

GENERAL NOTES

- 1. THE DESIGN PROFESSIONAL HAS PERFORMED REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATING INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.
- 2. THE DESIGN PROFESSIONAL HAS PERFORMED REQUIRED VOLTAGE DROP CALCULATIONS AND BRANCH CIRCUITS AND FEEDERS COMPLY WITH NEC 210-19(A) FPN NO. 4.
- 3. FAULT CURRENT CALCULATIONS ASSUME UTILITY PROVIDED
 ___KVA UTILITY TRANSFORMER WITH ___A OF AVAILABLE FAULT
 CURRENT LOCATED __ FEET FROM MAIN SWITCHBOARD. REFER TO
 POWER UTILITY DRAWINGS FOR EXACT SIZE AND LOCATION. NOTIFY
 ENGINEER IN WRITING IF TRANSFORMER SIZE IS INCREASED OR
 DISTANCE IS DECREASED.
- 4. GROUND FAULT RELAY SETTINGS:

 A. TO MINIMIZE NUISANCE TRIPPING OF THE MAIN AND FEEDER BREAKER, THE CONTRACTOR SHALL ADJUST THE GROUND FAULT RELAY SETTINGS FOR THE GFP DEVICES TO BE HIGHER THAN DOWNSTREAM GFP AND NON-GFP DEVICES. THE GROUND FAULT CURRENT PICK-UP AND TIME DELAY SETTINGS SHALL BE ADJUSTED, PER THE MANUFACTURERS RECOMMENDATIONS, RESULTING FROM A CONTRACTOR /MANUFACTURER PREPARED COORDINATION STUDY WHICH SHALL BE DOCUMENTED IN THE SHOP DRAWING SUBMITTAL.
- B. DURING THE CONSTRUCTION PHASE OF THE PROJECT, GROUND FAULT RELAYS SHALL BE SET AT THE SHORTEST AVAILABLE TIME DELAY.
- C. AFTER SETTINGS HAVE BEEN ADJUSTED, THE CONTRACTOR SHALL HAVE THE GROUND FAULT SYSTEM TESTED BY AN INDEPENDENT TESTING AGENCY PER NEC 230-95 (C). THIS TEST SHALL BE PERFORMED IN THE PRESENCE OF THE LOCAL AUTHORITY HAVING JURISDICTION AND THE TEST RESULTS SHALL BE DELIVERED TO THE ENGINEER OF RECORD.



DRO IECT NAME

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

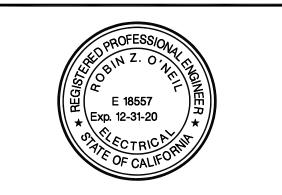
FOUNTAIN VALLEY, CA 92708

ADMINISTRATIVE
BUILDING-SEISMIC
RETROFIT, ADA
COMPLIANCE AND
TENANT IMPROVEMENT

ENGINEER/ARCHITECT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



KEY NOTES

- 1 EXISTING INFORMATION IS BASED ON AS-BUILT CONDITIONS VERIFIED DECEMBER 2018.
- 2.0KW CENTRAL LIGHTING BATTERY INVERTER, 277V OPERATION, 90° BATTERY OPERATION, SUITABLE FOR LED & H.I.D. LIGHT FIXTURES. 10KAIC RATED. EQUIP WITH (6) 20A-1P CIRCUIT BREAKERS. MEYERS #CM SERIES OR EQUAL.
- (3) CONTRACTOR SHALL FIELD VERIFY ALL EXISTING LOADS, DISCONNECT FROM EXISTING PANEL, INTERCEPT CIRCUITS IN A NEW WIREWAY ABOVE CEILING AND EXTEND TO UPGRADED PANELS'. UPDATE PANEL DIRECTORIES FOR ALL RELOCATED CIRCUITS.

STAM

ISSUE		
REV.	DESCRIPTION	DATE
	90% CD Owner Review	

KEY P

PROJECT NO.	18X093.00
PRINT DATE	
DRAWN BY	
CHECKED BY	

SHEET TITLE

SINGLE LINE DIAGRAM

SHEET NUMBER

E-002SHEET NO. OF

SINGLE LINE DIAGRAM N/A

1

					J	РΑ	NEI	B	O	ΑF	RD 'L	_F	•				
MAIN:	208/120VOLT,3-PH,	4-WIRF & GI	ND FE	FD :			ОТТОМ				REAKER			3P		MOUNTING:	SURFACE
	1 SEC.: SINGLE LU						IEMA 1				BUS						RATING: 10
				OU				#	Щ	#		Οl	JTLI	ETS			
LOAD VA	LOAD DE	SCRIPTION					CB / P	CKT #	PHASE	CKT #	CB / P		_	М	LOAD DESCRIPT	10N	LOAD VA
000	(E) DECEDE OF		116	IVI	\rightarrow	-	00/4	_	_	+	00/4		-	IVI			4000
900	(E) RECEPT - OFF	-ICE 114, 118	3, 116			0	20/1	1		2	20/1	0	-		(E)LOAD		1080
900	(E) RECEPT					0	20/1	3 5	-	4	20/1 20/1	0	+		(E)LOAD		1080
	(E) RECEPT					0	20/1		-	6	20/1	0			(E)LOAD		1080
900	(E) RECEPT				_	0	20/1	7	-	8		0			(E)LOAD		1080
900	(E) RECEPT - OFF	ICE 126 129	120			U	20/1	9 11	-	10		0	-		(E)LOAD		1080 1080
540	(E) RECEPT - 122.		0. 129				20/1	_	-	12 14		0	-		(E)LOAD		
600	(E) PATIO LIGHTS						20/1	_	A B	-	-	0			(E) HEAT PUMP (1HP)		504
180	(E) WATER HEAT						20/1	17	-	18	_	0			(L) HEAT FOWE (HIF)		504 504
540	(E) RECEPT - A35						20/1	19	-	20		0	-		(E)LOAD		900
900	(E)LOAD	, 730					20/1	21	-	22		0	-		(E)LOAD		900
900	(E)LOAD						20/1	23	-	24	20/1	0	-		(E)LOAD		900
900	(E)LOAD								A	-		0	+		(L)LOAD		504
	(E)LOAD						20/1		-	26	-	0	-		(E) HEAT PUMP (1HP)		
900	` ′						20/1	27	-	28	_	0	-		(E) NEAT POWP (THP)		504
900	(E)LOAD						20/1	29	-	30		+-			(E)104D		504
900	(E)LOAD						20/1	31	-	32	20/1	0			(E)LOAD		1080
900	(E) LOAD	TOT 440 404	1				20/1	33	-	34	20/2	0	+		(E) LIEA T DUMP (41 ID)		504
720	(E)RECEPT-OFF	-ICE 119, 12					20/1	35	-	36	_	0	₩		(E) HEAT PUMP (1HP)		504
900	(E)LOAD						20/1	37	-	38		0			(E) LOAD		504
900	(E)LOAD						20/1	39	-	40		_			(E)LOAD		900
900	(E)LOAD						20/1	41	-	42		0			(E)LOAD		900
720	RECEPT - OPEN O						20/1		A	-					RECEPT - CONFERENCE F		540
540	RECEPT - OPEN O						20/1	45	_	46					RECEPT - CONFERENCE F		540
540	RECEPT - OPEN O		ODEENO				20/1	47	-	48					RECEPT - CONFERENCE F		540
360	RECEPT - OPEN O	FFICE LCD S	CREENS				20/1	49	-	50					RECEPT - CONFERENCE F		540
1920	SPARE						20/1	51	-	52					PROJECTOR - CONFEREN	SE ROOM	1100
1920	SPARE						20/1	53	-	54	20/1				(E) CCTV - COPY ROOM		360
1920	SPARE						20/1	55	-	56					(E) COFFIEE MACHINE		1500
1920	SPARE						20/1	57	-	58					(E) RECEPT BREAK RO		
1920	SPARE						20/1	59	_	60			╄		(E) RECEPT ATRIUM AF		360
1920	SPARE						20/1	61	-	62					(E) RECEPT ATRIUM AF	KEA	360
1920	SPARE						20/1	63	-	64			╄		(E) RECEPT A11		360
1920	SPARE						20/1	65	-	66			╄		(E) RECEPT A14		360
1920	SPARE						20/1	67	-	68					(E) LIGHTS - CHILLER PIT		600
1920	SPARE						20/1	69	-	70					SPARE		1920
1920	SPARE						20/1	71	-	72					SPARE		1920
1920	SPARE						20/1		Α	74					SPARE		1920
1920	SPARE						20/1		В	76					SPARE		1920
1920	SPARE						20/1	77	-	78					SPARE		1920
1920	SPARE						20/1	79	Α	80	20/1				SPARE		1920
1920	SPARE						20/1	81	-	82			╙		SPARE		1920
1920	SPARE						20/1	83	С	84	20/1				SPARE		1920
	PHASE		Α		В		С				PANEL	TOT	AL		PANEL LOCATION:	WORKROOM	
PHASE TO	TAL CONNECTED V	A:	29292	3′	1292	2	30492				91.1	ΚV	Ά		FED BY:	MSB-MWDOO	VIA TLE
CONTINUO	US LOAD @125%:	(1200)	750	-	750		0				1.5	KV	 'A	╫	CONTRACTOR SHALL UPD	ATE DIRECTO	RY BASED
		· · ·															
KIICHEN E	QUIP. @ 65%	(0)	0		0		0				0.0	KV	A		FIELD VERIFICATION OF A	LL EXISTING C	CONDITIONS
LARGEST	MOTOR @125%:	(0)	0		0		0				0.0	ΚV	Ά		LOADS RELOCATED FROM	1 (E) PANELS	BLE, LES,
HVAC @ 10	00%	(0)	0		0	\top	0				0.0	KV	Ά				
						+								1	100 00/ (NET CEN DE	DEMAND FAC	TOP)
	EPT. DEMAND	(0)	0		0		0				0.0	KV		-	100.0% (NET GEN. REC	,. DEIVIAND FAC	TOR)
REMAINING	G @100%		28692	30	0692	2	30492				89.9	KV	Ά				
PANEL TO	TAL W/ DEMAND:		29442	3′	1442	2	30492				91.4	KV	Ά				
FULL LOAD) AMPS:		245	,	262	+	254				253.6	Δ1./	IPS	1			
LOAL	, , , , , , , , , , , , , , , , , , ,		270				207				200.0	, 47					

Environmental

Voltage THD | <3% THD for Linear Load Output Frequency 60 Hz +/- 0.05 Hz Crystal controlled

Voltage Regulation +/-3% for +/- 25% load step change

Type | Sealed Lead Calcium VRLA

Altitude <10,000 feet without derating

Storage Temperature | -20 to 70 Degrees Centigrade(Electronics Only)

Weight = 77 lbs (35 kg.)

Weight = 22 lbs (10 kg.) per module w/o batteries

Input

120/277 5.2/2.25 4.16/1.80

120/277 10.5/4.51 8.33/3.61

120/277 15.62/6.78 12.5/5.42

120/277 20.8/9.03 16.66/7.22

Protection Output Circuit Breaker

Protection Battery Circuit Breaker String Voltage 48 VDC for all models

Operating Temperature | 20 to 30 degrees Centigrade

Relative Humidity <95% (non-condensing) Electronics Enclosure | Dimensions = 10" x 10" x 26"

Standard Metering: Vin, Vout, Iout, Vbatt, Ibatt, Temp, Date, Inverter Hours, System Days, VA, Inverter Watts

Standard Logs: Alarm Log (75), Event Log (75) Test Log (50)

Standard Alarms: Output, Inverter, Charger, Low Battery, Near Low Battery, High Temp, Load Reduction, Overload, Overload Shutdown, Low Voltage, High Voltage, Circuit Breaker Trip

Battery Weight Weight

107

427

Specifications are subject to change without notice to reflect improvements and upgrades.

reflects system at max. charge current plus max. load current a = Voltage Output, external transformer enclosures available for different combinations

52 ADC

www.myerspowerproducts.com

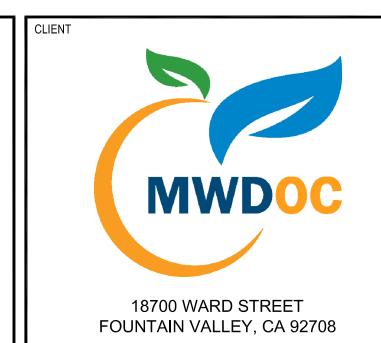
206

592

Battery Enclosure | Dimensions = 10" x 10" x 26"

Inverter Overload 115 % for 5 Minutes

					ANEL											
	480/277VOLT,3-PH,4-WIRE & C	SND FE	ED T				MA	IN B	REAKER:			MOUNTING				
BUS: 1 SEC.: SINGLE LUGS				NEMA 1				BUS	_			ING: 10K				
LOAD VA	LOAD DESCRIPTION	I	OUT	_	CB / P	CKT#	PHASE	CKT #	CB / P	-	ITLE R	LOAD DESCRIPTION	LOAD VA			
	(=V=0.404.40=.400.440		M	-		Ò	+	_		+	K					
2880	(E)LTS A01,A05,A09,A16			0	20/1	1	Α	2	20/1	0		(E)LTS RMS A19-A23,A35,A40	2694			
2268	(E)A06,A27,A29			0	20/1	3	₩	4	20/1	0		(E)LTS A30,A33,A45,A48	2904			
2772	(E)A10,A15,A24,A26	. =-		0	20/1	5	С	6	20/1	0		(E)A25,A34,A41,A44	2601			
1980	(E)PERIMETER & ENTRYWAY	LTS		0	20/1	7	Α	8	20/1	0		(E)OUTSIDE LIGHTS	171			
	LIGHTS - OPEN OFFICE			_	20/1	9	В	10	20/1	0		(E)LTG RM A49,A50,A51	564			
	SPARE - OFF				20/1	_	С	12	20/1	0		(E)LTS-CORRIDOR	386			
	SPARE - OFF				20/1	_	Α	14		0		_	2105			
	SPARE - OFF				20/1	-	В	16	20/3	0		1 (E)) CHILLER PIT PUMP 5HP	2105			
	SPARE - OFF				20/1	-	С	18		0			2105			
	SPARE - OFF				20/1	-	Α	20	20/1	_		SPARE - OFF				
664	(E)CHILLER PIT LTS			0	20/1	-	В	22	20/1	_		SPARE - OFF				
	SPARE - OFF			0	20/1	23	С	24	20/1			SPARE - OFF				
1330				0			Α	26		0			2105			
1330	LOAD 3HP (E)			0	20/3	27	В	28	20/3	0		(E)) CHILLER PIT PUMP 5HP	2105			
1330				0		29	С	30		0			2105			
2500	SPARE			0	20/1	31	Α	32	20/1	0		LIGHTS - CONFERENCE ROOM	205			
2500	SPARE			0	20/1	33	В	34	20/1	0		SPARE	2500			
2500	SPARE			0	20/1	35	С	36	20/1	0		SPARE	2500			
2500	SPARE			0	20/1	37	Α	38	20/1	0		SPARE	2500			
2500	SPARE			0	20/1	39	В	40	20/1	0		SPARE	2500			
2500	SPARE			0	20/1	41	С	42	20/1	0		INVERTER 'EL'	1815			
	PHASE	Α	l i	3	С				PANEL.	TOTAL		PANEL LOCATION: ELEC. ROOM				
PHASE TO	TAL CONNECTED VA:	20970	21	940	20614				63.5	ΚV	Α	FED BY: (E) PANEL PP2	(400A)			
CONTINUO	US LOAD @125%: (45089)	19288	20	500	16574				56.4	KV	Α	FIELD VERIFY ALL CIRCUITS AND UPDATE	PANEL			
KITCHEN E	QUIP. @ 65% (0)	0	()	0				0.0	KV	Α	DIRECTORY				
_ARGEST I	MOTOR @125%: (6315)	2631	26	31	2631				7.9	KV	VA MOTOR LOADS SHALL BE EQUIPPED WITH					
HVAC @ 10	00% (0)	0	()	0				0.0	KV	Α	HCAR TYPE CIRCUIT BREAKERS				
GEN. RECE	EPT. DEMAND (0)	0	()	0				0.0	KV	Α					
REMAINING	G @100%	3435	34	35	5250				12.1	KV	Α					
PANEL TO	TAL W/ DEMAND:	25354	26	566	24455				76.4	KV	Α					
FULL LOAD) AMPS:	91	9	6	88	1			91.9	AM	PS					

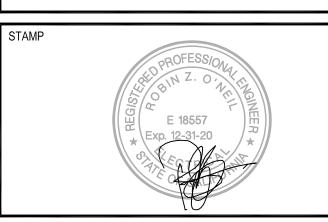


MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ADMINISTRATIVE **BUILDING-SEISMIC** RETROFIT, ADA COMPLIANCE AND TENANT IMPROVEMENT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



REV. DESCRIPTION

90% CD Owner Review

Power Products

Illuminator C-M Emergency Lighting Inverter System

Single-phase emergency lighting systems: 500VA to 2,000VA



Battery Module

Circuit breaker and fuse access panel for easy routine

16 AWG (.059") steel construction with powder coat

touch pad controls front panel interface.

Microprocessor controlled, 2x20 character display with

STANDARD FEATURES

User programmable with password protection for alarms
 Sealed lead calcium valve regulated lead acid batteries

- PWM/MOSFET Inverter technology for high efficiency and
 Electrical knock outs for easy contractor connection and
- Small footprint 26"x10"x (20"/30"/40"/50") for 500/1000/ 1500/2000VA units respectively
- 98% efficient in standby mode means no fan for cooling Modular design allows separation of inverter and battery
- Self testing and diagnostic with Event, Test and Alarm
- electronic low voltage lighting.
- Programmable setpoints are password controlled with user and service levels. · Compatible with HID, fluorescent, incandescent and UL 924 Listed and meets the requirements for NFPA 101
- · Protection circuit breakers are Battery, Input and Output

OPTIONAL FEATURES

- Field upgradeable from 500VA to 2000VA by additional
 RS-232 interface battery modules
- Circuit breaker trip alarm Normally off output

and diagnostics

- Summary alarm dry contact Extended runtime

maintenance

are maintenance free

4/4/03

18X093.00 PRINT DATE DRAWN BY CHECKED BY

SHEET TITLE

PANEL SCHEDULE

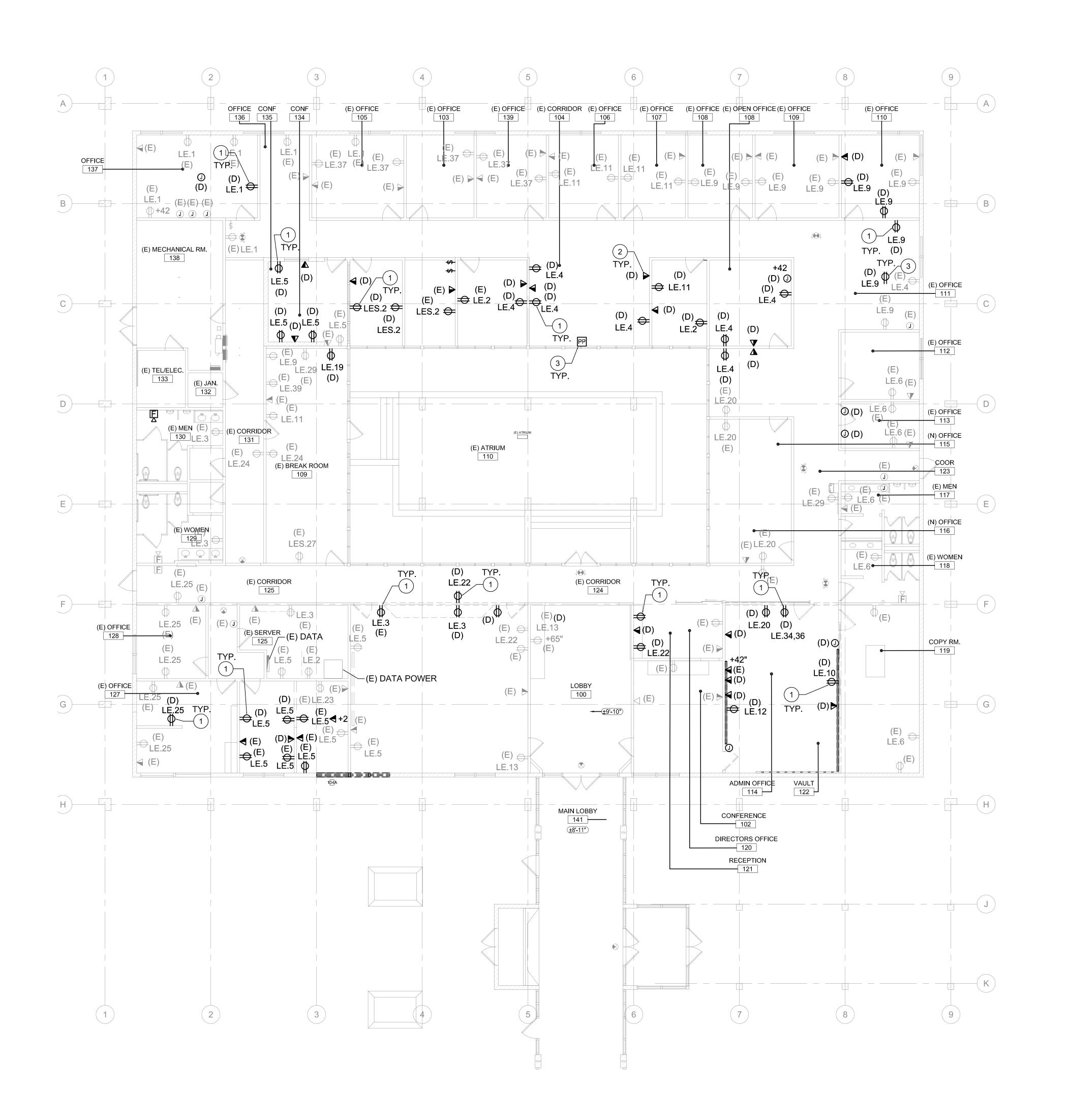
SHEET NUMBER

						'EL'	Ŀ	NE	PA						
MAIN: 277VOLT,1-PH,2-WIRE & GND ENCL.: NEMA 1 BUS: 30 AMP MIN A.I.C. RATING: 10K														MAIN:	
LOAD WA	LIGHTING	YPE	L CBT		CB/P	#	S	'B /B #		TYPE	CB.		LIGHTING	LOAD \/A	
LOAD VA	DESCRIPTION	TYPE	ON	OFF	S	CB/P	CB/P # LXO # LXO		S	OFF	ON	TYPE	DESCRITPTION	LOAD VA	
700	CONFERENCE ROOM	LED	Χ		0	20 / 1	2	Α	20 / 1 1	0		Х	LED	CORRIDOR	752
0				Х	0	20 / 1	4	Α	20 / 1 3	0	Х			SPARE	
0				Х	0	20 / 1	6	Α	20 / 1 5	0	Х			SPARE	0
M	R LOCATION: ELEC ROOM	INVERTER		TAL	R TC	INVERTE			-				Α	PHASE	
	FED BY: PANEL HC				KVA	1.5							1452	TAL CONNECTED VA:	PHASE TO
					KVA	0.4							363	AD DEMAND @ 25%:	CONT. LOA
					KVA	1.8							1815	TAL W/ DEMAND:	PANEL TO
				'S	AMF	8.7							8.7	D AMPS:	-ULL LOAD

LIGHTING BATTERY INVERTER 'EL' N/A

E-003

SHEET NO.



GENERAL DEMOLITION NOTES

I. REFER TO ARCH'L REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.

- VERIFY EXACT CEILING CONSTRUCTION W/ ARCH'L REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
- COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
- 4. DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
- 5. PROGRAM ALL LIGHTING CONTROLS TO MEET THE LATEST
- REQUIREMENTS OF THE LIGHTING TITLE 24.

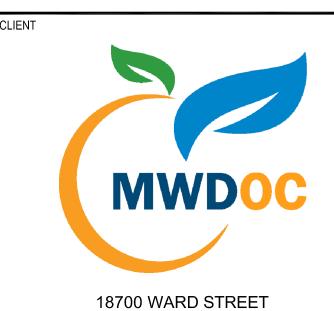
 6. LIGHTING FIXTURES AND CONTROLS ARE NEW UNLESS OTHERWISE
- NOTED.

 RECEPTACLES ON COMMON WALLS SHALL BE SEPARATE BOXES AND

OFFSET 12" MINIMUM. FIRE RATED WALLS SHALL HAVE AN OFFSET OF

24" MINIMUM. COORDINATE W/ ARCH'L FIRE RATED WALL DETAILS.

- 8. HEIGHT OF RECEPTACLES AT COUNTER SHELVES, ETC., SHALL BE VERIFIED W/ OWNER PRIOR TO ROUGH-IN. PROVIDE G.F.C.I. TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
- EACH AND EVERY 15 AND 20 AMP, 120 VOLT RECEPTACLE IN KITCHEN, FOOD PREPARATION, BAR AREAS AND RESTROOMS SHALL BE GFCI TYPE PROTECTION.
- OORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT AND POWER CONNECTION LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. SEE MECHANICAL EQUIPMENT SCHEDULE FOR CIRCUIT DESIGNATION, CONDUIT AND WIRE SIZES.



PROJECT NAME

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

FOUNTAIN VALLEY, CA 92708

ADMINISTRATIVE
BUILDING-SEISMIC
RETROFIT, ADA
COMPLIANCE AND
TENANT IMPROVEMENT

ENGINEER/ARCHITECT

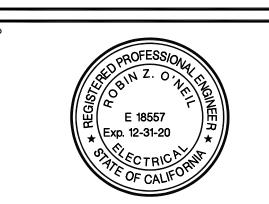


1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800

GENERAL NOTES

EXISTING EQUIPMENT WERE TAKEN FROM EXISTING CONDITION OF THE BUILDING. THE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS AND EXISTING CIRCUIT NUMBERS; ADJUST AND UPDATE THE PANELBOARD DIRECTORIES.

- 2. COORDINATE THE EXTENT OF WORK WITH ARCHITECT AND OWNER.
- REMOVE CONTROL DEVICES INDICATED ON PLANS UNLESS OTHERWISE NOTED.
- 4. EQUIPMENT TO BE REMOVED SHALL INCLUDE ASSOCIATED CONDUIT, WIRING AND APPURTENANCES BACK TO THE PANEL BOARD OR EXISTING DEVICE OR FIXTURE TO REMAIN.
- 5. COORDINATE WITH OWNER FOR SHUTDOWN OF PANELS / LOADS AFFECTED BY THE PROJECT.



STAMP

REV. DESCRIPTION

KEY NOTES

- 1 PRESERVE EXISTING CIRCUIT IN CEILING SPACE FOR TENANT IMPROVEMENT CIRCUITRY.
- DISCONNECT & REMOVE EXISTING DATA CABLING BACK TO SERVER

ROOM, REMOVE BACK BOX OF ASSOCIATED DATA JACK DEVICE.

DISCONNECT & REMOVE EXISTING POWER POLE COMPLETE.
PRESERVE EXISTING CIRCUIT.

		90% CD Owner Review	
,			

KEY PL

PROJECT NO. 18X093.00
PRINT DATE
DRAWN BY
CHECKED BY

SHEET TITLE

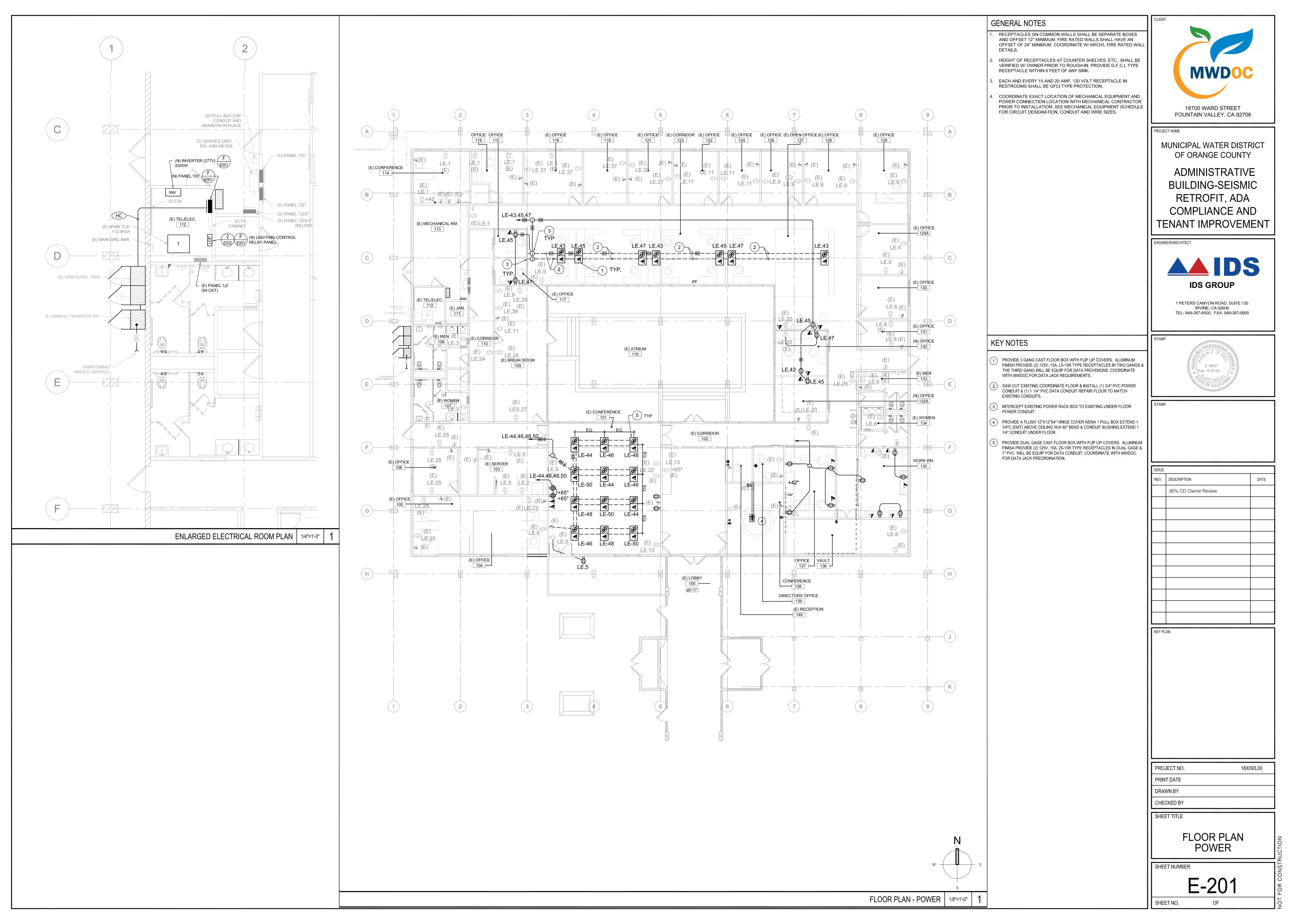
SHEET NO.

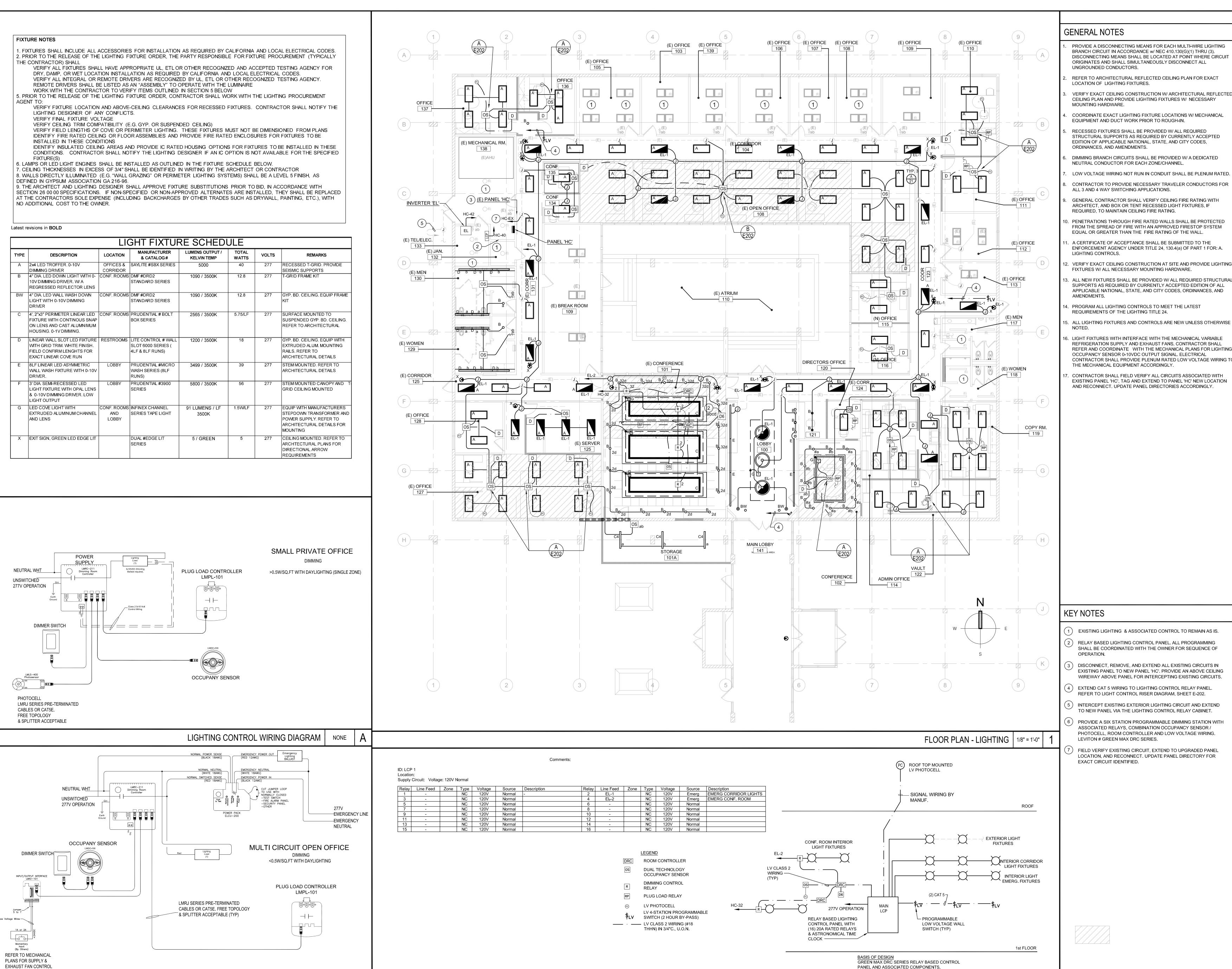
POWER PLAN DEMOLITION

HEET NUMBER

E-101

w W





LIGHTING CONTROL WIRING DIAGRAM

GENERAL NOTES

- PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE w/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT ALL
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
- VERIFY EXACT CEILING CONSTRUCTION W/ ARCHITECTURAL REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY
- COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL
- RECESSED FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE, AND CITY CODES,
- ORDINANCES, AND AMENDMENTS. DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED
- LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL BE PLENUM RATED.
- GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH
- ARCHITECT, AND BOX OR TENT RECESSED LIGHT FIXTURES. IF REQUIRED, TO MAINTAIN CEILING FIRE RATING.
- PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.
- A CERTIFICATE OF ACCEPTANCE SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY UNDER TITLE 24, 130.4(a) OF PART 1 FOR: A.
- VERIFY EXACT CEILING CONSTRUCTION AT SITE AND PROVIDE LIGHTING FIXTURES W/ ALL NECESSARY MOUNTING HARDWARE.
- . ALL NEW FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF ALL APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND
- PROGRAM ALL LIGHTING CONTROLS TO MEET THE LATEST REQUIREMENTS OF THE LIGHTING TITLE 24.
- . ALL LIGHTING FIXTURES AND CONTROLS ARE NEW UNLESS OTHERWISE
- REFRIGERATION SUPPLY AND EXHAUST FANS. CONTRACTOR SHALL REFER AND COORDINATE WITH THE MECHANICAL PLANS FOR LIGHTING OCCUPANCY SENSOR 0-10VDC OUTPUT SIGNAL. ELECTRICAL CONTRACTOR SHALL PROVIDE PLENUM RATED LOW VOLTAGE WIRING TO THE MECHANICAL EQUIPMENT ACCORDINGLY.
- . CONTRACTOR SHALL FIELD VERIFY ALL CIRCUITS ASSOCIATED WITH EXISTING PANEL 'HC'. TAG AND EXTEND TO PANEL 'HC' NEW LOCATION AND RECONNECT. UPDATE PANEL DIRECTORIES ACCORDINGLY.



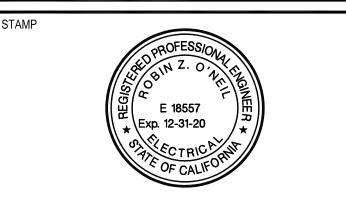
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

FOUNTAIN VALLEY, CA 92708

ADMINISTRATIVE BUILDING-SEISMIC RETROFIT, ADA **COMPLIANCE AND** TENANT IMPROVEMENT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



REV. DESCRIPTION

90% CD Owner Review	

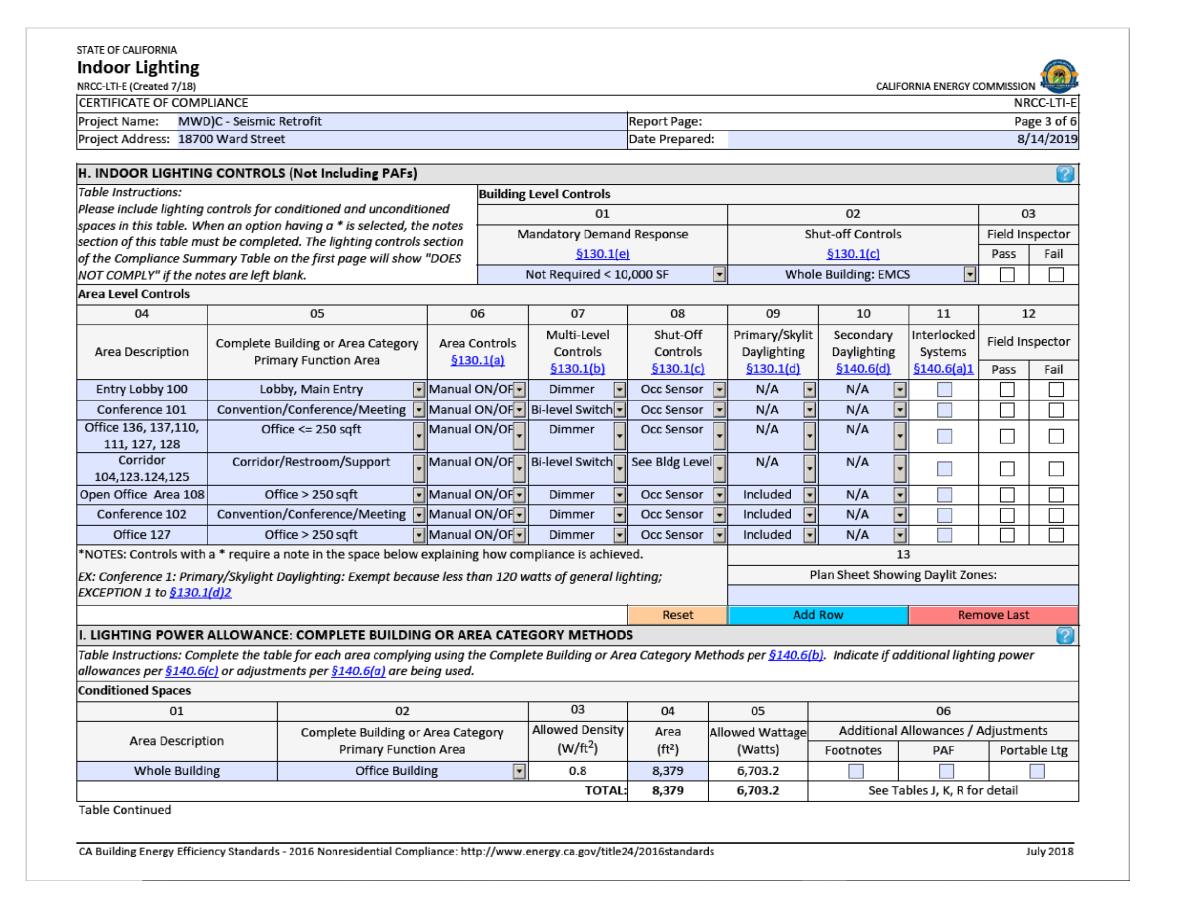
- EXISTING LIGHTING & ASSOCIATED CONTROL TO REMAIN AS IS.
- RELAY BASED LIGHTING CONTROL PANEL. ALL PROGRAMMING SHALL BE COORDINATED WITH THE OWNER FOR SEQUENCE OF
- DISCONNECT, REMOVE, AND EXTEND ALL EXISTING CIRCUITS IN EXISTING PANEL TO NEW PANEL 'HC'. PROVIDE AN ABOVE CEILING WIREWAY ABOVE PANEL FOR INTERCEPTING EXISTING CIRCUITS.
- EXTEND CAT 5 WIRING TO LIGHTING CONTROL RELAY PANEL. REFER TO LIGHT CONTROL RISER DIAGRAM, SHEET E-202.
- INTERCEPT EXISTING EXTERIOR LIGHTING CIRCUIT AND EXTEND TO NEW PANEL VIA THE LIGHTING CONTROL RELAY CABINET.
- PROVIDE A SIX STATION PROGRAMMABLE DIMMING STATION WITH ASSOCIATED RELAYS, COMBINATION OCCUPANCY SENSOR / PHOTOCELL, ROOM CONTROLLER AND LOW VOLTAGE WIRING. LEVITON # GREEN MAX DRC SERIES.
- FIELD VERIFY EXISTING CIRCUIT, EXTEND TO UPGRADED PANEL LOCATION, AND RECONNECT. UPDATE PANEL DIRECTORY FOR

LIGHTING CONTROL RISER DIAGRAM | 1/8" = 1'-0" | 2

18X093.00 PRINT DATE DRAWN BY **CHECKED BY**

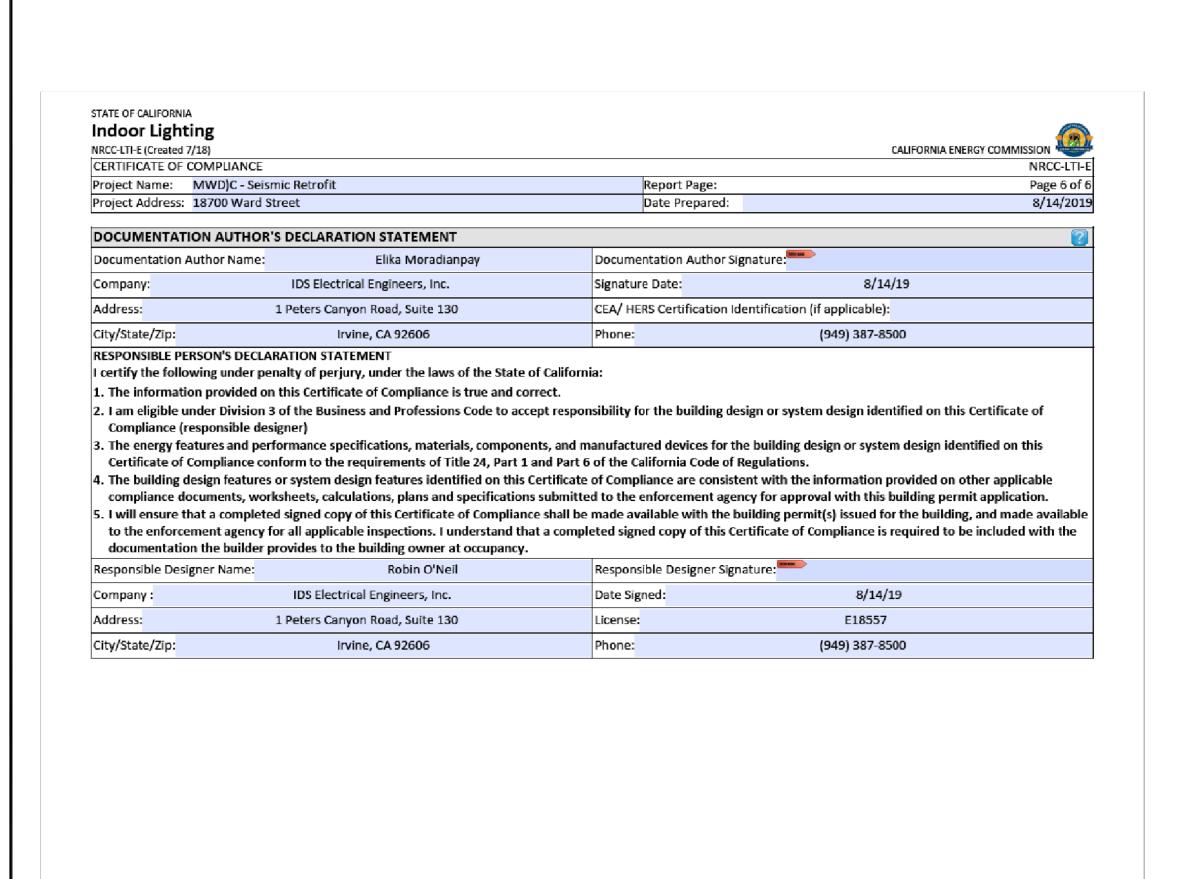
FLOOR PLAN LIGHTING AND FIXTURE SHEDULE

SHEET NUMBER E-202 SHEET NO. OF

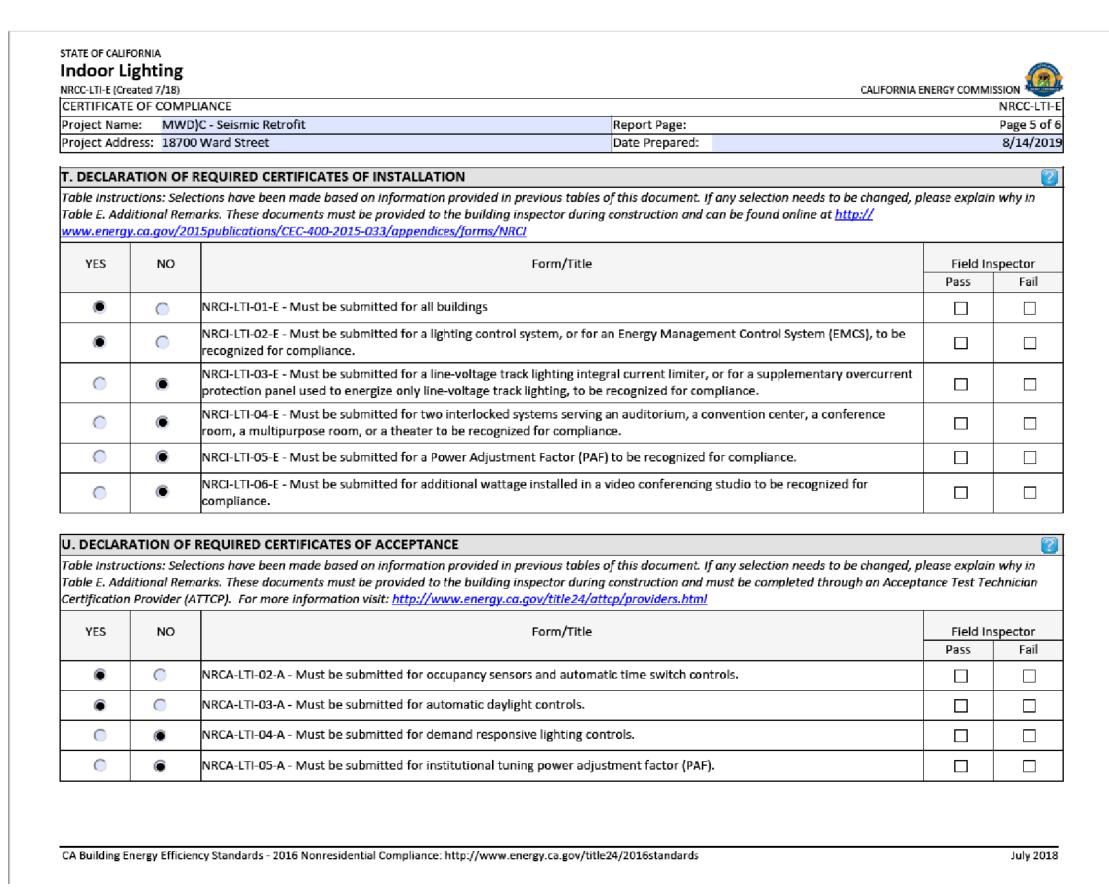


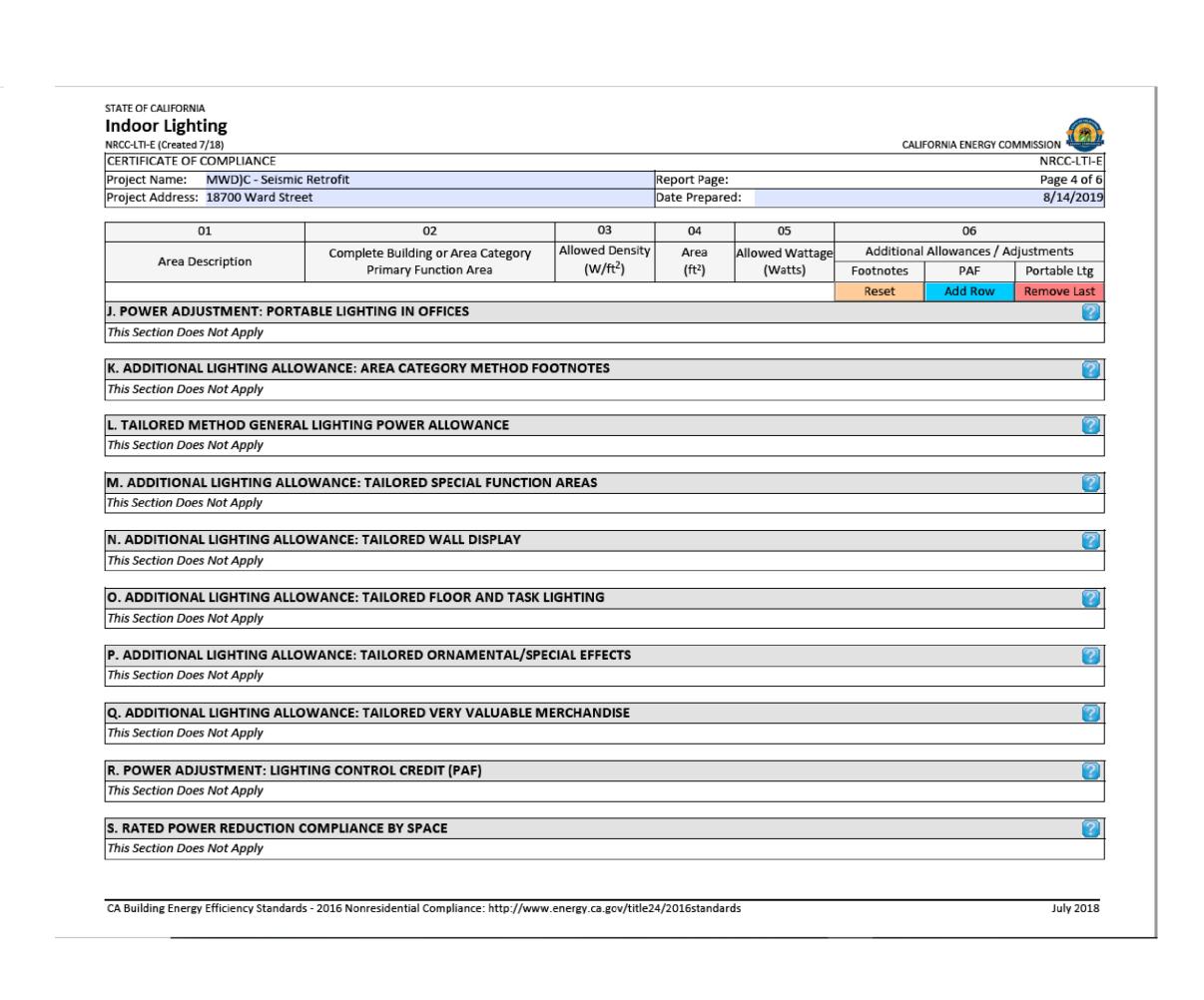
EKTIFICA	Created 7/18) TE OF COMPLIANCE						CA	LIFORNIA ENERGY C		_
roject Na					Donart Doga:					ge 2 of
_	dress: 18700 Ward Street				Report Page: Date Prepared	4.				ge 2 or /14/201
oject Au	uress. 18700 Ward Street				Date Preparet				0)	14/201
. EXCEP	TIONAL CONDITIONS									?
his table i	is auto-filled with uneditable commer	ts because of s	elections made o	r data entered	l in tables through	out the form.				
o excenti	ional conditions apply to this project.									
о слосра	ional conditions apply to ans project.									
ADDITI	ONAL REMARKS									(a)
		annlinant to the	. Authority Havin	a luciadiation						
iis table i	includes remarks made by the permit	аррисант то тн	Authority Havin	ig Jurisaiction.						
INDOO	R LIGHTING FIXTURE SCHEDULE									?
able Instr	ructions: Include all permanent desigr	ed lighting and	all portable light	ting in offices.						
01	02		03	04	05	06	07	08	0	9
lame or	Complete Luminaire Description	Specialized L	ıminaire Types	Watts per	How Wattage is	Total number	Exempt per	Design Wette	Field In	spector
em Tag	Complete Luminaire Description	Track	Portable	luminaire ¹	determined	luminaires	§140.6(a)3	Design Watts	Pass	Fail
Α	2'x4' Flat Panel LED			40	Mfr. Spec ¹	70		2,800		
В	4" Downlight LED			12.8	Mfr. Spec ¹	97		1,241.6		
BW	4" Wall Wash LED			12.8	Mfr. Spec ¹	2		25.6		
C4	1X4 Linear LED C4			23	Mfr. Spec ¹	30		690		
C8	1X4 Linear LED C8			23	Mfr. Spec ¹	7		161		
D4	1X4 Linear Wall Slot LED			18	Mfr. Spec ¹	1		18		
D8	1X8 Linear Wall Slot LED			18	Mfr. Spec ¹	11		198		
Е	1X8 Linear LED			39	Mfr. Spec ¹	5		195		
F	3' Dla Pendant LED			56	Mfr. Spec ¹	3		168		
G	Cove Light 1.5LF			1.5	Mfr. Spec ¹	365		547.5		
Х	Exit Sign			5	Mfr. Spec ¹	8		40		
					Total Designe	d Watts CONDIT	IONED SPACES:	6,084.7		
							Reset	Add Row	Remov	ve Last

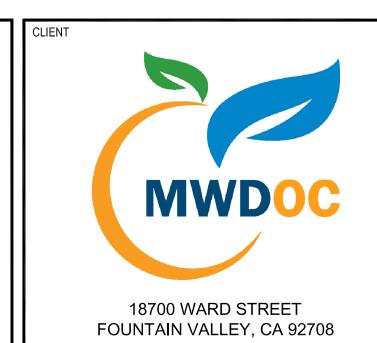
NRCC-LTI-E (Created 7 CERTIFICATE OF C													CALIFORNIA ENE		NRCC-LTI-
This document is		strate compli	ance with reau	irements in §	§11 (0.9.	§130.0. §1	30.	1. §140.6. and	§141.0(b)2 for	r indoor liahtii	na s	copes using the	prescrip	
	MWD)C - Seis								Report Pag			· 5 -		,	Page 1 of
Project Address:									Date Prepa						8/14/201
A. GENERAL INF	ORMATION								·						9
01 Project Loca			F	ountain Valle	ev		10)4	Total Conditio	ned Floor Are:	a (ft²)		8.3	379	_
02 Climate Zon				6	,				Total Uncondi					0	
03 Occupancy 7	Types Within P	roject (select a	all that apply):						# of Stories (H		, ,			1	
✓ Office	71	Retail		Wareh	ous	e			Hotel/Motel		chool		Supp	ort Area	 S
Parking Ga	rage		Residential	Reloca					Other (write						
B. PROJECT SCO										7					?
§140.6 or <u>§141.0(</u> calculation metho	od, please ope								tioned Spaces			_	Unconditioned		
		01					02			03			04		05
My i	Project Consist	s of (check all	that apply):			C	Calculation	Me	thod	Area (ft ²)	Calo	Calculation Method			Area (ft ²)
New Lighting	g System														
					- 1	Add	Parking Ga	rag	ge-Complete B	ldg Method		ا	Remove Parking	g Garage	
Altered Light	ting System	Entire L	uminaire Altera	ation			Complete B	Buile	ding	8,379	Cor	mpl	ete Building		0
							Add Alt	ere	ed Lighting Syst	tem		Re	move Last Alter	ed Syste	·m
			Total Area of	Work (ft ²)					8,379				0		
C. COMPLIANCE	RESULTS														?
Table Instructions	s: If any cell on	this table say:	s "DOES NOT C	OMPLY" or "	"COI	MPL	.IES with Ex	сер	tional Condition	ons" refer to T	able D. for gui	dar	nce.		
		Allowed Lighti	ng Power per	<u>§140.6(b)</u> (V	Vatt	ts)			Actual	Lighting Pow	er per <u>§140.6</u>	<u>a)</u> ((Watts)	Compl	iance Result
Lighting in conditioned and	01	02	03	04			05		06	07	08		09		10
unconditioned			Area							Adjust	ments				
spaces must not	Complete	Area	Category	Tailored			Total	≥	Total	Portable	PAF Control		Total Actual		
be combined for	Building §140.6(c)1	Category §140.6(c)2	Footnotes §140.6(c)2G	§140.6(c)3 (+)	5 =	-	Allowed		Designed (Watts)	Lighting §140.6(a)	Credits §140.6(a)2	=	(Watts) *Includes	1	Iust be≥09 §140.6
compliance per	3140.0(0)1	3140.0(0)2	(+)	(.,			(Watts)		(watts)	(-)	(-)		Adjustments		8140.0
<u>§140.6(b)1</u> .	(See Table I)	(See Table I)		(See Table I	L)				(See Table F)		(See Table R)	1	,		
Conditioned:	6,703.2	,,			=		6,703.2	2	6,084.7	,,	,	=	6,084.7	co	OMPLIES
Unconditioned:	-				=	=	-	2	-			=			
							(Con	trols Complia	nce (See Table	H for Details		co	MPLIES	
					R	late			ction Complia			_	Not A	Applicabl	le



CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: http://www.energy.ca.gov/title24/2016standards







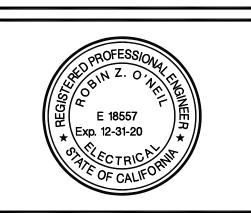
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ADMINISTRATIVE BUILDING-SEISMIC RETROFIT, ADA COMPLIANCE AND TENANT IMPROVEMENT

ENGINEER/ARCHITECT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800

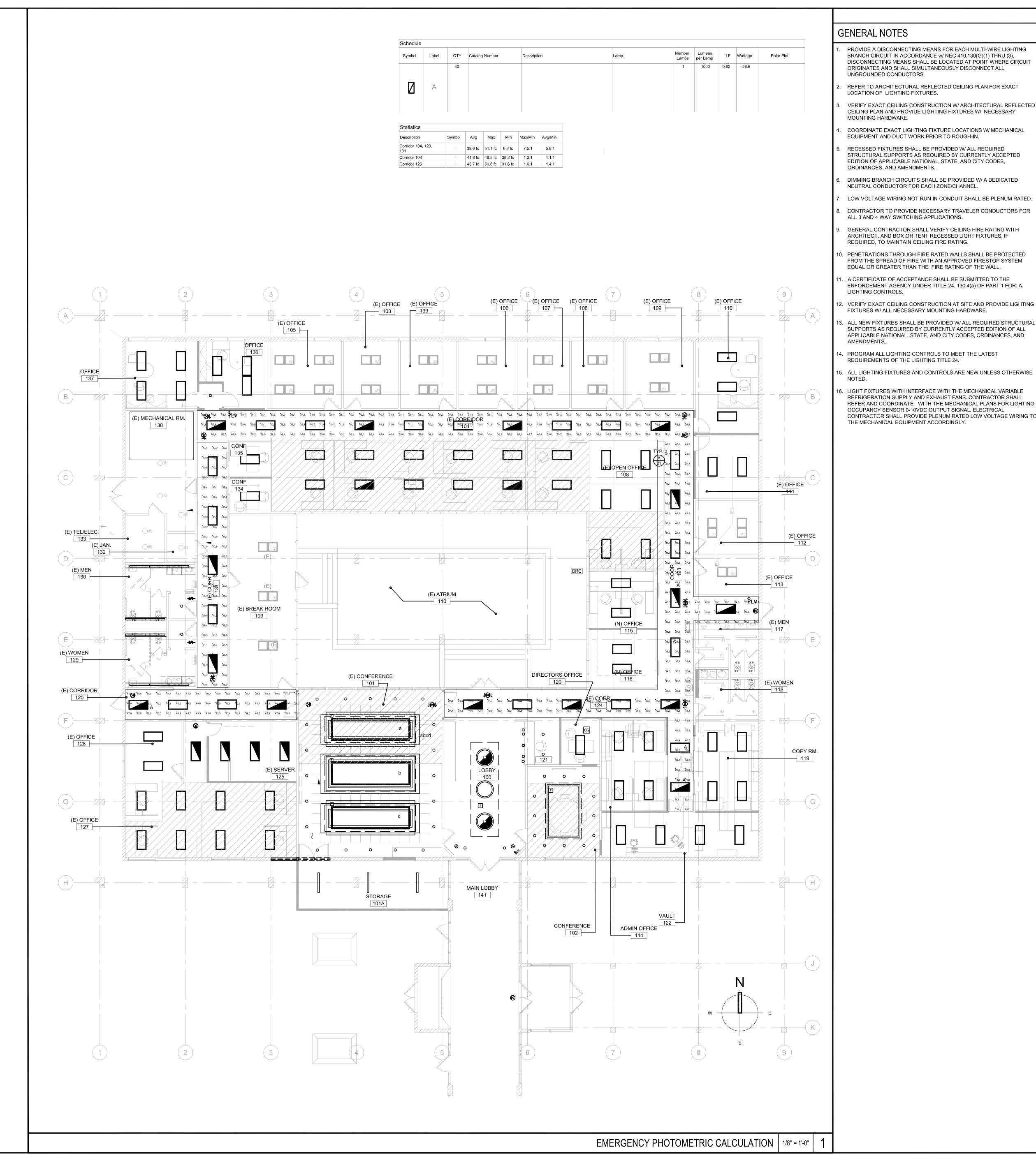


REV. DESCRIPTION 90% CD Owner Review

18X093.00 PRINT DATE CHECKED BY

TITLE 24 INDOOR COMPLIANCE **FORMS**

E-6.0 SHEET NO.



GENERAL NOTES

- PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE w/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT ALL
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
- VERIFY EXACT CEILING CONSTRUCTION W/ ARCHITECTURAL REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
- COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
- RECESSED FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
- DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
- LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL BE PLENUM RATED.
- ALL 3 AND 4 WAY SWITCHING APPLICATIONS. GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH ARCHITECT, AND BOX OR TENT RECESSED LIGHT FIXTURES, IF
- REQUIRED, TO MAINTAIN CEILING FIRE RATING. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED
- EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL. . A CERTIFICATE OF ACCEPTANCE SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY UNDER TITLE 24, 130.4(a) OF PART 1 FOR: A.
- . VERIFY EXACT CEILING CONSTRUCTION AT SITE AND PROVIDE LIGHTING FIXTURES W/ ALL NECESSARY MOUNTING HARDWARE.
- 3. ALL NEW FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF ALL APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
- PROGRAM ALL LIGHTING CONTROLS TO MEET THE LATEST REQUIREMENTS OF THE LIGHTING TITLE 24.
- 5. ALL LIGHTING FIXTURES AND CONTROLS ARE NEW UNLESS OTHERWISE
- 6. LIGHT FIXTURES WITH INTERFACE WITH THE MECHANICAL VARIABLE REFRIGERATION SUPPLY AND EXHAUST FANS. CONTRACTOR SHALL REFER AND COORDINATE WITH THE MECHANICAL PLANS FOR LIGHTING OCCUPANCY SENSOR 0-10VDC OUTPUT SIGNAL. ELECTRICAL CONTRACTOR SHALL PROVIDE PLENUM RATED LOW VOLTAGE WIRING TO THE MECHANICAL EQUIPMENT ACCORDINGLY.



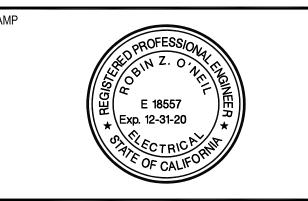
18700 WARD STREET FOUNTAIN VALLEY, CA 92708

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ADMINISTRATIVE **BUILDING-SEISMIC** RETROFIT, ADA COMPLIANCE AND TENANT IMPROVEMENT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



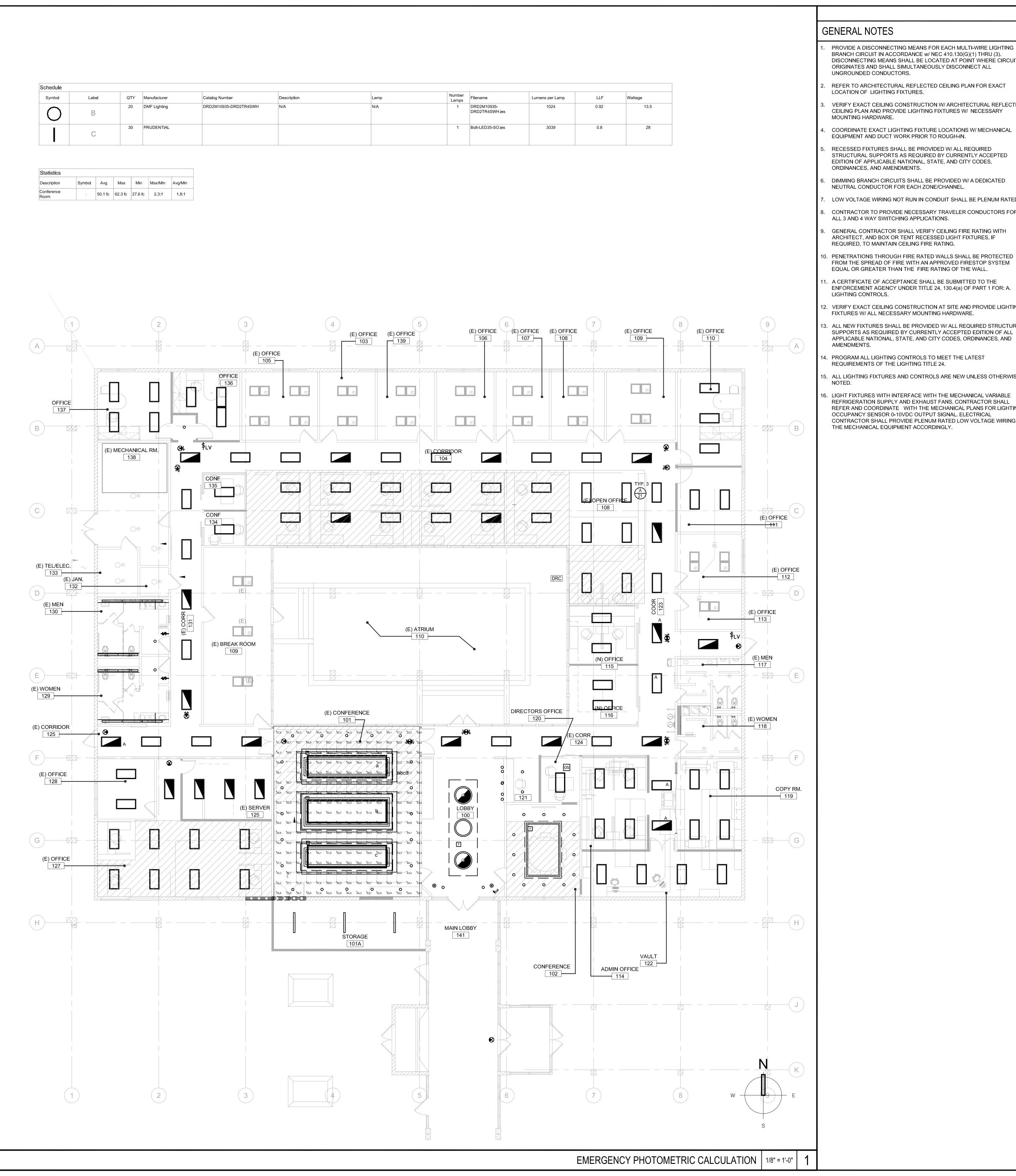
REV.	DESCRIPTION	DATE
	90% CD Owner Review	

PROJECT NO.	18X093.00
PRINT DATE	
DRAWN BY	
CHECKED BY	

EMERGENCY PHOTOMETRIC CALCULATION

E-401

SHEET NO.



GENERAL NOTES

- PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE w/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
 - VERIFY EXACT CEILING CONSTRUCTION W/ ARCHITECTURAL REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
- COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
- RECESSED FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
- DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED
- NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL. LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL BE PLENUM RATED.
- CONTRACTOR TO PROVIDE NECESSARY TRAVELER CONDUCTORS FOR ALL 3 AND 4 WAY SWITCHING APPLICATIONS.
- GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH ARCHITECT, AND BOX OR TENT RECESSED LIGHT FIXTURES, IF REQUIRED, TO MAINTAIN CEILING FIRE RATING.
- FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL. . A CERTIFICATE OF ACCEPTANCE SHALL BE SUBMITTED TO THE
- . VERIFY EXACT CEILING CONSTRUCTION AT SITE AND PROVIDE LIGHTING
- 3. ALL NEW FIXTURES SHALL BE PROVIDED W/ ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF ALL APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
- PROGRAM ALL LIGHTING CONTROLS TO MEET THE LATEST REQUIREMENTS OF THE LIGHTING TITLE 24.
- 5. ALL LIGHTING FIXTURES AND CONTROLS ARE NEW UNLESS OTHERWISE
- 6. LIGHT FIXTURES WITH INTERFACE WITH THE MECHANICAL VARIABLE REFRIGERATION SUPPLY AND EXHAUST FANS. CONTRACTOR SHALL REFER AND COORDINATE WITH THE MECHANICAL PLANS FOR LIGHTING OCCUPANCY SENSOR 0-10VDC OUTPUT SIGNAL. ELECTRICAL CONTRACTOR SHALL PROVIDE PLENUM RATED LOW VOLTAGE WIRING TO THE MECHANICAL EQUIPMENT ACCORDINGLY.



18700 WARD STREET FOUNTAIN VALLEY, CA 92708

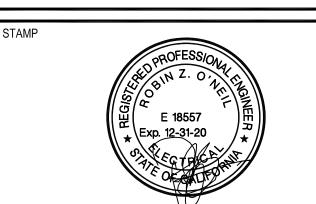
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ADMINISTRATIVE **BUILDING-SEISMIC** RETROFIT, ADA COMPLIANCE AND TENANT IMPROVEMENT

ENGINEER/ARCHITECT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



REV.	DESCRIPTION	DATE
	90% CD Owner Review	
_		

11	
11	

ı				
	PROJECT NO.	18X093.00		
	PRINT DATE			
	DRAWN BY			
	CHECKED BY			

EMERGENCY PHOTOMETRIC CALCULATION

E-402

SHEET NO.