

PANELBOARD SCHEDULE 'EV'

LOCATION MOUNTING ENCL. SURFACE	VOLTAGE PHASE WIRE	MIN. AC RATING MAINS RATING C.B. TYPE	FULLY RATED
PUMP STATION #1 SURFACE NEMA 1			
120 / 208 / 3 / 4			
10,000 MCB BOLT-ON			
NOTE	WIRE SIZE (G, N, H)	CIRCUIT DESCRIPTION / AREA SERVED	CONN. (LOAD/WA) / POLE / CB / CONN. (LOAD/WA) / CIRCUIT DESCRIPTION / AREA SERVED / WIRE SIZE (H, N, G) / NOTE
	10 - 4	ELECTRIC VEHICLE CHARGING STATION (FUTURE)	4800 60 2 1 4800 0 0 0 SPACE
	- 4	9.8KW, 208V, 1PH	4800 - - 3 0 4800 0 0 0 SPACE
	10 - 4	ELECTRIC VEHICLE CHARGING STATION (FUTURE)	4800 60 2 5 0 4800 0 0 0 SPACE
	- 4	9.8KW, 208V, 1PH	4800 - - 7 4800 0 0 0 SPACE
		SPACE	0 0 9 0 10 0 0 0 SPACE
		SPACE	0 0 11 0 12 0 0 0 SPACE
		SPACE	0 0 13 0 14 0 0 0 SPACE
		SPACE	0 0 15 0 16 0 0 0 SPACE
		SPACE	0 0 17 0 18 0 0 0 SPACE
		SPACE	0 0 19 0 20 0 0 0 SPACE
		SPACE	0 0 21 0 22 0 0 0 SPACE
		SPACE	0 0 23 0 24 0 0 0 SPACE
		SPACE	0 0 25 0 26 0 0 0 SPACE
		SPACE	0 0 27 0 28 0 0 0 SPACE
		SPACE	0 0 29 0 30 0 0 0 SPACE
TOTAL LOAD PER PHASE 9600 4800 4800 9,600 VA / 120 V = 80 AMPS			

NOTE: MAIN BREAKER AND BRANCH CIRCUIT BREAKERS IN ELECTRICAL PANEL 'EV' MUST BE TURNED-OFF AND LOCKED-OFF UNTIL ELECTRICAL VEHICLE CHARGING STATIONS ARE INSTALLED AND READY TO POWER ON.

LOAD CALCULATIONS SUMMARY

SERVICE ENTRANCE SECTION 'SES'
1600A, 277/480V, 3PH, 4W WITH 1200A MCB

EXIST. LOAD FROM DEMOLISHED SWITCHBOARD	(PER EDG RECORD DWGS. DATED 8-23-21) =	168,750 VA
PANEL 'HO'	(PER EDG RECORD DWGS. DATED 8-23-21) =	46,931 VA
PANEL 'HM'	(PER EDG RECORD DWGS. DATED 8-23-21) =	41,490 VA
100-HP MOTOR	(PER EDG RECORD DWGS. DATED 8-23-21) =	103,044 VA
PANEL 'HA'	(THIS PROJECT) =	57,946 VA
PANEL 'EV'	(THIS PROJECT) =	19,200 VA
TOTAL DEMAND LOAD IN VA		437,361 VA
TOTAL DEMAND LOAD IN AMPS @ 480V, 3PH		526 AMPS

LIGHTING FIXTURE SCHEDULE

FIXTURE ID	MANUFACTURER	DESCRIPTION/CATALOG NO.	LAMPS		VOLT	MOUNTING	REMARKS
			NO	TYPE			
L1	ZUMTOBEL	2'X2' RECESSED CRYSTAL OPTIC M/LINF-22-RU-1515-EA-830-DU	19W LED	1515 LUMENS	120/277	CEILING/ RECESSED	
L1A	LITHONIA LIGHTING	1'X4' SURFACE MOUNTED LED TLX4-20L-FW-A12-EZ1-LP835-N80EMG	21W LED	2260 LUMENS	120	CEILING/ SURFACE	
L2	BESA LIGHTING	STEM-MOUNT PENDANT 1JC-412386-LED-BR-LW 80+CRI, 3000K CCT, 800 LUMENS	9W LED	800 LUMENS	120	PENDANT	
L3	CORE LIGHTING GROUP	FLEXIBLE INDOOR LED STRIP LSM25-WW-24 ALU-FL-78-FR-LSM25	2.2W/FT LED	185 LUMENS/FT	120	CEILING/ SURFACE	PROVIDE MAGNETIC DIMMABLE CLASS 2 LED DRIVER BY CORE LIGHTING #PSDM-20W-24 (QUANTITY AS REQUIRED)
L4	ELEMENT LIGHTING	4" ADJUSTABLE DOWNLIGHT E4S-L-LO830-25-A-1010 / E4S-L-F-LZ 1500 LUMENS, 3000K	18W LED	1500 LUMENS	120	CEILING/ RECESSED	
L5	ACUITY BRANDS	4" SQUARE DOWNLIGHT SD4SQ-08LM-BBD-120-G4-90CRI-TD-FD-BD-FM	11W LED	800 LUMENS	120	CEILING/ RECESSED	
L6	I2 SYSTEMS	I2COVE ASYMMETRICAL LED LIGHT FIXTURE (4-FEET) CAS-4-27K-05-B	5W/FT LED	96.5 LUMENS/W	120-277	CEILING/ SURFACE	PROGRAM LIGHT FIXTURE TO 5W/FT
L6A	I2 SYSTEMS	I2COVE ASYMMETRICAL LED LIGHT FIXTURE (3-FEET) CAS-3-27K-05-B	5W/FT LED	96.5 LUMENS/W	120-277	CEILING/ SURFACE	PROGRAM LIGHT FIXTURE TO 5W/FT
L7	LITHONIA LIGHTING	LED STRIPLIGHT ZL1N-L48-3000LM-FST-120-30K-90CRI-PLR-CS1W-WH	33W LED	3000 LUMENS	120	CEILING/ SURFACE	
L8	GEORGE KOVACS	TUBE 2 BATH LIGHT KVC-TUBE-2-LIGHT-BATH-LIGHT	10W LED		120	WALL/ SURFACE	VERIFY MOUNTING HEIGHT WITH ARCHITECT
L9	RAB LIGHTING	WALLPACKS WPLED-FC-52-Y/PCS/BU/D10	52W LED	4584 LUMENS	120-277	WALL/ SURFACE	PROVIDE PHOTO/MOTION CONTROL BY RAB, CATALOG NO. "STL200LED"
L10	WAC LIGHTING	STEP LIGHT WL-LED100-C-BZ	3.9 LED	32 LUMENS	120	WALL/ RECESSED	VERIFY MOUNTING HEIGHT WITH ARCHITECT
L11	SONEMAN LIGHTING	BOX LED SCONCE 7340.72-WL	10W LED	1020 LUMENS	120	SURFACE	VERIFY MOUNTING HEIGHT WITH ARCHITECT
L12	SONEMAN LIGHTING	TRIFORM COMPACT LED SCONCE 7320.72-WL	10W LED	980 LUMENS	120	SURFACE	VERIFY MOUNTING HEIGHT WITH ARCHITECT
X	LITHONIA LIGHTING	LED EDGE-LIT EXT SIGN EDG-1-R / EDGR-1-R	3.8W LED		120	SURFACE/ RECESSED	

PANELBOARD SCHEDULE 'HA'

LOCATION MOUNTING ENCL. SURFACE	VOLTAGE PHASE WIRE	MIN. AC RATING MAINS RATING C.B. TYPE	FULLY RATED
UTILITY ROOM SURFACE NEMA 1			
277 / 480 / 3 / 4			
10,000 MCB BOLT-ON			
NOTE	WIRE SIZE (G, N, H)	CIRCUIT DESCRIPTION / AREA SERVED	CONN. (LOAD/WA) / POLE / CB / CONN. (LOAD/WA) / CIRCUIT DESCRIPTION / AREA SERVED / WIRE SIZE (H, N, G) / NOTE
	8 - 4	PANEL 'LA'	12477 70 3 1 12477 4120 2 3 20 3296 RTU-1 10 - 10 1
	- 4	VIA 45KVA XFMR	12355 - - 3 4120 12355 4 - - 3296 11.9 FLA 10 - - 1
	- 4		11863 - - 5 11863 4120 6 - - 3296 - - 10 - - 1
		SPARE	0 20 1 7 0 2964 8 3 20 2964 RTU-2 10 - 10
		SPARE	0 20 1 9 0 2964 10 - - 2964 10.7 FLA 10 - -
		SPARE	0 20 1 11 0 2964 12 - - 2964 - - 10 - -
		SPARE	0 20 1 13 0 0 14 - - 0 SPACE
		SPARE	0 20 1 15 0 0 16 - - 0 SPACE
		SPARE	0 20 1 17 0 0 18 - - 0 SPACE
		SPARE	0 20 1 19 0 0 20 - - 0 SPACE
		SPARE	0 20 1 21 0 0 22 - - 0 SPACE
		SPARE	0 20 1 23 0 0 24 - - 0 SPACE
		SPARE	0 20 1 25 0 0 26 - - 0 SPACE
		SPARE	0 20 1 27 0 0 28 - - 0 SPACE
		SPARE	0 20 1 29 0 0 30 - - 0 SPACE
		SPARE	0 20 1 31 0 0 32 - - 0 SPACE
		SPARE	0 20 1 33 0 0 34 - - 0 SPACE
		SPARE	0 20 1 35 0 0 36 - - 0 SPACE
		SPARE	0 20 1 37 0 0 38 - - 0 SPACE
		SPARE	0 20 1 39 0 0 40 - - 0 SPACE
		SPARE	0 20 1 41 0 0 42 - - 0 SPACE
TOTAL LOAD PER PHASE 19561 19439 18947 19,561 VA / 277 V = 71 AMPS			

PANELBOARD SCHEDULE 'LA'

LOCATION MOUNTING ENCL. SURFACE	VOLTAGE PHASE WIRE	MIN. AC RATING MAINS RATING C.B. TYPE	FULLY RATED
UTILITY ROOM SURFACE NEMA 1			
120 / 208 / 3 / 4			
10,000 MCB BOLT-ON			
FUTURE METERING DEVICE SPACE			
NOTE	WIRE SIZE (G, N, H)	CIRCUIT DESCRIPTION / AREA SERVED	CONN. (LOAD/WA) / POLE / CB / CONN. (LOAD/WA) / CIRCUIT DESCRIPTION / AREA SERVED / WIRE SIZE (H, N, G) / NOTE
	12 12 12	RECEPT - OFFICE 101	1260 20 1 1 1260 720 2 1 20 720 RECEPT - LOBBY 12 12 12
	12 12 12	RECEPT - OFFICE 102	900 20 1 3 900 360 4 1 20 360 RECEPT - OFFICE 104 COMPUTER 12 12 12 IG
	12 12 12	RECEPT - PATIO	540 20 1 5 540 900 6 1 20 900 RECEPT - TELE/ ELEC RM / VAULT RM / CORRIDOR 12 12 12
	12 12 12	RECEPT - QUADRIPLEX TMB TELEPHONE/ ELEC	500 20 1 7 500 1200 8 1 20 1200 RECEPT - ABOVE COUNTER 12 12 12
	12 12 12	RECEPT - OFFICE 104	1260 20 1 9 1260 1200 10 1 20 1200 RECEPT - ABOVE COUNTER 12 12 12
	12 12 12	BOARD ROOM COUNTER	900 20 1 11 900 1200 12 1 20 1200 RECEPT - ABOVE COUNTER 12 12 12
	IG 12 12 12	RECEPT - BOARD ROOM PROJECTOR/ SCREEN PROJECTOR	1000 20 1 13 1000 360 14 1 20 360 RECEPT - OFFICE 101 COMPUTER 12 12 12 IG
	12 12 12	RECEPT - FILE STORAGE/ KITCHEN/ BOARD ROOM UTILITY RM.	720 20 1 15 720 360 16 1 20 360 RECEPT - OFFICE 102 COMPUTER 12 12 12 IG
	12 12 12	RECEPT - BOARD ROOM	1080 20 1 17 1080 360 18 1 20 360 RECEPT - RESTROOMS 12 12 12
	12 12 12	RECEPT - BOARD ROOM	720 20 1 19 720 180 20 1 20 180 RECEPT - ROOF 12 12 12
	12 12 12	RECEPT - BREAK ROOM	360 20 1 21 360 2250 22 2 30 2250 WATER HEATER (WH-1) 10 - 10 4
	12 12 12	ELECTRIC WATER COOLER (EDF-1)	480 20 1 23 480 2250 24 - - 2250 4.5 KW 10 - - 4
	12 12 12	RECEPT - TV @ BOARD ROOM	300 20 1 25 300 200 26 1 20 200 TIMELOCK / CONTACTOR 12 12 12
	12 12 12	IRRIGATION CONTROLLER	200 20 1 27 200 0 28 - - 0 SPACE
	12 12 12	ELECTRONIC WATER CONTROL SYSTEM W/ TIMER & PUMP	500 20 1 29 500 0 30 - - 0 SPACE
	IG 12 12 12	RECEPT - BOARD OF DIRECTORS TABLE	360 20 1 31 360 288 32 1 15 288 EF-1 (1120-HP) 12 12 12
		SPACE	0 0 33 0 34 - - 0 SPACE
		SPACE	0 0 35 0 36 - - 0 SPACE
		SPACE	0 0 37 0 38 3 60 3413 PANEL 'SR' 4 4 10
		SPACE	0 0 39 0 40 - - 3805 - - 4 - -
		SPACE	0 0 41 0 42 - - 2805 - - 4 - -
FUTURE METERING DEVICE SPACE			
	1,2 12 12 12	LTS - VAULT/TELE/ELEC RM / BREAK RM / TOILETS/UTILITY	751 20 1 43 939 344 44 1 20 343.8 LTS - PATIO COLUMN / BENCH SEATING 12 12 12 1,2
	1,2 12 12 12	LTS - LOBBY/OFFICES	468 20 1 45 585 355 46 1 20 284 LTS - BLDG. EXTERIOR WALL / CANOPY 12 12 12 1,2
	1,2 12 12 12	LTS - BOARD ROOM	378 20 1 47 473 375 48 1 20 300 LTS - PLANTERS 12 12 12 1,2
	1,2 12 12 12	LTS - BOARD ROOM	555 20 1 49 694 0 50 1 20 0 LTS - BOARD ROOM 12 12 12 1,2
		SPACE	0 0 51 0 52 - - 0 SPACE
		SPACE	0 0 53 0 54 - - 0 SPACE
TOTAL LOAD PER PHASE 12477 12355 11863 12,477 VA / 120 V = 104 AMPS			

PANELBOARD SCHEDULE NOTES:

- (NOT ALL NOTES MAY BE USE)
- 1 - CONTINUOUS LOAD OR LARGEST MOTOR TAKEN AT 125%.
- 2 - VIA TIMELOCK/PHOTOCELL
- 3 - CIRCUIT BREAKER WITH LOCK-ON DEVICE.
- 4 - CIRCUIT BREAKER CAPABLE OF BEING LOCKED IN THE OPEN POSITION
- 5 - CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER
- 6 - LABEL IN RED BOLD LETTERS "EMERGENCY LIGHT" IN COMPLIANCE WITH CEC 700.12(F).
- IG - PROVIDE AN ADDITIONAL IDENTIFIED GROUND CONDUCTOR FOR ISOLATED GROUND.

PANELBOARD GENERAL NOTES:

- 1.) EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNDERGROUND CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES. (CEC 210.4(B)).
FOR SINGLE PHASE INSTALLATION: PROVIDE 2-POLE CIRCUIT BREAKER OR (2) SINGLE-POLE CIRCUIT BREAKERS WITH U.L. LISTED HANDLE-TIE.
FOR THREE PHASE INSTALLATION: PROVIDE 3-POLE CIRCUIT BREAKERS OR (3) SINGLE-POLE CIRCUIT BREAKERS WITH U.L. LISTED HANDLE-TIE.
- 2.) THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION.
- 3.) ELECTRICAL CONTRACTOR SHALL PROVIDE TYPE WRITTEN PANELBOARD CIRCUIT DIRECTORY CARDS FOR EACH PANELBOARD THAT LEGIBLY IDENTIFY EVERY CIRCUITS CLEAR, EVIDENT AND SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUITS TO BE DISTINGUISHED FROM ALL OTHERS (CEC 408.4) ADDITIONALLY, ELECTRICAL CONTRACTOR SHALL ETCH OR PERMANENTLY MARK THE COVERPLATES OF RECEPTACLES AND THE JUNCTION BOXES OF LUMINAIRES AND EQUIPMENT WITH THE CIRCUITS IDENTIFICATION (STICK-ON LABELS ARE NOT ACCEPTABLE). TAG EACH CIRCUIT CONDUCTOR AT EACH JUNCTION BOX, OUTLET, SWITCH, ETC. WITH THE CIRCUITS IDENTIFICATION. (PANEL ORIGIN AND CIRCUIT NO.)



Your environmental partner since 1954

UCSB Campus
Parking Lot 32
Santa Barbara, CA 93106
(p) 805 968-2617 (f) 805 562-8987

ADMINISTRATION BUILDING

EDUARDO GALINDO ARCHITECT

9733 W. SUNNYGLOPE LANE PEORIA, ARIZONA 85345

480.751.8780 ed@egadesign.net

egadesign.net



ISSUED	REV	DATE
DART Submittal		15 May 2015
Site Development Plan 1		23 June 2015
30% Schematic Design		30 Oct. 2015
Pre-App & Architectural Board of Review Submittal		23 Apr. 2016
Architectural Board of Review Submittal		25 Jan. 2017
Architectural Board of Review Submittal		10 OCT 2022
Building Permit Review		28 AUG 2023



06-24-23

DRAWING

PANELBOARD SCHEDULES, LIGHTING FIXTURE SCHEDULES & LOAD CALCULATIONS

NTS

SCALE 40903

PROJECT NUMBER

A-E6.0

DRAWING NUMBER