER, MODEM, ETHERNET OR INTERNET. ALL COMMANDS SHALL BE IN PLAIN ENGLISH. HELP PAGES SHALL DISPLAY ON THE DTC SCREEN.
- ALL SWITCHES SHALL COMMUNICATE VIA RS 485, CAT 5 PATCH CABLE WITH RJ45 CONNECTORS. CONTACT CLOSURE STYLE SWITCHES ARE NOT ACCEPTABLE. ANY SWITCH BUTTON FUNCTION SHALL BE ABLE TO BE CHANGED LOCALLY (AT THE DTC OR A PC) OR REMOTELY, VIA MODEM, ETHERNET OR INTERNET. REFER TO SINGLE LINE DIAGRAM FOR WIRING DETAILS. SWITCHES WHICH CANNOT BE PROGRAMMED REMOTELY SHALL NOT BE ACCEPTABLE.
- PHOTOCELL, EXTERIOR (PCO) OR INTERIOR (PCI), SHALL PROVIDE READOUT ON THE DTC SCREEN IN NUMBER VALUES ANALOGOUS TO FOOT-CANDLES. EACH PHOTOCELL SHALL PROVIDE A MINIMUM OF 14 TRIGGER POINTS. EACH TRIGGER CAN BE PROGRAMMED TO CONTROL ANY RELAY OR ZONE. EACH TRIGGER SHALL BE SET THROUGH DTC, LOCALLY OR REMOTELY. PHOTOCELLS THAT REQUIRE THE USE OF SET SCREWS OR MANUAL ADJUSTMENTS AT THE PHOTOCELL CONTROL CARD SHALL NOT BE ACCEPTABLE.
- LIGHTING CONTROL SYSTEM INTERFACES TO INCLUDE A DRY CONTACT INPUT INTERFACE, BMS INTERFACE, DIMMING SYSTEM INTERFACE, ETHERNET/INTERNET INTERFACE AND AN INTERFACE TO SMARTBREAKER PANEL BOARDS. VERIFY AND INSTALL ONLY THOSE INTERFACES INDICATED ON THE PLANS.
- STANDARD LIGHTING CONTROL SYSTEM SOFTWARE, PRE-INSTALLED INTO THE DTC, SHALL CONSIST OF AND USE STANDARD GRAPHICAL MANAGEMENT SOFTWARE (GMS) PAGES. GMS SOFTWARE SHALL PROVIDE VIA LOCAL OR REMOTE PC A VISUAL REPRESENTATION OF EACH DEVICE ON THE BUS, SHOW REAL TIME STATUS AND THE ABILITY TO CHANGE THE STATUS OF ANY INDIVIDUAL DEVICE, RELAY OR ZONE. OPTIONAL SOFTWARE THAT ACCEPTS JOB SPECIFIC GRAPHICS SHALL BE AVAILABLE. NO EXCEPTIONS.
- MASTER PANEL SHALL HAVE A MINIMUM OF 6-INPUT DIGITAL INPUT CARD, UNLESS OTHERWISE NOTED. TO BE USED FOR DEMAND RESPONSE PROTOCOL AS REQUIRED, TO REDUCE BUILDING'S TOTAL LIGHTING POWER BY 15%.
- START UP: EC SHALL CONTACT LIGHTING CONTROL MANUFACTURER AT LEAST 7 DAYS BEFORE TURNOVER OF PROJECT. MANUFACTURER WILL REMOTELY DIAL INTO THE LIGHTING CONTROL SYSTEM, RUN DIAGNOSTICS AND CONFIRM SYSTEM PROGRAMMING. EC SHALL BE AVAILABLE AT THE TIME OF DIAL IN TO PERFORM ANY CORRECTIONS REQUIRED BY LCD. EC IS RESPONSIBLE FOR COORDINATING WITH GC AND THE OWNER, THE INSTALLATION OF A DEDICATED TELEPHONE LINE OR A SHARED PHONE LINE WITH A/B SWITCH. PHONE JACK TO BE MOUNTED WITHIN 12" OF MASTER LCP. LABEL JACK WITH PHONE NUMBER. EC SHALL CONNECT PHONE LINE FROM JACK TO MASTER LCP. NO EXCEPTIONS.
- TELEPHONE FACTORY DIAL-UP SUPPORT SHALL BE AVAILABLE AT NO ADDITIONAL COST TO THE EC OR OWNER BOTH DURING AND AFTER THE 3 YEAR WARRANTY PERIOD. FACTORY TO PREPROGRAM THE LIGHTING CONTROL SYSTEM PER PLANS AND APPROVED SUBMITTAL. THE LIGHTING CONTROL MANUFACTURER, AT NO ADDED COST, SHALL PROVIDE ADDITIONAL PROGRAMMING VIA MODEM AS REQUIRED BY THE EC OR OWNER FOR THE OPERATIONAL LIFE OF THE SYSTEM. MANUFACTURER WARRANTS THAT THE DTC SOFTWARE CAN BE UPGRADED AND MONITORED REMOTELY. NO EXCEPTIONS.
- SHOP DRAWINGS: SUBMIT DIMENSIONED DRAWINGS OF LIGHTING CONTROL SYSTEM AND ACCESSORIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, RELAY PANELS, SWITCHES, DTC, PHOTOCELLS AND OTHER INTERFACES. DRAWINGS SHALL INDICATE EXACT LOCATION AND PROGRAMMING OF EACH DEVICE. INDICATE ALL TIME SCHEDULES AND SWITCH BUTTON ENGRAVING.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE AND FULLY FUNCTIONING CODE APPROVED LOW VOLTAGE LIGHTING CONTROL SYSTEM INCLUDING ALL NECESSARY MATERIALS AND LABOR.
- THE LIGHTING CONTROL SYSTEM SHALL BE AS MANUFACTURED BY LCD, WATSTOPPER, HUBBELL OR EQUAL, SHOP DRAWINGS SHALL BE PROVIDED SHOWING ALL COMPONENTS, SOFTWARES WIRING DIAGRAM AND PROGRAMMING SCHEDULES. CONTRACTOR TO INCLUDE TWO HOURS OF PROGRAMMING TIME BY THE MANUFACTURERS REPRESENTATIVE IN THE PRESENCE OF THE OWNER.
- IT IS THE INTENT OF THE CONTRACT DOCUMENTS, WHICH ARE PRESENTED IN A DIAGRAMMATIC, "DESIGN-BUILD" FORMAT, FOR THE CONTRACTOR TO DESIGN, PROVIDE AND INSTALL A COMPLETE AND FULLY FUNCTIONING, CODE APPROVED LOW VOLTAGE LIGHTING CONTROL SYSTEM.
- LIGHTING CONTROL SYSTEM SHALL COMPLY WITH LATEST ADOPTED CALIFORNIA ENERGY COMMISSION TITLE 24 REQUIREMENTS.

LUMINAIRE TYPE	MINIMUM REQUIRED CONTROL STEPS (% OF FULL-RATED POWER)	UNIFORM LEVEL OF ILLUMINANCE SHALL BE ACHIEVED BY:				
Line-voltage sockets except GU-24 Low-voltage incandescent systems LED luminaires and LED source systems GU-24 rated for LED	Continuous dimming 10-100 percent					
GU-24 sockets rated for fluorescent > 20 watts Pin-based compact fluorescent > 20 watts. *2						
GU-24 sockets rated for fluorescent ≤ 20 watts Pin-based compact fluorescent ≤ 20 watts. *2 Linear fluorescent and U-bent fluorescent ≤ 13 watts	Continuous dimming 20-100 percent					
Linear fluorescent and U-bent fluorescent > 13 watts	Minimum one step between 30-70 percent	<ul style="list-style-type: none"> - Stepped dimming; or - Continuous dimming; or - Switching alternate lamps in a luminaire 				
	Minimum one step in each range:					
	<table border="1"> <tr> <td>20% to 40%</td> <td>50% to 70%</td> <td>75% to 85%</td> <td>100%</td> </tr> </table>	20% to 40%	50% to 70%	75% to 85%	100%	
20% to 40%	50% to 70%	75% to 85%	100%			
Track Lighting	Minimum one step between 30-70 percent	<ul style="list-style-type: none"> - Stepped dimming; or - Continuous dimming; or - Separately switching circuits in multi-circuit track with a minimum of two circuits. 				
HID > 20 watts Induction > 25 watts Other light sources	Minimum one step between 50-70 percent	<ul style="list-style-type: none"> - Stepped dimming; or - Continuous dimming; or - Switching alternate lamps in each luminaire, having a minimum of 2 lamps per luminaire, illuminating the same area and in the same manner. 				

NOTES:
 * 1. Full rated input power of ballast and lamp, corresponding to maximum ballast factor
 * 2. Includes only pin based lamps: twin tube, multiple twin tube, and spiral lamps

AUTOMATIC DAYLIGHTING CONTROL INSTALLATION AND OPERATION:

FOR LUMINAIRES IN DAYLIGHT ZONES, AUTOMATIC DAYLIGHTING CONTROLS SHALL BE INSTALLED AND CONFIGURED TO OPERATE ACCORDING TO ALL OF THE FOLLOWING REQUIREMENTS:

- IT IS THE INTENT OF THE CONTRACT DOCUMENTS, WHICH ARE PRESENTED IN A DIAGRAMMATIC, "DESIGN-BUILD" FORMAT, FOR THE CONTRACTOR TO DESIGN, PROVIDE AND INSTALL A COMPLETE AND FULLY FUNCTIONING, CODE APPROVED LOW VOLTAGE LIGHTING CONTROL SYSTEM.
- PHOTOSENSORS SHALL BE LOCATED SO THAT THEY ARE NOT READILY ACCESSIBLE TO UNAUTHORIZED PERSONNEL, AND THE LOCATION WHERE CALIBRATION ADJUSTMENTS ARE MADE TO AN AUTOMATIC DAYLIGHTING CONTROLS SHALL NOT BE READILY ACCESSIBLE TO UNAUTHORIZED PERSONNEL.
- AUTOMATIC DAYLIGHTING CONTROLS SHALL PROVIDE FUNCTIONAL MULTILEVEL LIGHTING, HAVING AT LEAST THE NUMBER OF CONTROL STEPS SPECIFIED IN TABLE ON THIS SHEET.
- FOR EACH SPACE, THE COMBINED ILLUMINANCE FROM THE CONTROLLED LIGHTING AND DAYLIGHT SHALL NOT BE LESS THAN THE ILLUMINANCE FROM CONTROLLED LIGHTING WHEN NO DAYLIGHT IS AVAILABLE.
- IN AREAS SERVED BY LIGHTING THAT IS DAYLIGHT CONTROLLED, WHEN THE ILLUMINANCE RECEIVED FROM THE DAYLIGHT IS GREATER THAN 150 PERCENT OF THE DESIGN ILLUMINANCE RECEIVED FROM GENERAL LIGHTING SYSTEM AT FULL POWER, THE GENERAL LIGHTING POWER IN DAYLIGHT ZONE SHALL BE REDUCED BY A MINIMUM OF 65 PERCENT.

LIGHTING CONTROL SCHEDULE

SCALE	1
NTS	



NATIONAL
 ENGINEERING & CONSULTING, INC.
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
 COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
 1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
 LOS ANGELES, CA 90016

C-JAIME-001		
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:26:51 PM

SHEET TITLE:
LIGHTING CONTROL SCHEDULES

SHEET NO:
E502

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 7 of 8
 Date Prepared: 04/26/2022

Area Description	Complete Building or Area Category	Area Controls	07	08	09	10	11	12
ELEVATOR LOBBIES	Main Entry Lobby	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
1ST FLOOR COMMON SPACE	Lounge	Manual ON/OFF	Dimmer	Auto Timeswitch	Included	Included		
MAILBOXES	Commercial and Industrial Storage	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
RESIDENTIAL CORRIDORS	Corridor	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
ELEVATOR MACHINE ROOM	Electrical, Mechanical, Telephone Rooms	Manual ON/OFF	Dimmer	Occ. Sensor	NA	NA		

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/2019standards/nrci/>

Form/Title	Field Inspector
NRCA-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	Pass Fail
NRCA-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	Pass Fail
NRCA-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	Pass Fail
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Pass Fail
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Pass Fail
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	Pass Fail
NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	Pass Fail
NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).	Pass Fail

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 4 of 8
 Date Prepared: 04/26/2022

Area Description	Complete Building or Area Category	Area Controls	07	08	09	10	11	12
ELEVATOR LOBBIES	Main Entry Lobby	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
1ST FLOOR COMMON SPACE	Lounge	Manual ON/OFF	Dimmer	Auto Timeswitch	Included	Included		
MAILBOXES	Commercial and Industrial Storage	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
RESIDENTIAL CORRIDORS	Corridor	Manual ON/OFF	Dimmer	Auto Timeswitch	NA	NA		
ELEVATOR MACHINE ROOM	Electrical, Mechanical, Telephone Rooms	Manual ON/OFF	Dimmer	Occ. Sensor	NA	NA		

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
 Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Area Description	Complete Building or Area Category	03	04	05	06
ELEVATOR LOBBIES	Main Entry Lobby	0.85	648	550.8	
1ST FLOOR COMMON SPACE	Lounge	0.65	780	507	
MAILBOXES	Commercial and Industrial Storage	0.6	110	66	
RESIDENTIAL CORRIDORS	Corridor	0.6	1,431	858.6	
ELEVATOR MACHINE ROOM	Electrical, Mechanical, Telephone Rooms	0.4	50	20	
TOTAL:			3,019	2,002.4	See Tables J or P for detail

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 1 of 8
 Date Prepared: 04/26/2022

A. GENERAL INFORMATION

01 Project Location (city)	LOS ANGELES	04 Total Conditioned Floor Area (ft ²)	3,019
02 Climate Zone	8	05 Total Unconditioned Floor Area (ft ²)	8,212
03 Occupancy Types Within Project (select all that apply):	Office, Retail, Warehouse, High-Rise Residential, Healthcare, Hotel/Motel, School, Support Areas	06 # of Stories (Habitable Above Grade)	6

B. PROJECT SCOPE
 Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)(2) for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work	Conditioned Spaces	Unconditioned Spaces
My Project Consists of (check all that apply):	02 Calculation Method	03 Calculation Method
<input checked="" type="checkbox"/> New Lighting System	Area Category	Area Category
<input checked="" type="checkbox"/> New Lighting System - Parking Garage	3,019	3,292
<input type="checkbox"/> Altered Lighting System	Complete Building	4,920
Total Area of Work (ft²)	3,019	8,212

C. COMPLIANCE RESULTS
 Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)(1)	Allowed Lighting Power per §140.6(b) (Watts)	Adjusted Lighting Power per §140.6(a) (Watts)	Compliance Results
01	02	03	04
Complete Building §140.6(c)(1)	Area Category §140.6(c)(2)	Tailored §140.6(c)(3) (+)	Total Allowed (Watts)
(See Table I)	(See Table I)	(See Table J)	(See Table K)
2,002.4			2,002.4
	05	06	07
	Total Designed (Watts)	PAF Control Credits §140.6(a)(2) (-)	Total Adjusted (Watts) Includes Adjustments
	1,570.6		1,570.6
		08	09
		05 Must be ≥ 08	COMPLIES
		§140.6	

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 8 of 8
 Date Prepared: 04/26/2022

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name: GABRIEL TUASON
 Signature: [Signature]
 Date: 04/26/2022

Company: NATIONAL ENGINEERING & CONSULTING, INC.
 Address: 30 THOMAS, IRVINE, CALIFORNIA 92618
 Phone: 949 716 9990

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: REGINO C LAVARIAS
 Signature: [Signature]
 Date Signed: 04/26/2022

Company: NATIONAL ENGINEERING & CONSULTING, INC.
 Address: 30 THOMAS, IRVINE, CALIFORNIA 92618
 Phone: 949 716 9990

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 5 of 8
 Date Prepared: 04/26/2022

Area Description	Complete Building or Area Category	03	04	05	06
BIKE STORAGE	Commercial and Industrial Storage	0.6	255	153	
BUILDING SERVICES	Electrical, Mechanical, Telephone Rooms	0.4	229	91.6	
STAIR #1	Stairwell	0.5	991	495.5	
STAIR #2	Stairwell	0.5	1,279	639.5	
STORAGE ROOMS	Commercial and Industrial Storage	0.6	162	97.2	
TRASH ROOMS	Commercial and Industrial Storage	0.6	263	157.8	
JANITOR ROOM	Commercial and Industrial Storage	0.6	53	31.8	
PACKAGES ROOM	Commercial and Industrial Storage	0.6	60	36	
PARKING GARAGE	Parking Garage Building	0.13	4,920	639.6	
TOTAL:			8,212	2,342	See Tables J or P for detail

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
 This Section Does Not Apply

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
 This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
 This Section Does Not Apply

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 2 of 8
 Date Prepared: 04/26/2022

C. COMPLIANCE RESULTS

Unconditioned:	639.6	1,702.4	=	2,342	≥	1,788	=	1,788	COMPLIES
Controls Compliance (See Table H for Details) COMPLIES									
Rated Power Reduction Compliance (See Table Q for Details) Not Applicable									

D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.
 No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. INDOOR LIGHTING FIXTURE SCHEDULE
 Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change	Watts per luminaire	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)(3)	Design Watts	Field Inspector Pass Fail
LC-1	6" LED CYLINDER DOWNLIGHT			31	Mfr. Spec ²	4		124	
LC-1E	SAME AS "LC-1" W/ EM			31	Mfr. Spec ²	5		155	
LC-2	4" LED CYLINDER			27	Mfr. Spec ²	7		189	
LL-1	48" LINEAR LED			31	Mfr. Spec ²	1		31	
LP-1	4" LINEAR PENDANT LED			48.6	Mfr. Spec ²	1		48.6	
LR-1	4" LED DOWNLIGHT			11	Mfr. Spec ²	48		528	
LR-1E	SAME AS "LR-1" W/ EM			11	Mfr. Spec ²	45		495	
Total Designed Watts UNCONDITIONED SPACES:									1,570.6

G. MODULAR LIGHTING SYSTEMS
 This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)
 Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls	01	02	03
	Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)	Field Inspector Pass Fail
	Required > 10,000 SF	See Area/Space Level Controls	

Area Level Controls

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

TITLE 24 PROCEDURES FOR TESTING AND ADJUSTING

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ASSOCIATED WITH FINAL INSPECTION AND APPLICABLE ACCEPTANCE REQUIREMENTS. INCLUDE ALL COST IN THE BASE BID. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO CONSTRUCTION INSPECTION, MEASUREMENTS, MONITORING, FUNCTIONAL TESTING, CALIBRATING, ETC. CONTRACTOR SHALL ASSUME THE ROLE OF "FIELD TECHNICIAN" AND "RESPONSIBLE PERSON" AS DEFINED IN STATE OF CALIFORNIA 2019 BUILDING ENERGY EFFICIENCY STANDARDS NONRESIDENTIAL COMPLIANCE MANUAL SECTIONS 13.1.2.2 AND 13.1.2.3.

- LIGHTING CONTROL ACCEPTANCE TESTING AND ADJUSTING PROCEDURES - REFER TO NRCA-LTI-02-A
- AUTOMATIC DAYLIGHT CONTROL ACCEPTANCE TESTING AND ADJUSTING PROCEDURES - REFER TO NRCA-LTI-03-A
- DEMAND RESPONSE LIGHTING CONTROL ACCEPTANCE TESTING AND ADJUSTING PROCEDURES - REFER TO NRCA-LTI-04-A
- INSTITUTIONAL TUNING PAF ACCEPTANCE TESTING AND ADJUSTING PROCEDURES - REFER TO NRCA-LTI-05-A
- OUTDOOR LIGHTING CONTROL ACCEPTANCE TESTING AND ADJUSTING PROCEDURES - REFER TO NRCA-LTI-02-A
- ALL LIGHTING CONTROLS TESTING AND ADJUSTING DOCUMENTS NOTED ABOVE ARE AVAILABLE FROM THE CALIFORNIA ENERGY COMMISSION WEBSITE

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 6 of 8
 Date Prepared: 04/26/2022

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
 This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
 This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
 This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
 This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS
 This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS
 This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
 This Section Does Not Apply

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Form/Title	Field Inspector
NRCI-LTI-01-E - Must be submitted for all buildings	Pass Fail
NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	Pass Fail

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Indoor Lighting
 NRCC-LTI-E (Created 11/19)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016
 Report Page: Page 3 of 8
 Date Prepared: 04/26/2022

Designated Wattage: Unconditioned Spaces

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change	Watts per luminaire	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)(3)	Design Watts	Field Inspector Pass Fail
LC-3	6" WALL-MOUNT LED DOWNLIGHT			23	Mfr. Spec ²	9		207	
LG-1	4" PARKING GARAGE LED			31	Mfr. Spec ²	6		186	
LG-1E	SAME AS "LG-1" W/ EM			31	Mfr. Spec ²	6		186	
LL-1	48" LINEAR LED			31	Mfr. Spec ²	14		434	
LL-1E	SAME "LL-1" W/ EM			31	Mfr. Spec ²	5		155	
LL-2	48" SURFACE-MOUNT LINEAR LED			31	Mfr. Spec ²	20		620	
Total Designed Watts UNCONDITIONED SPACES:									1,788

Footnote: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)(8) is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS
 This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)
 Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls	01	02	03
	Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)	Field Inspector Pass Fail
	Required > 10,000 SF	See Area/Space Level Controls	

Area Level Controls

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

NATIONAL ENGINEERING & CONSULTING, INC.
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP: [Professional Engineer Seal - E-14492]

COPYRIGHT: COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT: **JAIME PARTNERS OF CALIFORNIA, INC.**
 1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT: **2853 WEST BLVD**
 LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:20:31 PM
 SHEET TITLE: **INDOOR LTG T-24 COMPLIANCE CERTIFICATES**
 SHEET NO: **E801**

STATE OF CALIFORNIA
Electrical Power Distribution
 NRCC-ELC-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 4 of 5
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES
 Table Instructions: Please complete this table for entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(d). Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

01	02	03	04	05	06
Room Name or Description	Location/ Type of Controlled Receptacles	Shut-Off Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector
			<input checked="" type="checkbox"/>	E201	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
1ST FLOOR COMMON SPACE	Split-wired receptacles	Auto Time-Switch w/ applicable override	<input checked="" type="checkbox"/>	E201	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

* If "Other" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.

J. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/

YES	NO	Form/Title	Field Inspector
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-ELC-01-E - Must be submitted for all buildings.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

K. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 There are no Certificates of Acceptance applicable to electrical power distribution requirements.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards November 2019

STATE OF CALIFORNIA
Electrical Power Distribution
 NRCC-ELC-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 5 of 5
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

DOCUMENTATION AUTHORITY'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: GABRIEL TUASON Documentation Author Signature:

Company: NATIONAL ENGINEERING & CONSULTING, INC Signature Date: 04/26/2022

Address: 30 THOMAS CEA/HERS Certification Identification (if applicable):

City/State/Zip: IRVINE, CALIFORNIA 92618 Phone: 949.716.9990

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: REGINO C LAVARIAS Responsible Designer Signature:

Company: NATIONAL ENGINEERING & CONSULTING, INC Date Signed: 04/26/2022

Address: 30 THOMAS License: E14492

City/State/Zip: IRVINE, CALIFORNIA 92618 Phone: 949.716.9990

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards November 2019

STATE OF CALIFORNIA
Electrical Power Distribution
 NRCC-ELC-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 1 of 5
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

A. GENERAL INFORMATION
 01 Project Location (City): LOS ANGELES 02 Occupancy Types Within Project:
 Office Retail Warehouse Hotel/ Motel School Support Areas
 Parking Garage High-Rise Residential Relocatable Healthcare Facilities Other (Write in):

B. PROJECT SCOPE
 Table Instructions: Include any electrical service systems that are within the scope of the permit application.

01	02	03	04	05	06
Electrical Service Designation/Description	Scope of Work ¹	Rating (kVA)	Utility Provided Metering System Exception to §130.5(a) ²	System subject to CA Elec Code Article 517 Exception to §130.5(a)&(b)	Demand Response Controls
"MSA"	New electrical service equipment & meter	285.8	<input type="checkbox"/>	<input type="checkbox"/>	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections §120.2, §130.1 and §130.3 and compliance documents NRCC-MCH, NRCC-LTI and NRCC-LTS will indicate when demand response controls are required.

* FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop §130.5(c), no other requirements from §130.5 are required.
² Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

C. COMPLIANCE RESULTS
 Table Instructions: If this table says "DOES NOT COMPLY" refer to Table D, for guidance and review the Table that indicates "No".

01	02	03	04	05
Service Electrical Metering §130.5(a)	AND	Separation for Monitoring §130.5(b)	AND	Voltage Drop §130.5(c)
Yes <input type="checkbox"/>	AND	Yes <input type="checkbox"/>	AND	Yes <input type="checkbox"/>
COMPLIES				

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards November 2019

STATE OF CALIFORNIA
Electrical Power Distribution
 NRCC-ELC-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 2 of 5
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.
 No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING
 Table Instructions: Complete the table below for new or replacement electrical service systems OR equipment to demonstrate compliance with §130.5(a).

01	02	03	04	05
Electrical Service Designation/Description	Rating (kVA)	Required Metering Capabilities per Table 130.5-A	Location of Requirements in Construction Documents	Field Inspector
		Instantaneous Demand (kW)		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
		Historical Peak Demand (kW)		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
		Tracking kWh for user-defined period		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
		kWh per rate period		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
"MSA"	286	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	E401	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Electrical Service Designation/Description: "MSA"

01	02	03	04	05
Load Type per Table 130.5-B ¹	Minimum Required Separation of Load per Table 130.5-B	Compliance Method ²	Location of Requirements in Construction Documents	Field Inspector
Lighting including exit, egress and exterior	All lighting disaggregated by floor, type or area	Method 2	E401	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
HVAC systems and components	All HVAC in aggregate and each HVAC load rated at least 50 kVA	Method 2	E401	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Domestic and service water systems	All loads in aggregate	Method 2	E401	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards November 2019

STATE OF CALIFORNIA
Electrical Power Distribution
 NRCC-ELC-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 3 of 5
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING
 Table Instructions: Complete this table for entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(b). Using the dropdown choices in column 01, indicate the load types included for each service. Any load types that are not included in the service do not need to be shown.

01	02	03	04	05
Load Type per Table 130.5-B ¹	Minimum Required Separation of Load per Table 130.5-B	Compliance Method ²	Location of Requirements in Construction Documents	Field Inspector
Elevators, escalators, moving walkways	All loads in aggregate	Method 2	E401	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

* NOTES: If "Other" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.

¹ FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type.
² Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type
 Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type
 Method 3: Branch circuits serve load types individually & provisions for adding future branch circuit monitoring
 Method 4: Complete metering system measures and reports loads by type
 See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

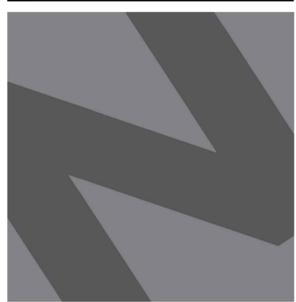
H. VOLTAGE DROP
 Table Instructions: Please complete this table for entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with §130.5(c). For alterations, only the altered circuits must demonstrate compliance per §141.0(b)(2)(iii).

01	02	03	04	05
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method	Location of Voltage Drop Calculations ¹	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector
"MSA"	<input checked="" type="checkbox"/> Voltage drop < 5% <input type="checkbox"/> Permitted by CA Elec Code (Exception to §130.5(c))*	In construction documents	E402	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

* NOTES: If "Permitted by CA Elec Code" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.
¹ FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards November 2019



NATIONAL
 ENGINEERING & CONSULTING, INC
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
 COPYRIGHT NOTICE:
 COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.

1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
 LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:18:34 PM

SHEET TITLE:
POWER TITLE 24 COMPLIANCE CERTIFICATES

SHEET NO:
 △ **E802**

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 4 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

01	02	03	04	05
Area Description	Shut-Off §130.2(c)1	Auto-Schedule §130.2(c)2	Motion Sensor §130.2(c)3	Field Inspector
ROOF DECK	EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS			Pass
WALKWAY ENTRY	EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS			Fail
6TH FLR ELEVATOR LOBBY	EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS			
GARAGE ENTRY	EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS			

I. LIGHTING POWER ALLOWANCE (per §140.7)
 Table Instructions: Please complete this table for areas using the allowance calculations per §140.7. General Hardscape Allowance is per Table 140.7-A while "Use it or lose it" Allowances are per Table 140.7-B. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.

Area Description	Surface Type	Area Wattage Allowance (AWA) Illuminated Area (ft²)	Area Allowance (W/ft²)	Perimeter Length (ft)	Linear Wattage Allowance (LWA) (W/ft)	Total General AWA + LWA (Watts)
ROOF DECK	Concrete	1,715	0.03	180	0.4	123.45
WALKWAY ENTRY	Concrete	1,116	0.03	223	0.4	122.68
6TH FLR ELEVATOR LOBBY	Concrete	102	0.03	43	0.4	20.26
GARAGE ENTRY	Concrete	326	0.03	74	0.4	39.38

Initial Wattage Allowance for Entire Site (Watts): 350
 Total General Hardscape Allowance (Watts): 655.77

J. LIGHTING ALLOWANCE: PER APPLICATION
 This Section Does Not Apply

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 5 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

K. LIGHTING ALLOWANCE: SALES FRONTAGE
 This Section Does Not Apply

L. LIGHTING ALLOWANCE: ORNAMENTAL
 This Section Does Not Apply

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA
 This Section Does Not Apply

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)
 This Section Does Not Apply

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/

YES	NO	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTO-01-E - Must be submitted for all buildings.	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTO-02-E - Must be submitted for a lighting control system; or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

YES	NO	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls area added to ≤ 20 luminaires.	<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 6 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name: GABRIEL TUASON
 Documentation Author Signature: *G. Tuason*
 Company: NATIONAL ENGINEERING & CONSULTING, INC
 Signature Date: 04/26/2022
 Address: 30 THOMAS
 City/State/Zip: IRVINE, CALIFORNIA 92618
 Phone: 949.716.9990

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: REGINO C. LAVARIAS
 Responsible Designer Signature: *R. Lavarias*
 Company: NATIONAL ENGINEERING & CONSULTING, INC
 Date Signed: 04/26/2022
 Address: 30 THOMAS
 City/State/Zip: IRVINE, CALIFORNIA 92618
 Phone: 949.716.9990

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 1 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

A. GENERAL INFORMATION

01 Project Location (city) LOS ANGELES 04 Total Illuminated Hardscape Area (ft²) 2,259
 02 Climate Zone 8
 03 Outdoor Lighting Zone per Title 24, Part 1 §10.1.1(d) or as designated by Authority Having Jurisdiction (AHJ):
 LZ-0: Very Low - Undeveloped Parkland LZ-2: Moderate - Rural Areas LZ-4: High - Must be reviewed by CA Energy Commission for Approval
 LZ-1: Low - Developed Parkland LZ-3: Moderately High - Urban Areas

B. PROJECT SCOPE
 Table Instructions: Include any outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.7 or §141.0(b)(2) for alterations.
 My project consists of:
 New Lighting System Must Comply with Allowances from §140.7
 Altered Lighting System Is your alteration increasing the connected lighting load (Watts)? Yes No
 % of Existing Luminaires Being Altered: 0 Sum Total of Luminaires Being Added or Altered: 0 Calculation Method: 05
 FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100

C. COMPLIANCE RESULTS
 Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Calculation of Total Allowed Lighting Power (Watts) §140.7 or §141.0(b)(2)						Compliance Results		
01	02	03	04	05	06	07	08	09
General Hardscape Allowance §140.7(d)1	Per Application §140.7(d)2	Sales Frontage §140.7(d)2	Ornamental §140.7(d)2	Per Specific Area §140.7(d)2	Existing Power §141.0(b)(2)	Total Allowed (Watts)	Total Actual (Watts)	07 Must be ≥ 08
(See Table I)	(See Table J)	(See Table K)	(See Table L)	(See Table M)	(See Table N)	655.77	456.4	COMPLIES
Cutoff Compliance (See Table G for Details)						Not Applicable		
Controls Compliance (See Table H for Details)						COMPLIES with Exceptional Conditions		

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 2 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Table H. Outdoor Lighting Controls Permit Applicant Notes:
 ROOF DECK: EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS
 WALKWAY ENTRY: EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS
 6TH FLR ELEVATOR LOBBY: EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS
 GARAGE ENTRY: EXEMPT FROM MOTION SENSORS BECAUSE LIGHT FIXTURES ALL ARE RATED LESS THAN 40 WATTS
 Total Hardscape Area in Table A does not match the areas entered in Table I. Please review for compliance.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. OUTDOOR LIGHTING FIXTURE SCHEDULE
 Table Instructions: For new or altered lighting systems demonstrating compliance with §140.7 (ie Table I has expanded for input), include all luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application in the Table below. For altered lighting systems using the Existing Power method per §141.0(b)(2), (ie Table N has expanded for input), include only new luminaires being installed and replacement luminaires being installed as part of the project scope (ie, do not include existing luminaires remaining or existing luminaires being moved).

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Watts per luminaire ^{1,2}	How Wattage is determined	Total number luminaires ²	Luminaire Status ³	Excluded per §140.7(a)	Design Watts	Cutoff Req. ≥ 6,200 initial lumen output §130.2(b) ⁴	Field Inspector
LS-1	OUTDOOR STEP LIGHT	12.2	Mfr. Spec ⁵	29	New		353.8	NA: <6,200 lumens	<input type="checkbox"/>
LR-2	LED DOWNLIGHT	14	Mfr. Spec ⁵	2	New		28	NA: <6,200 lumens	<input type="checkbox"/>
LS-2	LED BOLLARD	12.3	Mfr. Spec ⁵	2	New		24.6	NA: <6,200 lumens	<input type="checkbox"/>
LR-3/UR-4*	LED ADJUSTABLE GIMBAL	10	Mfr. Spec ⁵	5	New		50	NA: <6,200 lumens	<input type="checkbox"/>
							0		<input type="checkbox"/>
						Total Designated Watts:	456.4		

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
 EX: Luminaire is lighting a statue; EXCEPTION 2 to §130.2(b).
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

STATE OF CALIFORNIA
Outdoor Lighting
 NRCC-LTO-E (Created 11/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: WEST BOULEVARD HOUSING Report Page: Page 3 of 6
 Project Address: 2853 WEST BLVD LOS ANGELES, CA 90016 Date Prepared: 04/26/2022

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Watts per luminaire ^{1,2}	How Wattage is determined	Total number luminaires ²	Luminaire Status ³	Excluded per §140.7(a)	Design Watts	Cutoff Req. ≥ 6,200 initial lumen output §130.2(b) ⁴	Field Inspector
									Pass

FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c)
¹ For linear luminaires, wattage should be indicated as W/ft instead of Watts/luminaire. Total linear feet for the luminaire should be indicated in column 05 instead of number of luminaires.
² Select "New" for new luminaires in a new outdoor lighting project or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.
³ Compliance with mandatory cutoff requirements is required for luminaires with initial lumen output ≥ 6,200 unless exempted by §130.2(b).
G. CUTOFF REQUIREMENTS (BUG)
 This Section Does Not Apply

H. OUTDOOR LIGHTING CONTROLS
 Table Instructions: Complete this table demonstrating compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
 When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank. For each requirement in columns 02 through 04, do not leave the field blank, instead select NA or Exempt* from the dropdown list to indicate not applicable or an exemption.

01	02	03	04	05
Area Description	Shut-Off §130.2(c)1	Auto-Schedule §130.2(c)2	Motion Sensor §130.2(c)3	Field Inspector
ROOF DECK	Photocontrol	Yes	Exempt*	<input type="checkbox"/>
WALKWAY ENTRY	Photocontrol	Yes	Exempt*	<input type="checkbox"/>
6TH FLR ELEVATOR LOBBY	Photocontrol	Yes	Exempt*	<input type="checkbox"/>
GARAGE ENTRY	Photocontrol	Yes	Exempt*	<input type="checkbox"/>

*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
 EX: Not permitted by health & safety to be turned off; EXCEPTION 1 to §130.2(c).
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> November 2019

NATIONAL
 ENGINEERING & CONSULTING, INC
 30 THOMAS, IRVINE, CA 92618-2703
 PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT: COPYRIGHT NOTICE: COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
 1050 S. FLOWER STREET
 LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
 LOS ANGELES, CA 90016

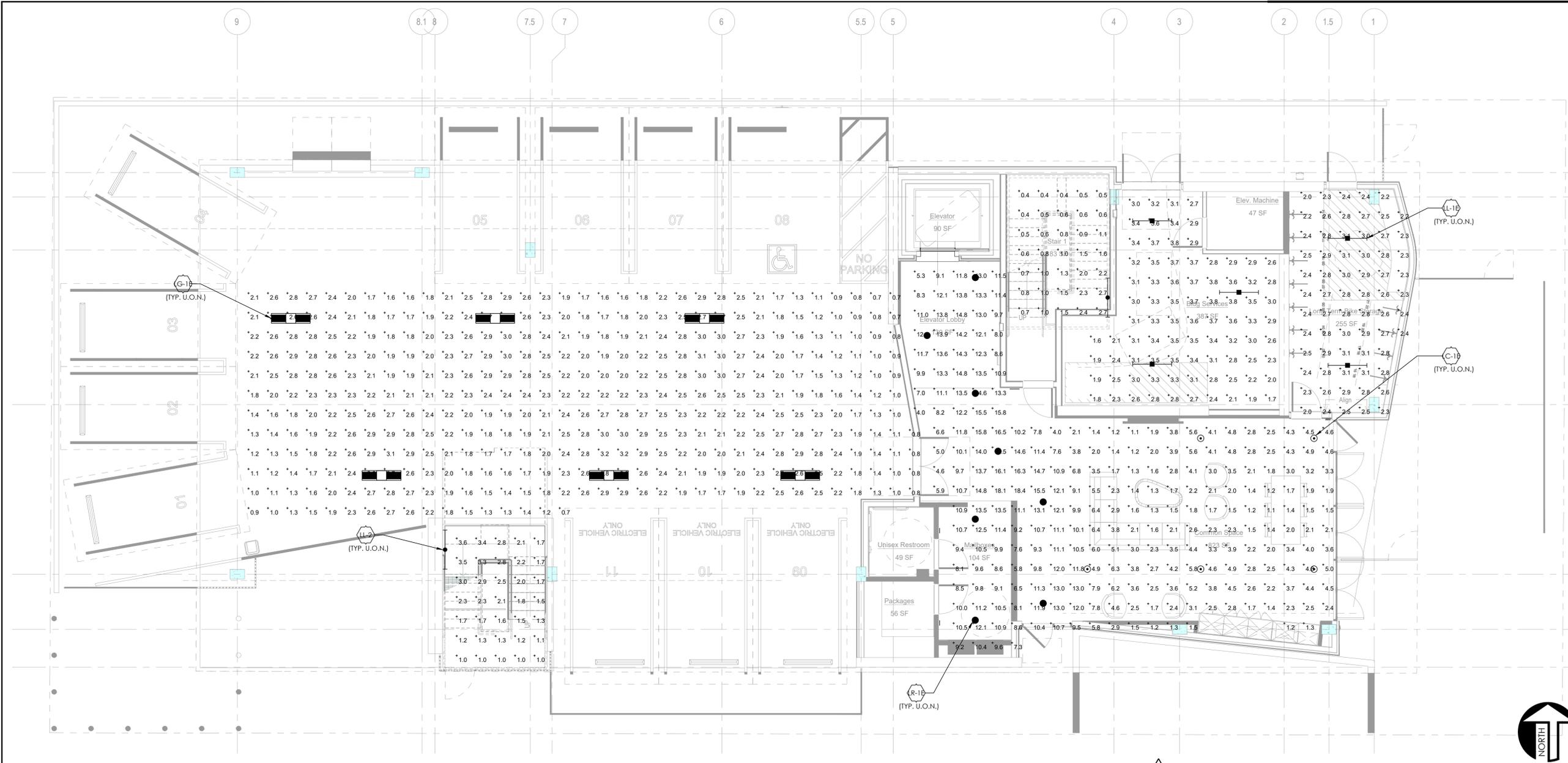
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:04:43 PM

SHEET TITLE:
OUTDOOR LTG TITLE 24 COMPLIANCE CERTIFICATES

SHEET NO:
E803



LEVEL 1 EMERGENCY PHOTOMETRICS PLAN SCALE 3/16" = 1'-0" 1

PLAN NOTES

A. THIS LIGHTING CALCULATION REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATION ENGINEERING SOCIETY APPROVED METHODS.

B. PHOTOMETRIC DATA USED IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP RATINGS USING MANUFACTURER'S MEAN LUMEN VALUES. FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS. CERTAIN ELEMENTS MAY AFFECT THE LAMP & FIXTURE PERFORMANCE. ACTUAL FOOT-CANDLE LEVELS MAY VARY. DUE TO THE ABOVE CONSIDERATIONS, NATIONAL ENGINEERING & CONSULTING, INC CANNOT GUARANTEE THAT ACTUAL LIGHT LEVELS MEASURED IN THE FIELD WILL ACTUALLY MATCH THE INITIAL CALCULATIONS SHOWN ON PLAN.

BIKE STORAGE	BUILDING SERVICES
MAX. 3.1 FC	MAX. 3.8 FC
MIN. 2.0 FC	MIN. 1.6 FC
AVG. 2.6 FC	AVG. 3.0 FC
MAX./MIN. 1.6:1 FC	MAX./MIN. 2.4:1 FC
AVG./MIN. 1.3:1 FC	AVG./MIN. 1.9:1 FC

LOUNGE AREA	PARKING GARAGE
MAX. 18.4 FC	MAX. 3.2 FC
MIN. 1.1 FC	MIN. 0.7 FC
AVG. 6.2 FC	AVG. 3.0 FC
MAX./MIN. 16.7:1 FC	MAX./MIN. 4.6:1 FC
AVG./MIN. 6.2:1 FC	AVG./MIN. 3.0:1 FC

STAIRS #1	STAIRS #2
MAX. 2.7 FC	MAX. 3.6 FC
MIN. 0.4 FC	MIN. 1.0 FC
AVG. 1.1 FC	AVG. 1.9 FC
MAX./MIN. 6.8:1 FC	MAX./MIN. 3.6:1 FC
AVG./MIN. 2.8:1 FC	AVG./MIN. 1.9:1 FC

NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:

COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

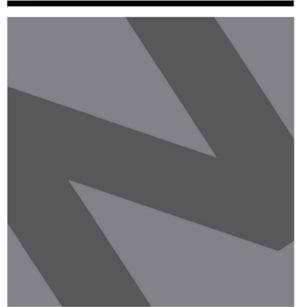
C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:10:01 PM

SHEET TITLE:
LEVEL 1 EMERGENCY PHOTOMETRICS

SHEET NO:
E901



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997

STAMP:



COPYRIGHT:
COPYRIGHT NOTICE:
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. NO PART OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN CONSENT OF NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:

**JAIME PARTNERS
OF CALIFORNIA, INC.**
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:

2853 WEST BLVD
LOS ANGELES, CA 90016



RESIDENTIAL FLOORS 2-4 EMERGENCY PHOTOMETRICS PLAN

SCALE
3/16" = 1'-0"

1

PLAN NOTES

- A. THIS LIGHTING CALCULATION REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATION ENGINEERING SOCIETY APPROVED METHODS.
- B. PHOTOMETRIC DATA USED IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP RATINGS USING MANUFACTURER'S MEAN LUMEN VALUES. FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS. CERTAIN ELEMENTS MAY AFFECT THE LAMP & FIXTURE PERFORMANCE. ACTUAL FOOT-CANDLE LEVELS MAY VARY. DUE TO THE ABOVE CONSIDERATIONS, NATIONAL ENGINEERING & CONSULTING, INC CANNOT GUARANTEE THAT ACTUAL LIGHT LEVELS MEASURED IN THE FIELD WILL ACTUALLY MATCH THE INITIAL CALCULATIONS SHOWN ON PLAN.

CORRIDOR/ELEVATOR LOBBY		STAIRS 1	
MAX.	21.8 FC	MAX.	15.8 FC
MIN.	1.0 FC	MIN.	8.8 FC
AVG.	12.6 FC	AVG.	12.1 FC
MAX./MIN.	21.8:1	MAX./MIN.	1.8:1
AVG./MIN.	12.6:1	AVG./MIN.	1.4:1
STAIRS 2			
MAX.	25.9 FC		
MIN.	7.0 FC		
AVG.	12.5 FC		
MAX./MIN.	3.7:1		
AVG./MIN.	1.8:1		

C-JAIME-001

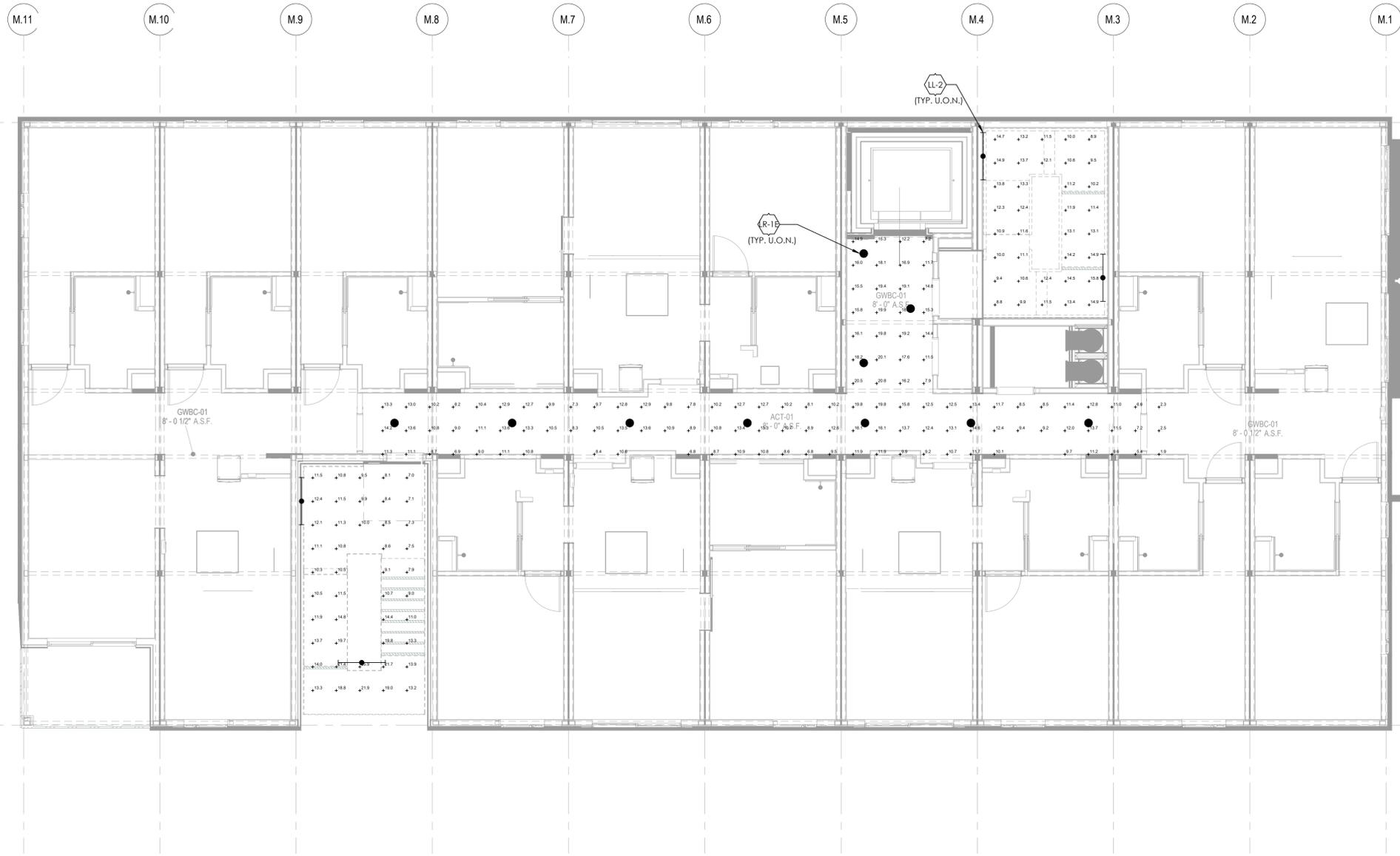
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:10:38 PM

SHEET TITLE:
**RESIDENTIAL FLOORS
2-4 EMERGENCY
PHOTOMETRICS**

SHEET NO:

E902



RESIDENTIAL FLOORS EMERGENCY PHOTOMETRICS PLAN SCALE 3/16" = 1'-0" 1

PLAN NOTES

A. THIS LIGHTING CALCULATION REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATION ENGINEERING SOCIETY APPROVED METHODS.

B. PHOTOMETRIC DATA USED IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP RATINGS USING MANUFACTURER'S MEAN LUMEN VALUES. FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS. CERTAIN ELEMENTS MAY AFFECT THE LAMP & FIXTURE PERFORMANCE. ACTUAL FOOT-CANDLE LEVELS MAY VARY. DUE TO THE ABOVE CONSIDERATIONS, NATIONAL ENGINEERING & CONSULTING, INC CANNOT GUARANTEE THAT ACTUAL LIGHT LEVELS MEASURED IN THE FIELD WILL ACTUALLY MATCH THE INITIAL CALCULATIONS SHOWN ON PLAN.

CORRIDOR/ELEVATOR LOBBY		STAIRS 1	
MAX.	20.8 FC	MAX.	15.8 FC
MIN.	1.9 FC	MIN.	8.8 FC
AVG.	11.9 FC	AVG.	12.1 FC
MAX./MIN.	10.9:1	MAX./MIN.	1.8:1
AVG./MIN.	6.3:1	AVG./MIN.	1.4:1
STAIRS 2			
MAX.	25.9 FC		
MIN.	7.0 FC		
AVG.	12.7 FC		
MAX./MIN.	3.7:1		
AVG./MIN.	1.8:1		



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE :
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

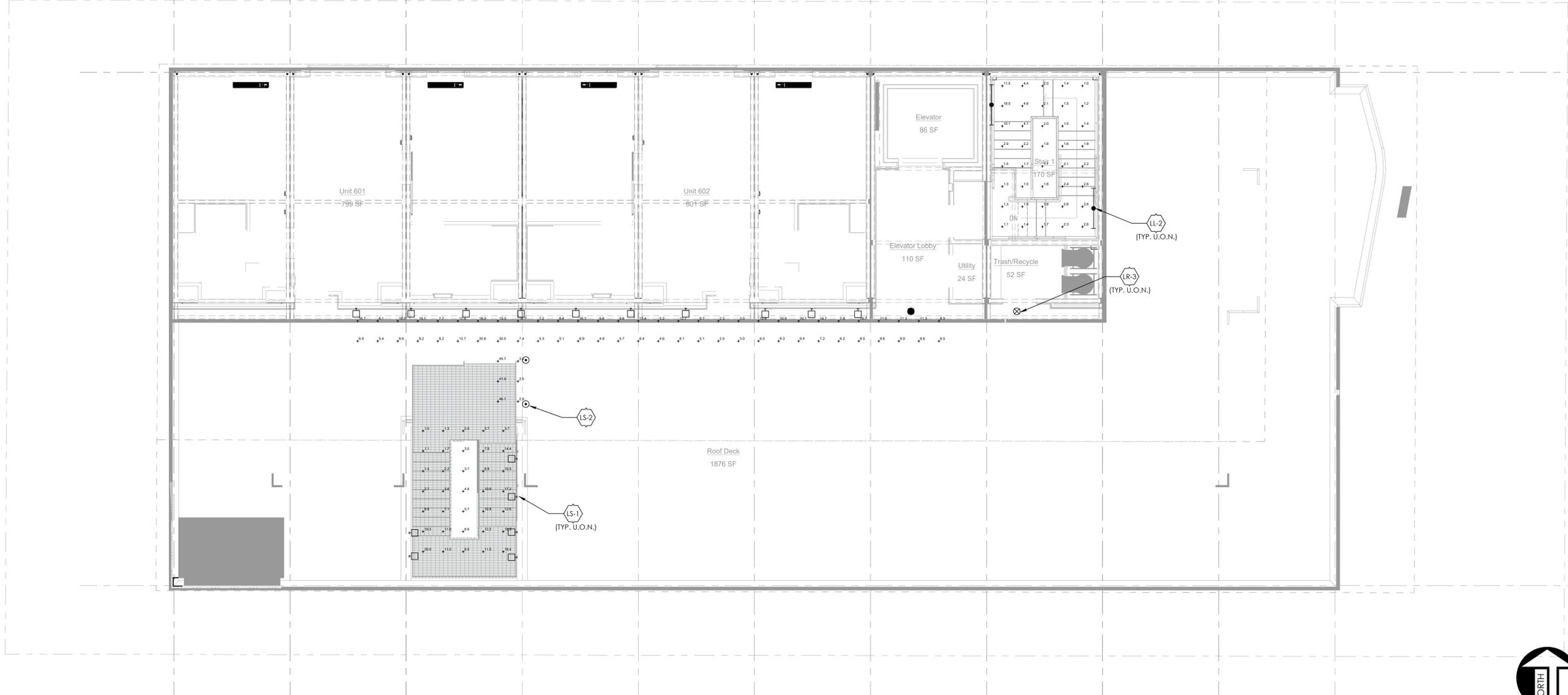
#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:05:59 PM

SHEET TITLE:
5TH FLOOR EMERGENCY PHOTOMETRICS

SHEET NO:
E903

M.11 M.10 M.9 M.8 M.7 M.6 M.5 M.4 M.3 M.2 M.1



LEVEL 6 EMERGENCY PHOTOMETRICS SCALE 3/16" = 1'-0" 1

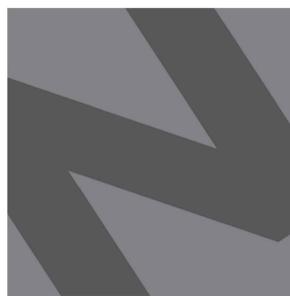
PLAN NOTES

A. THIS LIGHTING CALCULATION REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATION ENGINEERING SOCIETY APPROVED METHODS.

B. PHOTOMETRIC DATA USED IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP RATINGS USING MANUFACTURER'S MEAN LUMEN VALUES. FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS. CERTAIN ELEMENTS MAY AFFECT THE LAMP & FIXTURE PERFORMANCE. ACTUAL FOOTCANDLE LEVELS MAY VARY. DUE TO THE ABOVE CONSIDERATIONS, NATIONAL ENGINEERING & CONSULTING, INC CANNOT GUARANTY THAT ACTUAL LIGHT LEVELS MEASURED IN THE FIELD WILL ACTUALLY MATCH THE INITIAL CALCULATIONS SHOWN ON PLAN.

EGRESS PATH OF TRAVEL		NORTH STAIRS	
MAX.	10.8 FC	MAX.	18.0 FC
MIN.	2.2 FC	MIN.	1.0 FC
AVG.	10.8 FC	AVG.	2.9 FC
MAX./MIN.	21.0:1 FC	MAX./MIN.	18.0:1 FC
AVG./MIN.	4.9:1 FC	AVG./MIN.	2.9:1 FC

SOUTH STAIRS	
MAX.	20.0 FC
MIN.	1.0 FC
AVG.	8.1 FC
MAX./MIN.	20.0:1 FC
AVG./MIN.	8.1:1 FC



NATIONAL
ENGINEERING & CONSULTING, INC
30 THOMAS, IRVINE, CA 92618-2703
PHONE: (949) 716-9990 | FAX: (949) 716-9997



COPYRIGHT:
COPYRIGHT NOTICE :
COPYRIGHT IS RETAINED BY NATIONAL ENGINEERING & CONSULTING, INC. FROM THE DATE OF ISSUANCE OF THESE DOCUMENTS. DUPLICATION OF THESE DOCUMENTS OR THE BUILT-WORK REPRESENTED BY THEM IS PROHIBITED WITHOUT THE EXPRESS, WRITTEN CONSENT NATIONAL ENGINEERING & CONSULTING, INC.

CLIENT:
JAIME PARTNERS OF CALIFORNIA, INC.
1050 S. FLOWER STREET
LOS ANGELES, CA 90015

PROJECT:
2853 WEST BLVD
LOS ANGELES, CA 90016

C-JAIME-001

#	DESCRIPTION	DATE
	1ST SUBMITTAL	10/04/21
	UTILITY COORDINATION	04/08/22
△	PC RESUBMITTAL	05/18/22
△	PC RESUBMITTAL	10/28/22
△	HCD REVISION 1	12/16/22
△	PC RESUBMITTAL	02/02/23
△	HCD & PC RESUBMITTAL	06/06/23
△	HCD RESUBMITTAL	06/14/23
△	PC RESUBMITTAL	07/10/23
△	CLIENT REVISIONS	07/11/23
△	CLIENT REVISIONS	08/04/23
△	PC RESUBMITTAL (ELEC)	09/12/23
△	PC RESUBMITTAL (ELEC)	10/05/23
△	CLIENT REVISIONS	10/12/23

Plot Date: 10/11/2023 4:13:46 PM

SHEET TITLE:
LEVEL 6 EMERGENCY PHOTOMETRICS

SHEET NO:
E904