ADDITION TO SINGLE FAMILY RESIDENTIAL AT 2847 SYCAMORE WAY, SANTA CLARA, CA 95051



Tel. 510-789-5651

FAMILY RESIDENTIAL , SANTA CLARA, CA 95051

ADDITION TO SINGLE F AT 2847 SYCAMORE WAY,

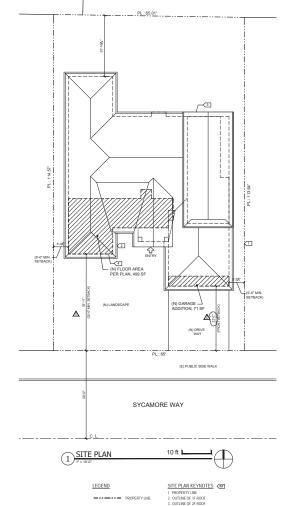
Δ

PRO IECT NO: 2020,030

PROJECT INFO & SITE PLAN

DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS



4. OUTLINE OF EXTERIOR WAL

VICINITY MAP



APPLICABLE CODES

ALL WORK IS TO BE PERFORMED ACCORDING TO THE BUILDING CODES, ORDINANCES AND LAWS OF THE AUTHORITY HAVING JURISDICTION ON THE PROJECT. WHEN THE REQUIREMENTS OF THE BUILDING CODES, ORDINANCES AND LAWS COHECT WITH ANY OTHER PART OF THE BUILDING CODES, ORDINANCES AND LAWS COHECT WITH ANY OTHER PART OF THE BUILDING CODES, ORDINANCES AND LAWS, THE MOST RESTRICTIVE REQUIREMENTS SHALL PREVAIL.

- 2019 CALIFORNIA ADMINISTRATIVE CODE. PART 1
- 2019 CALIFORNIA BUILDING CODE, PART 2, BASED ON THE 2018 I.B.C.
- 2019 CALIFORNIA RESIDENTIAL CODE, PART 2.5, BASED ON THE 2018 I.R.C. 2019 CALIFORNIA ELECTRICAL CODE, PART 3, BASED ON THE 2018 N.E.C. 2019 CALIFORNIA MECHANICAL CODE, PART 4, BASED ON THE 2018 U.M.C.
- 2019 CALIFORNIA PLUMBING CODE, PART 5, BASED ON THE 2018 U.P.C.
 2019 CALIFORNIA ENERGY CODE, PART 6 (2016 BUILDING ENERGY EFFICIENC'
 STANDARDS)
- 2019 CALIFORNIA FIRE CODE, PART 9, BASED ON THE 2018 LF C. CODE
- 2019 CALIFORNIA FIRE CODE, PART 19, BASED ON THE 2018 I.F.C. CODE
 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11 (CALGRI
 THE CITY MUNICIPAL CODE AND ORDINANCES

GENERAL NOTES

- A NOTIFY AGENTICE PROMPTLY IF CONSTRUCTION DOCUMENTS ARE INCONSISTENT WITH THE CURRENT APPLICABLE CODES AND REGULATIONS.

 IN OTIFY AGENTICE PROMPTLY IF ROPOSTATION SHOWN IN ONE CONSTRUCTION DOCUMENT CONFLICTS WITH INFORMATION SHOWN ON ANOTHER.

 C. ONTIFY AGENTICE PROMPTLY IF ANY EASTING CONDITIONS CONFLICT WITH THE CONSTRUCTION DOCUMENTS.

 O YERRIPY EXISTING COMBINIONS AND DIMENSIONS. COORDINATE THE EXTENT OF DEMOLITION WORK AND EXISTING WORKE TO REMAIN WITH INSET PLAN AND PROJECT SITE PRORT TO PROME, A PAREATON AND INSTRUCTION. NOTIFY AGENTICE OF ALL CONFLICTS

 E. ALL DIMENSIONS IN CONSTRUCTION QUICINESTS ARE TO FACE OF PRISH UNIO.

 E. ALL DIMENSIONS IN CONSTRUCTION QUICINESTS ARE TO FACE OF PRISH UNIO.

 F. PROVIDE A SER MEANS OF CERES THROUGH AND DRIVEN HOUND THE BULLIONS AND SITE PER APPLICABLE CODES AT ALL TIMES DURING THE CONSTRUCTION PROCESS. MINIMIZE DISSIPPION OF DAUGHCHS APPLICABLE.
- DISRUPTION TO ADJACENT AREAS AS MUCH AS POSSIBLE.
- G. PROVIDE FIRE EXTINGUISHERS PER CODE AT ALL TIMES THROUGHOUT CONSTRUCTION H. REPAIR/PATCH OPENINGS IN WALLS. PARTITIONS. FLOORS AND CEILINGS THAT ARE
- EXISTING OR WHERE DEMOLITION OCCURS TO MATCH EXISTING ADJACENT FINISH
- ALL FOLIPMENT SHALL BE LISTED LABELED OR CERTIFIED BY A NATIONALLY RECOGNIZED I. ALL EQUIPMENT SHALL BE LISTED, LABELED OR CERTIFIED BY A DAYLOWALT REAL-COMMENT TESTING LABORATORY.

 J. IMMINIZE NOSE TO A LEVEL ACCEPTABLE TO THE OWNER. SCHEDULE TASKS CREATING EXCESSIVE BOOLED OR HEAR SENSITIVE AREAS WITH THE OWNER.

 K. PROVINE DUST CONTROL BETWEEN CONSTRUCTION AREAS AND COUPED AREAS AT ALL PRESENSE AND ABOULE PROFITCED DURING CONSTRUCTION, BEBLOOSE HIGH ON DEMOLITION ACTIVITIES SIGNS SHALL BE PROFICED TO BURING CONSTRUCTION, BEBLOOSE HIGH ON DEMOLITION ACTIVITIES SIGNS SHALL BE PROFICED THE OWNER OF THE PROFITCE AND THE DULICE REMY PROVIDER THE NOBLOWERS WITH A LLUMINARIE SCHEDULE THAT INCLUDES A LIST OF LAMPS INSTALLED IN THE LLUMINARIES SCHEDULE THAT INCLUDES A LIST OF LAMPS INSTALLED IN THE LLUMINARIES SCHEDULE THAT

PROJECT NAME. ADDITION TO SINGLE FAMILY RESIDENTIAL PROJECT DESCRIPTION. ADD A BEDROOM, FOYER & FRONT PORCH ADDITION TO GARAGE AND CHANGE ACCESS DIRECTION - ADDITION TO GARAGE AND CHANGE ACCESS DIRECTION - RISTALL, (9), LIGHT FEXTURES AND RECEPTRACE OUTLETS IN ADDITION AREA - RISTALL, (9), LIGHT FEXTURES AND RECEPTRACE OUTLETS IN ADDITION AREA - INSTALL (N) DOORS & WINDOWS

PROJECT INFORMATION

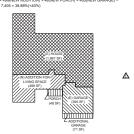
ZONING: R-1
TYPE OF CONSTRUCTION : V-B
USE: SINGLE FAMILY RESIDENTIAL

PROJECT ADDRESS: 2847 SYCAMORE WAY SANTA CLARA, CA 95

LOT SIZE : 7.405 S.F.

CONDITIONED FLOOR AREA: 2,278 S.F.(EXISTING) + 499 S.F.(NEW) = FAR: 2,777 / 7,405 x100 = 37.50%

EXISTING: 1.867(LIVING AREA) + 395(GARAGE) / 7.405 = 30.55% PROPOSED: 1.867 + 499(NEW ADDITION) + 48(NEW PORCH) + 465(NEW GARAGE) = 2,879 / 7,405 = 38.88%(<40%)



KEY MAP FOR LOT COVERAGE

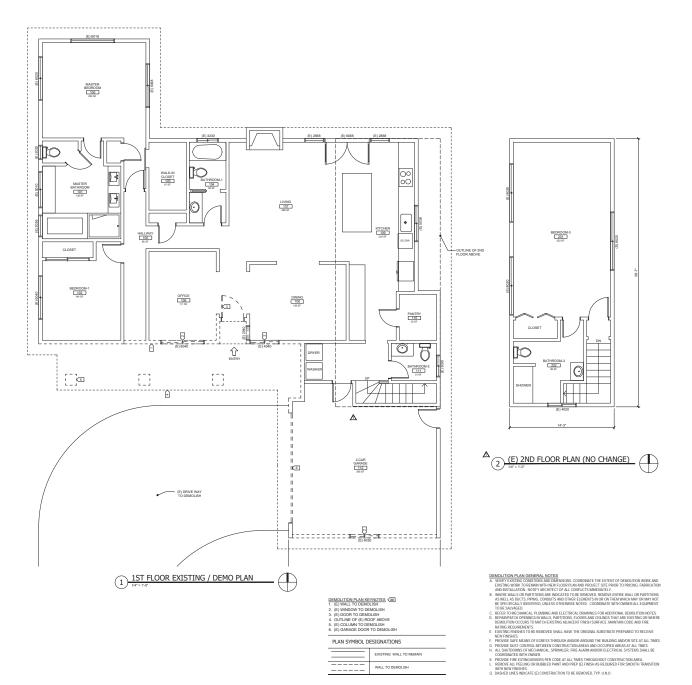
NUMBER OF BEDROOM: 4 NUMBER OF BATHROOM: 3 NUMBER OF PARKING STALLS: (2) EXISTING COVERED PARKING (TWO-CAR GARAGE) AUTOMATIC FIRE SPRINKLER SYSTEM: NOT F

SHEET INDEX

- A1.0 PROJECT INFO & SITE PLAN
- A2.1 PROPOSED FLOOR PLAN
- A4.0 EXTERIOR ELEVATIONS & DETAILS
- A5.0 ROOF PLAN & SECTION DETAILS E1.0 ELECTRICAL PLAN
- T1.0 TITLE 24 ENERGY COMPLIANCE FORM-1 T1.1 TITLE 24 ENERGY COMPLIANCE FORM-2
- S1.0 GENERAL NOTES

- \$10. GENERAL NOTES
 \$11. HOLDOWN DETAILS
 \$12. MISC. CONC. DETAILS
 \$13. SWS DETAILS
 \$14. CONVENTIONAL FRAMING DETAILS
 \$21. STFLR. SHEAR WALL PLANS AND DETAILS
 \$21. ISTFLR. SHEAR WALL PLANS AND DETAILS
 \$23. O ROOF PLANS AND DETAILS
 \$30. ROOF PLANS AND DETAILS

A1.0



WALL TO DEMOLISH

B E Y O N D S P A C E DESIGN & DEVELOPMENT

Tel. 510-789-5651
Email: 20beyondspace@gmail.com
42466 Grand Teton Park St.
FREMONT, CA 94538

ADDITION TO SINGLE FAMILY RESIDENTIAL AT 2847 SYCAMORE WAY, SANTA CLARA, CA 95051

SANGWOOK LEE

APN #: 293-22-062

NO DESCRIPTION DATE A REVISIONS FOR PLNG DEPT. COMMENTS

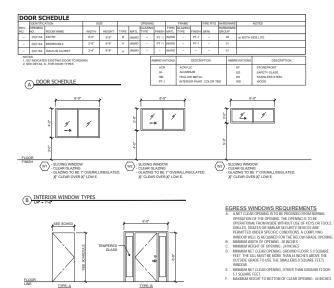
PROJECT NO: 2020-030

EXISTING / DEMO PLAN

DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS

A2.0



2 DOOR & WINDOW SCHEDULE

TYPE: B ENTRY DOOR

HARDWARE GROUP

GROUP 01

TYPE: A SOLID CORE WD, TYPE, PAINT GRADE, HINGED

O DOOR FRAME TYPES

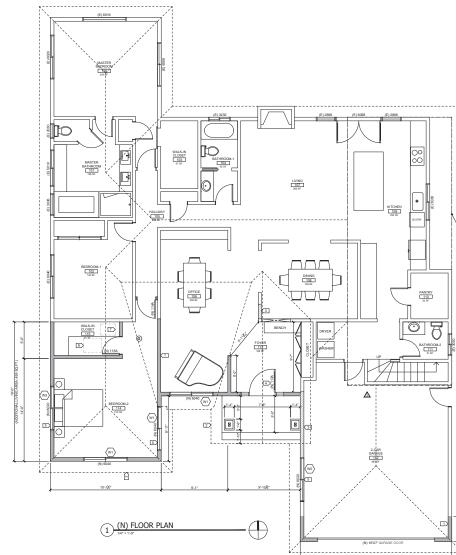
1 EA LOCKSET: ENTRY

I EA LUCKSE I: ENIRY
Function: Latchbot is retracted by lever on either side unless inside push button (cyl) or turn lever (mort) locks outside lever.
1 EA CLOSER
1 EA THRESHOLD
1 EA STOP

GROUP 02
3 EA BUTT HINGES
1 EA DOOR LOCK SET: BED/BATH ROOM

GROUP 03

3 DOOR HARDWARE



FLOOR PLAN GENERAL NOTES

A. ALI PRING. CONCUTS AND SELATED MESANICAL PLUMBING AND
ELECTRICAL ITERS SHALL BE CONCEALED WITHIN DRYWALL FURSING AS
RECURED IN PROSEIN AREA SWEETHER SHOWN ON BERNINGS OR NOT, UND.

B. ALL DIMERSONS ARE TO PACE OF PRISO UND.

C. ALL DIORES AND ACTIVE TO ALL SO SHALL BE TYPICALLY LOCATED 3" FROM

C. ALL DOORS ADJACENT TO WALL S SHALL BE TYPICALLY LOCATED F FROM MULL 10 DOORS ADJACENT TO WALL SHALL BE TYPICALLY LOCATED F FROM MULL 10 DOORS OF HEEK PROPERTY.

D. LOCAL DUMLST SYSTEMS SHEETED TO THE COULD DOORS FOR THE KITCHED BY THE CONTROL OF SHOW MET FOR WITH THE MAN THE MODERN HOUSE OF THE CONTROL OF SHOW MET FOR WITH THE MAN THE CONTROL OF THE CONTROL OF SHOW MET FOR WITH THE MAN THE CONTROL OF THE CONTROL OF THE CONTROL OF THE WITH THE CONTROL OF THE CONTROL OF THE WITH THE CONTROL OF THE WITH THE CONTROL OF THE CONTROL OF THE WITH THE WITH THE CONTROL OF THE WITH THE

(N) FLOOR PLAN KEYNOTES

1. (0) FULL HEIGHT WO STUD WALL
OUTLINE OF ROOF ABOVE
2. FILL IN (E) OPENING W/2 WID STUD 16* O.C.
4. (0) DOORS, SEE DOOR SCHEDILE ON 2M5. (0) WINDOWS, SEE WINDOW SCHEDULE ON 2B/6. (0) ACCESS OPENIN FOR ATTIC, NOT LESS TH.
7. (0) ACCESS FOR CRAWL SPACE, MIN. 247X18*

PLAN SYMBOL DESIGNATIONS FILL IN (E) OPENING PER PLAN 1000000 NEW STUD WALL - FULL HEIGHT

FLOOR PLAN LEGEND (S) SMOKE DETECTOR, SEE NOTE

C CARRON MONOXIDE ALARM SEE NOTE (E) EXISTING TO REMAIN

(N) NEW

SMOKE & CARBON MONOXIDE ALARM NOTES SMOKE AND CARBON MONOXIDE ALARMS ARE SMOKE AND CARBON MONOXIDE ALARMS AND ENTERCONNECTED. THE MANUS ARE REQUIRED TO BE RETAILED THE ALARMS ARE REQUIRED TO BE RETAILED THE ALARMS ARE REQUIRED TO BE RETAILED THE ALARMS AND ALL SEEPING ROOMS OF ALL SEEPING ALARMS IN ALL SEEPING ROOMS WITHIN APPLIANCES ARE RETAILED.

SOURCE ALARMS AND COLANAIS IN AREA SHOWN APPLIANCES ARE RETAILED.

SOURCE ALARMS AND COLANAIS IN AREA SHOWN APPLIANCES ARE RETAILED.

PRECEDING SLEEPING KOURS (SUCH AS A HALLWAY)

- SMOKE ALARM AND CO ALARM ON EACH STORY LEVEL OF THE DWELLING INCLUDING BASEMENTS AND HABITABLE ATTIC ROOMS

DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS

SANGWOOK LEE

△NO DESCRIPTION DATE REVISIONS FOR PLN DEPT. COMMENTS

PRO IECT NO: 2020-030

SCHEDULE

(N) FLOOR PLAN

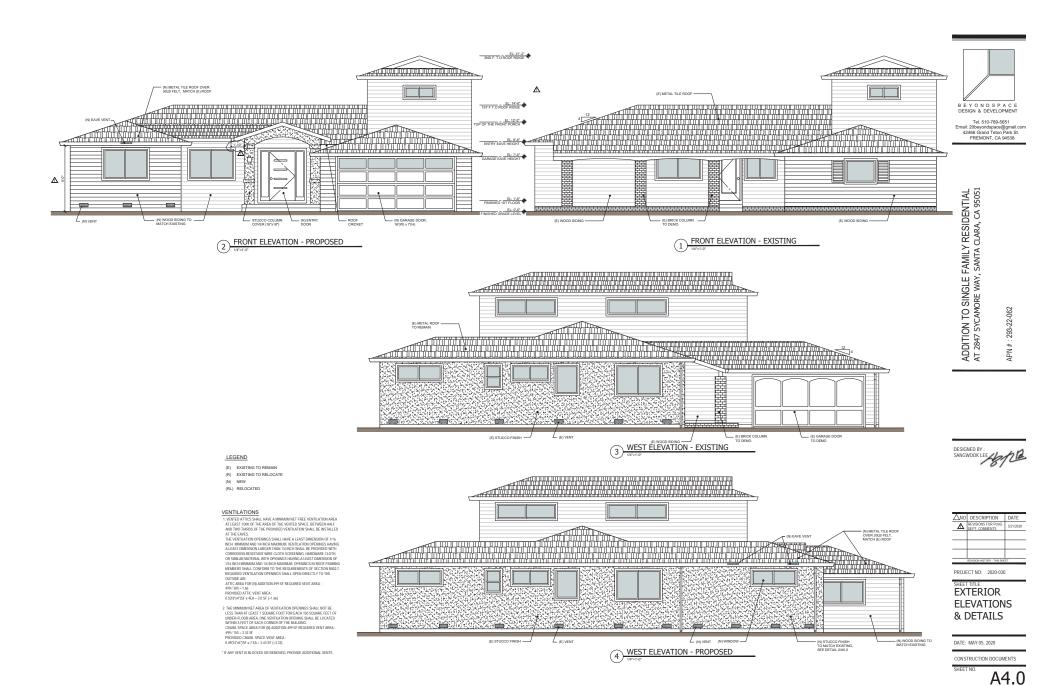
DOOR TYPE &

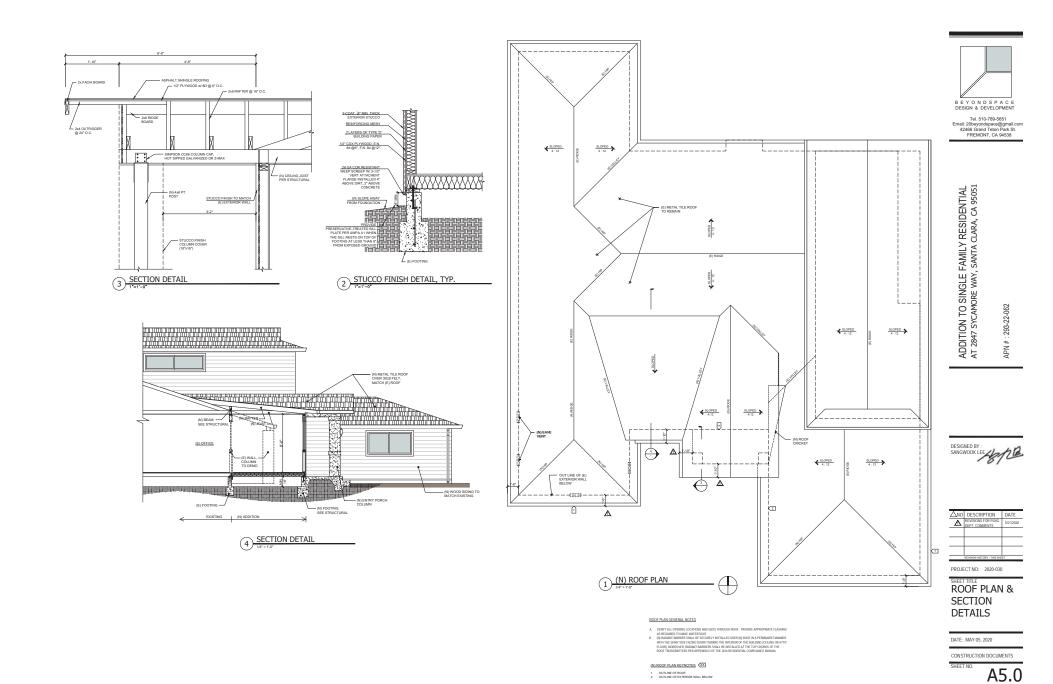
B E Y O N D S P A C E DESIGN & DEVELOPMENT Tel. 510-789-5651 Email: 20beyondspace@gmail.c 42466 Grand Teton Park St. FREMONT, CA 94538

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: 293-22-062

A2.1





ELECTRICAL NOTES

- 2. WIRING SHALL BE PROVIDED TO DEVICES SHOWN, UNLESS OTHERWISE INDICATED, MINIMUM WIRING SIZE SHALL BE #12 AWG. AMPACITY, DEPATING AND CONDUIT FILL SHALL BE AS REQUIRED BY THE NEC.
- 3. MULTIPLE GROUPINGS OF DEVICES SHALL BE GANGED UNDER THE SAME COVER PLATE. SEPARATE PLATES ARE UNACCEPTABLE EXCEPT IN CASES OF DIMMER SWITCHES ADJACENT TO OTHER LIGHT SWITCHES. IN THAT CASE, PLATES SHALL BE AS CLOSE TOGETHER AS POSSIBLE, PLUMB TRUE FOR A NEAT AND COMPACT ORGANIZED APPEARANCE.
- 4. SEE ARCHITECTURAL ELEVATIONS AND DETAILS FOR EXACT LOCATIONS OF ELECTRICAL ITEMS. THESE SHALL TAKE PRECEDENCE OVER ANY INDICATIONS IN ELECTRICAL CONSTRUCTION DOCUMENTS.
- 5. SWITCHED RECEPTACLES TO BE CONTROLLED BY THE OCCUPANCY SENSOR(S) IN THE SAME ROOM/SPACE, REFER TO THE LIGHTING PLANS FOR OCCUPANCY SENSOR LOCATIONS AND LIGHTING CONTROL SPECIFICATION FOR ADDITIONAL INFORMATION.
- 6. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120 VOLT BRANCH CIRCUIT.
- 7. PROVIDE GFCI PROTECTION AT ALL NEW BATHROOM, OUTDOOR RECEPTACLES SERVING KITCHEN COUNTERTOPS.
- 8. MIN. TWO 20-AMP APPLIANCE BRANCH ORCUITS ARE REQUIRED FOR THE KITCHEN AND ARE LIMITED TO SUPPLYING WALL AND COUNTER SPACE CUTLETS FOR THE KITCHEN, PANTIN BENEAVEST ROOM, DINNEN BROWN, OS MANAPA REAS, NOTE: THESE GROUNTS CANNOT SERVE OUTSIDE PLUSS, PANGE HOOD, DISPOSALS, DISPANSHERS OF MIDDOWNES-ONLY THE REQUIRED COUNTERTOP! MALL OUTLETS INCURRED.
- 9. A DEDICATED 20-AMP CIRCUIT IS REQUIRED TO SERVE THE REQUIRED BATHROOM OUTLETS. THIS CIRCUIT CANNOT SUPPLY ANY OTHER RECEPTACLES, LIGHTS, FAIS, ETC, (EXCEPTION-HIFE HE GRICUIT SUPPLES A SINCE BEATHROOM, CUTLETS, FOR OTHER EXPURENT WITHIN THE SAME BATHROOM SHALL BE PERMITTED TO BE SUPPLIED, IN NO CASE SHALL THE RECEPTACLE BE LOCATED MOSE THAN IS NOW-SEE SUCH WHIE TO COT THE RESMI
- 10, ALL BRANCH CIRCUITS THAT SUPPLY OUTLETS INSTALLED IN DWELLING AREAS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.
- 11. PROVIDE ADDITIONAL RECEPTACLE OUTLETS AT EACH KITCHEN, PANTRY, BREAKFAST ROOM, DINNS ROOM COUNTER SPACE WIDER THAN 12-INCHES, LOCATED SO THAT DO FORM ALONS THE COUNTER WALL IS OVER 24 FEROX RECEPTACE. AND AN EXTERIOR REPETACE, AT THE FRONT AND REAR OF THE HOME. ANY ADDED RECEPTICAL SIX BUST BE WITHIN 6 -6" OF GRADE, GFOL AND WATERFROOK.
- 12. ALL 15-AMP AND 20-AMP DWELLING UNIT RECEPTACLE OUTLETS SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
- 13. ANY SCREW-BASED PERMANENTLY INSTALLED LIGHT FIXTURES MUST CONTAIN SCREW-BASED JAB (JOINT APPENDIX B) COMPLIANT LAMPS. JAB COMPLIANT LIGHT SCURCES MUST BE MARKED AS "JAB-2016-E" ("JAB-2016-E" ("JAB-2016-E" ARE DEEMED APPROPRIATE FOR USE IN ENCLOSED LUMINAIRES).
- 14. AT LEAST ONE FIXTURE IN EACH BATHROOM WHERE NEW LIGHTING IS PROPOSED IS CONTROLLED BY A VACANCY SENSOR.
- 15. ALL NEW OUTDOOR LIGHTING AS HIGH EFFICACY WITH MANUAL ON/OFF SWITCH AND PHOTO CONTROL AND MOTION SENSOR.
- 16. LOCAL EXHAUST SYSTEMS VENTED TO THE OUTDOORS FOR THE KITCHEN (CAN USE RANGE HOOD, DOWN-DRAFT EXHAUSTS, CEILING FANS, WALL FANS-BUT WHATEVER USED MUST EXHAUST DIRECTLY TO THE OUTDOORS!
- 17. PROVIDE MIN, 100 CFM INTERMITTENT AIRFLOW FOR KITCHEN RANGE HOCO/MICROWAVE HOCO COMBINATION OR 9-HOW AN EXHAUST FAN IN THE KITCHEN CAPABLE OF PROVIDING AT LEAST 5 AIR CHANGES FER HOUR.
- IS, WHISE COMBISTION APPLIANCES ON SOLD-FIRE BURNING APPLIANCES SEE LECKLES PRICE THE PROSPECT BURNING THE WINDOWS THE WINDOWS
- 19. THE LOCAL EXHAUST SYSTEMS VENTED TO THE OUTDOORS FOR THE BATHROOMS.
- 21. EXHAUST FANS (EXCLUDES KITCHEN EXHAUST HOOD) SWITCHED SEPARATE FROM LITHING(OR UTILIZE A DEVICE WHERE LIGHTING CAN BE TURNED OFF WHILE THE FAN IS RUNNING)
- 22. COMPLETED CF2R-LTG-01-E FORM MUST BE PROVIDED TO THE CITY BUILDING INSPECTOR, PRIOR TO FINAL INSPECTION.
- 23. ALL THE EXTERIOR RECEPTACLE OUTLETS TO BE WEATHERPROOFED AND GROUND-FAULT CIRCUITINTERRUPTER (WP/GFG)).

ELECTRICAL SYMBOL LEGEND

	RECESSED LED FIXTURE
	LED STRIP LIGHT
0	LED PENDANT LIGHTING
•	FLUSH MOUNT LIGHT FIXTURE
ю	WALL-MOUNTED FIXTURE w/ PHOTO EYE
ada:	LED SCONCE
	EXHAUST FAN w/ LIGHT
\$	SWITCH
\$,	SWITCH 3 WAY
\$0	SWITCH W OCCUPANCY SENSOR
\$,	SWITCH W/ DIMMER
+	OUTLET DUPLEX
=	220V OUTLET
=	GFCI OUTLET DUPLEX w/ WEATHER PROOF
(§)	SMOKE DETECTOR
©	CARBON MONOXIDE DETECTOR
(E)	EXISTING TO REMAIN
(RL)	RELOCATED

MANUFACTURER'S CATALOG NO.

ILB4069FS1EMWR

VOLT

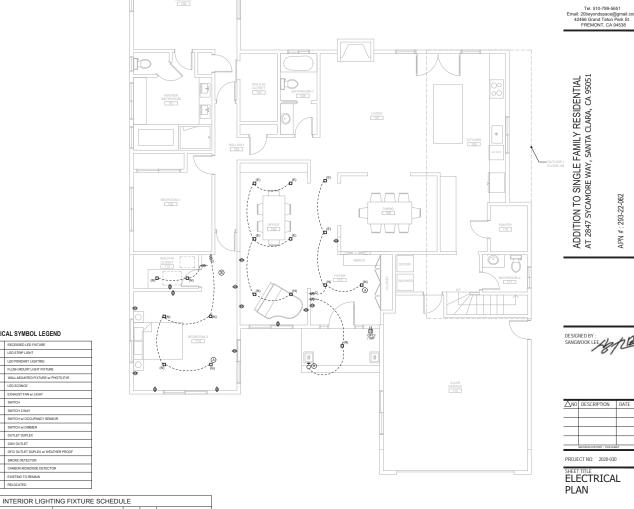
LED 120

LED

MOUNTING

RECESSED

WALL MOUNT, PHOTO CONTROL



ELECTRICAL PLAN

B E Y O N D S P A C E DESIGN & DEVELOPMENT Tel. 510-789-5651 Email: 20beyondspace@gmail.c 42466 Grand Teton Park St. FREMONT, CA 94538

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DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS

293-22-062

XTERIOR WALL SCONCE NOTE: CONTRACTOR TO VERIFY LIGHTING FIXTURE SPECIFICATIONS WITH OWNER

DESCRIPTION

RECESSED CAN LIGHT FIXTURE

V DIMMING BALLAST, 3000K

FIXTURE

Ō

				Schema Venion r	wv 20200381				
	2847 Sycamore ad					2020-05-03738-14-29			CF1R-P9F-010 (Page 9 of 11)
WATER HEATING	origition: Title 347 SYSTEMS	analysis .		Input III	te Name: 2847_)	iycamore_addition_si	7,1047.9		
01	0.0	09	04	05	96	47	- 14	99	10
Name	System Type	StateButten Type	Water Neuter Name (II)	Solar Heating System.	Compact (Natribution	HERS Verification	Status	Verified Existing Condition	Existing Water Heating System
	_					_		_	

Child on	Dom Wate	estic Hot or (DHW)	Standar Serituri System	d on	Se Gas S	torage (1)	-1/4		None	100	Conng	No	
VATER HEAD	-												_
et.	82	03	04	81	06	97	68	.09	10	11	13	- 11	14
Name	Heating Element Type	Earth Type	15.	Tark Wil. (g-f)	Energy Factor or Efficiency	mant facing or files	Tank Insulation Basker (Int/Tel)	Standby test or Bestvery	Let No. Rating or Flow Ritte	NEEA Heat Pump Brand or Model	Tank Location or Architect Condition	Status	Verified Existing Condition
Ex Gen Storage	- Gas	Small Storage	1	10	04.00	- Hubr	-	1 1	1 44	100	n/a	Estroy	No

UTER HEATING - HER	SVERIFICATION						
Øt.	02	60	94.	es	. 96	87	- 84
Name	Pipe Insulation	Parallel Phone	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DWW Distribution	Shower Drain Water Heat Recovery
136W ex - 1/1	Not Resulted	Not Required	Not Required.	None	Not Required	No Required	Not Required

ONDITIONING SH	STEMS									
es	45	03	84	05	06	- 07	08	09	10	11
Name	System Pape	Heating Unit Name	Cooling Unit Name	for Name	Distribution Name	Required Thermostet Type	Status	Verified Beloting Condition	Heating Equipment Count	Cooling Equipment Count
MARC 44	Heating and spaling system other	to furnace	Ex-Conling	faces	Ducts ex	10/0	Existing	tu .	1	1

as tration Number:	Registration Data/Time:	HERS Provider	
320 P2100780484-000-000-0000000-0000	3020-06-04 10:38:34		CarCII
L Building Energy Officiency Standards - 2019 Residentel Compilance	Report Version: 2019.3.508 Scheme Version rev 2020/0381	Report Senerated: 2020-05-03	18 15-00

	COMPLIANCE 2847 Sycamore a	dition					Calcu	bition	Date/Tim	w: 2020-01	-01118	14:29-07:00			(Page 4 of 11
Calculation Des	oription: Title 24	Analysis					Imput	File No	ome: 254	7. Sycamor	w adds	ion, v2.rbd			
OFFICIAL SURFAC	15													7	
81	42	. 63		14	- 05		.06		07			09		10	11
tone	Zone	Construct	tion Asi	much C	Diselation	Gress	Area (% ²)		dow and Area (NZ)	THE	rel (pr	Walt Exception	m 10	etus .	Yerifled Existin Condition
Interipr Floor ex univ Garage	House 2nd floor	Flour Int	ee /	ú.	0/4		10		n/a	4/3	ė.		. Call	ring	No.
Interior Floor Over Noune 245 Roor	House 2nd floor	Figur Int	80 ,	yla .	n/a	Г	645		n/a		8		tie	sing	No
Poter	Gerage	Wat G	r . 1	80	front		186		112	30		none	Alt	and .	. 90
Grant at	Corage	Mark Co	- 3	96	149		126		+	90		hone	Ale	ored.	No
Cook each	Garage	Wall G		10	Right		146		0.	190		none	- to	eting .	No
SNAHA	Garage	Might Ga	P	10	Right		40		0	90		none	Alt	and .	No
AFFIC															
- 01		-	12	C .	. 01	- 1	P4)		15	04	.01	08		09	20
Name		Const	-	0	Per	ų.	Real Rive (a in 12)		24	hed (minute)	Radia Barris		ef 16	atus	Verified Existin Condition
Atticies		- Ao	of ea	1-1-1	West	tied .	17,415	U	11/	485	T-SNo	. No	tx	uting	No.
Attion		Noo	Enew		Ventila	red .	4		1.1	0.85	No	No		irw	1/4
FENETRATION /	GLAZING		_					-				-			
41	- 11		04	- 01	.06	-	08	09	38	- 11	12	13	14	15	10
Name	Type	Surface	Orientation	Asimuth	Wides	meig (F)		Area (N°)	U-factor	U-factor Source	9460	SHGC Source	Exterior Sheding	Status	Unrifled Existing Condition
Windex	Window	Wilel	inh	210			1	24	1.38	MINC	0.8	NHC	Buglove	Donne	g No
Wind-en I	Wedne	Walles L	jarit .	110			- 3	18.3	1.28	WKC	1.0	WHIC	Bug Screen	Ewister	g No
Vindex 3	Window	Willes L	jeft.	279			1	5.	1.29	MAC	0.8	WHE	Bug Server	Course	g No
Wind-en 6	Wellow	Maller L	iaff	231			1		1.28	WINC	8.8	NINC	Bug lerner	(auto	E No
Vind-ex3	Window	Walter L	jeft.	276			1	12	1.26	WHIC	0.8	NIEC	Bug lerver	District	g No

iculation Descrip	ption: Title 24	L Analysis					input	File No	ome: 2541	Sycamor	e_additio	n_x2.rbd	9		
NEITHATION / GL	AZINS.													7.5	
81	62	88	04	.05.	- 86	87	-04	09	18	11	13	13	14	15	36
Name	Type	Surface	Orkelation	Astmuth	Wrupps (N)	mulgita (PI)	Mark	Area (N²)	U-factor	U-factor Source	SHEC	SHOC Source	Exterior Shading	Status	'tierRed Existing Condition
Wind-ex 7	Window	Wall-ex-B	lack	0.			1	9.5	1.26	NRC	6.6	NIRC	Bug Screen	bisting	No
Windes 8	Wodow	Walterd	tock	. 0			1.	17.8	1.28	N/RC	0.8	NIE	Bug Screen	finiting	No
Word-ex 9	Window	Walters	Section	.0			1	17.8	138	NAME	6.6	NHC	Bug Screen	Existing	No
90seres	Wishing	Webles 8	Section .	- 10			1.	40	1.25	NAC	1.5	NINC	Bug kreen	Existing	1to
Wind on 10	Window	Not-skill.	right	90			1	16.4	1.38	NAC.	1.8	NEC	Bug lareen	Dotting	No.
Vind ex 13	Window	Waterd	Right	90			1	9	1.28	WHIC	4.8	WHE	Bug Screen	Existing	No
(Oper-ex2	Window	. Wolfen R	Right	30			1	42	1.25	WINC	11	NRC	Bug Screen	.Earstong	No
Vind es IJ	Window	Mall-en-F	Front	180			1	6.7	1.38	NAC-	4.8	NIEC	Bug lareen	Desire	No
Vind ex 13	Window	Waterill.	aft.	270			1.	26	1.28	WIRC	1.6	NIEC	Bug Screen	Ecuting	No .
Vindes 14	White	Wall-east 2	Jaff.	779_	17	1	18	35	3.28	N/RC	_0.0	NFRC	Bug Screen	Exiting	No
Wind ex 15	Window	Walles-6.2	. Nack	00	П		1	8.7	3.26	MRC	0.8	NRC	Bug Screen	Isintry	No
Vind ex 16	Window	Walles N.2	1991	. 10	-		L	.15	1.78	MINC		NFRC.	Bug Streen	Linny	No
Wind-r-W1	Window	Waller	Front	180 1	.6		3.	'34	7036	ferec.	0.67	NRC	Bug Screen	New	16/8
mind n W12	Window	Walter	Front	180	. 6		1.	34	0.58	WRC	0.67	WIRC	Bug Screen	New	1/4
Ulloor n-113A	Window	Water	Front	180	- 6	6.67	1	40.02	.0.58	16780	0.67	N/RC	Bug Screen	New	11/4
Wind-n-W3	Window	Wallet	Lift.	270		- 2	1	12	0.56	NAC	0.67	NHC	Bug licreen	New	10/4
Wind-n-W1.1	Window	World	Refet	90	- 6		1	34	0.18	NEEC	0.67	NEEC	Bug Screen	New	0/4

01	62	83	96	95	
Name	Side of Building	Area (% ²)	U-factor	Status	Verified Existing Condition
Door-ee	Merior Wall ex to Cotage	30	85	taking	No
Sardwork -	Smithet	112	- 1	See	0/0

CERTIFICATE OF COMPLIANCE		CF1R-PRF-Q1E
Project Name: 2847 Sycamore addition	Calculation Date/Time: 2020-05-03118:14:29-07:00	(Page 6 of 11)

Calculation Description: Title 38 Analysis.

01	42		94	85	96	87	06	66
Name	Zone	Area (RZ)	Parimeter (90)	Edge treat. B value and Depth	Corpeted Fraction	Heatput	Status	Writted Existing Candition
Web On Srade-ee	Surage	ins	54	None	an.	An	twitte	No
SSIAN-Om Grader-a	Galage	.101	11;	None	DN .	, No	Altered	No.

Input File Name: 2517 Sycamore, addition, v2 ribst 9

81.	02	83	04 05		- 06	0.7		
Construction Name	nstruction Name Surface Type Construction Type Framing		Total Cavity B-value	Interior / Esterior Continuous B usine	U-factor	Assembly Layers		
West ex	Exterior Walls	Wood Frames Wall	2H Ø 16h 0.C	10,	Frie	0.347	inside French Gypsum Board Cavity / Frame: no insul. / Zell	
Wall tree	Einerer Wells	Wood Foarned Walf	2M#HROC	*11 O V I	DER Nove/Nove	21,068	Inside Firebi. Gypsum Board Carity Frame: B-13 Jul- Southing Insulation: Wood Salling Meathing docking Exterior Finish: Wood Salling Neuthing decking	
Wall Car	Exterior Waffs	Wood Framed Wall	24 @ 16 m. 0. C.	80	None / None	0.387	traids Freich: Gypsum Board Cavity / Frame: no Insut. / Self	
Wall tel NO	Interior Worls	Wood Framed Wall	24 Ø 16 × 0. C	84	None / None	8.277	Inside Freich, Gapturm Board Cavity / Frame: no insul. / 2n4 Other Side Freich: Gapture Board	
Waltedoo	Interior Walls	Wood Framed Wolf	24 Ø 16 in 0.C	84	None / None	6377	Inside Florich: Gypsum Board Caulty / Frame: no Insul. / 2nt Other Tide Florich: Gymsum Board	

ption Number: 220 PG 125752464 000 000 0000000 000	Registration Dats/Time: 3020-06-04 16:28:34	HERS Provider	Decorre
ding Energy Officiancy Standards - 2019 Residential Compilance	Report Version: 2019:1.509 Schema Version nev 20200/201	Report Generated: 3020-05-03	

MATION			Same: 2847_Sycamo	5-03138:14:29-0 re_addition_v2	
					_
Project Name	2817 Sycamore addition				
Ron Title	Title 24 Analysis				
				-	
City	Santa Clara, CA	- 05		landards Version	2007
Zip code	95/61	81		Johnson Version	CBECC-Res
		DR			
		- 11			
		10			
		15			
		- 0	Parastration	Buestage U factor	0.38
					-
		-11	ADM Conditi	ioned Floor Area	0/8
is Nortural Gas Available?			> III		
	(MER	EY USE SUMMARY	0 .	6.	
Energy Use (ATEN/W ⁴ -yr)	Standard Design	Prop	social Design	Complian	ce Moglin
Space Weating	93.9		89.39	. 4:	54
Space Cooling	327.93		130.54		
			13		
			-		
Compliance Energy Total	200		252,99		
under: 200 PD 1007ND48A-000-000-0000	0.00	ngintration Dats/Tin	MC 2000-00-04 M-28-04		RS Provide
	Nerval Compliance 6	sport Version: 2013	0.000		port Sener
	For the Committee of th	Subditing complete with Computer Individuals of Subditing shows an impact following use and transport Subditing shows an impact following use and transport Subditing shows an impact following shows the Subditing shows a subditin	Gray best Charles Co. B. B. Gray Best Charles	Comparison Com	Decision Decision

HERS FEATURE SUMMARY							
	of the features that must be find drig tables below. Registered CF				gy performance for this com-	yuter analysis. Additional	
Building level senthusburns - Numbe - Pante - Cooling System Verthusburn - Numbe - Num	e Inflications Vanifications	Cald	CERTS	Silne			
BUILDING - PEATURES INFO		V-011	to be like to	2, 1111			
- 41	62	- O -	SPROS	LIDER D	- OK	47	
Project Name	Conditioned Floor Ava (1	Number of Dwellin	Number of Becisions	Number of Zones	Number of Vertilation Cooling Systems	Number of Water Heating Systems	
2387 Sycamore addition	2777	1	4			1	
ZONE INFORMATION							
91	92	60	94	65	96	97	
Zone Name	Jone Type	MVAC System Name	Jone Floor Area (N°)	Aug. Ceiling Insight	Water Heating System 1	Water Heating System 2	
House Ist Foor	Carditioned	HVAC es	1838		Driet or	14/4	
Name 2nd Room	Conditioned	WAC ex	455		Delite	5/4	

01	02	60		65	96	97
Zone Name	Jone Type	MVMC System Name	Jone Floor Area (ft ²)	Aug. Colling Insight	Water Heating System 1	Water Heating System
House Int Foor	Conditioned	HVAC es	1819		Drift or	16/4
Nouse 2nd Roor	Conditioned	HIAC ex	455		Delite	N/A
Addition	Conditioned	HOLE III	499		268.0	76/6

Zone Name	Jone Type	MVMC System Name	Jone Floor Area (ft ²)	Aug. Ceiling mulghe	Water Heating System 1	Water Heating System 2
House Int Foor	Conditioned	HVAC es	1819		Drift or	16/8
touse 2nd floor	Conditioned	HIAC ex	455		Delite	16/4
Addition	Conditioned	HOLE m	499		268.0	76/8

CERTIFICATE OF COMPLIANCE		CF1R-P9F-01
Project Name: 2847 Sycamore addition	Calculation Date/Time: 2020-05-03138:14:29-07:00	(Page 3 of 1
Calculation Description: Title 34 Analysis	Input File Name: 2847, Sycamore, addition, v2.rbd;9-	

61	62	83	84	- 05	.06	07	06	- 89	38	- 11
Name	Zane	Construction	Asimuth	Orientation	Green Arms (% ²)	Window and Door Area (NJ)	Tit (deg)	Well Exceptions	Status	Verified Existing Condition
Visit-exit.	Mouse 3st Rose	Willer	270	Seff	381	575	. 90	none	Doining .	No
Wall-en-B	House 1st Roor	Weller	9	Báck	436	94.1	90	none	Existing	No.
Wall-on B	House 1st Roor	Walter	.90	Right	399	67.4	100	none	Existing	No
Wall-oad	House 2nd floor	Willen	180	front		6.7	90	none	froring	No.
Wuterill	House 3nd Roor	Weller	270	1eft.	306	II.	90	none	Existing	No.
Wolf-en 8 2	House 2nd Roor	Walles	- 0	Back	114	6.7	90	none	Existing	. No
Wither # 2	House 2nd Roor	Walter	90	Fight	292	16	90	none	Existing	No.
vist o f	Addison	Willnew	280	Frant	372	98.02	90	none	New	10/4
Websit	Addition	Wallness	270	Left	332	1.7	. 90	none	New	-11/8
station 8.	Addition	Wall new	16"	191/	74	17.08	96	nine	. New	m/a
Interior Wallies to Garage	House Ist Room-Garage	Mail let us	m_	d#C	. 175	1.3,	140		Existing	160
Interior Wall-ex. 10 After	House 2nd Room-HAbits-ex	Bulletan	100	ERS	iio R	OAL	D EAR		Contrag	. 96
trearter Wall-m. to Garager	Addition/villare ge	Wall Int New	rule	1/9	58		n/a		New	15/6
Coting ex	House 1st Room	Ceiling attic ex	16/4	1/9	1364	n/e	76/4		Drinting	No
Caling ex 2	House 2nd Roor	Carling artic ex	16/9	1/4	530	n/a	n/a		Existing	. No
Celling is	Addition	Colling attic new	10/9	1/3	419	15/2	76/9		New	1/4
GC#fing-ex	Garage	Carling attic Gar	76/4	1/9	385	n/a:	16/8		Existing	- No
SColing alt	Gerage	Carling artic Sar	10/4	0/6	103	10/8	76/8		Altered	No
Exterior Floor ex	House 3nd floor	Floor flained as	16/4	0/4	45	19/4	m/a		Existing	No.
Floor Ower Crawfigurer-ex	House Let Roor	Floor count ex	4/4	1/4	1819	4/4	n/a		bisting	No.
Ploor Over Crawlopers +	Addison	Floor crawl new	ru/a	0/4	499	n/a	nde		New	0/6

Number: 520-P2195750484-000-000-000000-0000	Registration Dats/Time: 2020-06-04 16:28:34	HERS Providen
Energy Officiency Standards - 2019 Residential Compliance	Report Version: 2019.1.108 Schema Version rev 20200381	Report Senerated: 3020-05-03 18:05-05



CF1R-P9F-01E (Page 1 of 11)

CF1R-PRF-Q1E (Page 2 of 11)

Tel. 510-789-5651

ADDITION TO SINGLE FAMILY RESIDENTIAL AT 2847 SYCAMORE WAY, SANTA CLARA, CA 95051

SANGWOOK LEE

△NO DESCRIPTION DATE

PROJECT NO: 2020-030

SHEET TITLE TITLE 24 **ENERGY** COMPLIANCE FORM-1

DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS

T1.0

2019 Low-Rise Residential Mandatory Measures Summary

Requirements t	or Ventilation and Indoor Air Quality:
§ 150.0opt:	Requirements for Ventilation and Indoor Air Quality. At dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(s)(f.
§ 150.0(c)1C	Single Family Detached Dwelling Utols. Single furthy detached dwelling units and standard dwelling units not sharing tallings or foora with other dwelling units, occupiable spacins, public garages, or commercial spacins must have mechanical sensitivities and septimentally determined by ALHPAUE 02.2 Sections 4.1 1 and 4.2 and as specified in § 150,000?*.
\$ 150 Djej1E:	Multimority Attached Desiling Global. Multifluming stached positing union must been rescharious artiflum provided at trains in accordance with Equation 15:0-5 at must be either a biological spatien or continuous popyly or controls exhaut system. It is absented system is not used, all union in the building must use the same system space and the duelling unit envirope isologie must be 5.0.0°M at 55°P of 2.2 in the watery or squares for of developing unit envirope surfaces was and envirope in concentrace with Millermore Resoluted algorithms.
\$ 150.0001F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that some multiple dwelling units must be balanced to provide ventilation and/on to each dwelling unit smooth at a rate egoal to be greater than the rate sportfood by Cipution 155-5-5. At unit antibuse must be waited 20 provide of the unit with the besets affice and as it salets to the involvable of its instruction of the unit with the besets affice and as it salets to the involvable of its instruction to each affice some features.
\$ 150:20x1G	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHEAE 82.2.
\$ 150.0(a)2.	Field Verification and Diagnostic Testing. Desting unit vertilation softwarmant by verified in accordance with Reference Residential Appends RA3.7 A Kitchen range hood must be verified in accordance with Reference Residential Appends RA3.7.4.3 to certime to a raised by Hrif a comply with the artifice rates and our departments as specified in Section 5 and 7.2 of ASSEASE GE 2.
Plus and Sea S	ystems and Equipment Messures:
§ 110.4(s);	Cartification by Manufacturers. Any pool or past indiring system or exponent must be certified to have all of the following a thorough allowing a formula efficiency and adjusting the themselves being a permittent weatherproof plate or card with operating instructions, and must not use execution the provisions being a permittent to the execution of the provisions are provided as the provision of the provisions are provided as the provision of the provisions are provided as the provision of the provision of the provision of the provisions are provided by the provision of the prov
§ 110.4(b)1:	Piping. Any pool or spaleoting system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated audio I and return lines, or built in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(to):	Directional triers and Time Switches for Peols. Pools must have directional roles that adequately mix the pool water, and a time switch that will allow all purint to be set or programmed to run only during off-peols electric demand periods.
§ 110.5:	Plot Light. Natural gas pool and aga heaters must not have a continuously burning pint light.
g 150.0yp	Pool Systems and Equipment Installation. Rescential pool systems or equipment must need the specified requirements for pump storig, flow rate points, filters, and valves."
Lighting Measu	ME.
§ 110.9:	Lighting Cerebra and Components. All lighting certal devices and systems, ballads, and luminaires must need the applicable requirements of § 115.9."
§ 150.00(1A	Luminaire Efficacy. All installed luminaires must need the requirements in Table 150.1-A.
§ 150.09318:	Blank Electrical Boses. The rumber of slectrical boses that are more than five fact above the finished floor and do not contain a Luminarie or other device must be no greater than the number of bedrooms. These electrical boses must be served by a dimmer, surancy sensor control, or fair speed control.
§ 150.0(k)1C	Recessed Doerlight Luminaires in Cellings. Luminaires recessed into callings must need all of the requirements for insulation contact (IC) labeling, air leak sgs. sealing, maintenance, and socket and light source as described in § 150.0(x) C.
6 150.0001D:	Electronic Ballosts for Fluorescent Lamps. Salosts for Fluorescent lamps rated 13 valts or greater must be electronic and must have an
§ 150.0(k)1E:	output frequency, no less train 20 kHz; Night Lightes, Step Lightes, and Parth Lightes. Night lights, niep lights and path lights are not required to comply with Table 150 D-A or be controlled by veximicy sensions provided they are issed to consume so more than 1 was of power and emit no more than 150 Lumens.
§ 150.00(1F)	Lighting triaged to Exhaust Fans. Lighting relegal to exhaust fans (except when inclaims by the manufacturar in killchor exhaust hoods) must need the applicable requirements of § 150 (alc.).
§ 150.00(1G:	Scree based luminaires. Screw based luminaires must contain larges that comply with Reference Joint Appendix JAB."
§ 150.0(q)1H	Light Sources is Enclosed or Recessed Luminaires. Lumps and other separable light sources that are not compliant with the JAB elevated temperature separaments, including making requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(x)11	Light Sources in Drawers, Cablinets, and Linen Closets. Light sources internal to drawers, cabinetly or linen closets are not required to comply with Table 190.0 A or be controlled by scarcely serrous provided that they are stated to consume on more than 3 settle of power, entring more than 150 settlems, and are exposed with control state of above, and for more than 5 settlems, and are exposed with control state of above.
\$ 150.0012A:	Interior Switches and Controls. All forward phase out dimmers used with LED light sources must comply with NEMA SSL TA.
§ 150.00x280	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems."
\$ 150.0k(2C	Interior Switches and Centrels. Lighting must have readly accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
\$ 150.00k320	telerior Switches and Coetrols. Controls and equipment must be installed in accordance with manufacturer's instructions.
	Interior Switches and Controls. Controls must not bypass a dimmer, occupant sersor, or vacancy sensor function if the control is installed to
\$ 150 bagge:	comply with § 150 (00).



	2019 Low-Rise Residential Mandatory Measures Summary
\$ 150.0(x)2G:	Interior Switches and Centrels. An energy management control system (EMCS) may be used to comply with control requirements if it provides functionality of the specified control according to § 110.0: Invests the installation Certification requirements of § 130.0: A meets of the management of § 130.0: A meet of the Centrels of § 130.0: A meet of the Centrel of § 130.0: A meet of § 130.0
\$ 150.0032H	Interior Switches and Controls, A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(s) if it provides the functionality of a dimmer according to § 110.0, and complies with all other applicable requirements in § 150.0(s);2
\$ 150:0(421:	Interior Switches and Controls. In bettrooms, garages, learney rooms, and allify coms, at least one furniture in each of fixes spaces must be controlled by in companie service or access; service providing automatic off bucclosally. If an acceptant service is installed, it must be intakly configured to menusion operation using the manual control required under Section 155 00;00.
\$ 150.00(22	Interior Switches and Controls. Luminaires that are or contain light sources that med Reference Joint Appendix JAB requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls."
5 150.00x29C	Interior Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
\$ 150.0(x)5A:	Residential Outdoor Lighting. For single-hardly residential buildings, outdoor lighting promanently recurried to a residential building, or to other buildings on the same fail, must inself the regisiment in lens (§ 150 (b))(34) (Old and OFF earthch) and the requirements in either (a retired of 150 (b))(34) (b) (and (b)) (b)(34) (b) (and (c))(b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
\$ 150.09(38)	Residential Outloor Lighting. For tow-the recidential building with floor or more desting units, subtoor lighting for private patios, entoroceal, belacories, and prothes; and neothers parking lots and carports with less than eight various par also must comply with either § 150.09,354 or with the applicable reparaments of Sections 110 9, 1300, 1302, 1302, 1 407 and 141.0.
\$ 150.0(x)SC:	Residential Outbook Lighting. For low-the residential buildings with thur or more desting units, any outbook lighting for residential penking title or carports with a boal of eight or more vehicles per alls and any outbook lighting natir regulated by § 150,00/200 or § 150,00/200 must compay with the applicable requirements in Sections 11-50, 1301, 1302, 1304, 1407 and 1413.
§ HOOKK	Internally illuminated address signs, internally illuminated address signs must comply with § 140.0; or must consume no more than 5 waits of power as determined according to § 150.0(c).
§ 150.00(6)	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.3, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(4)6A	Interior Common, Areas of Low-rise Multifamily Residential Buildings, in a low-rise multifamily residential building where the stall interior common area in a single building equals 20 persect or less of the floor area, permanently installed kyrtling for the interior common areas in that building must be comply with Table 1920-A and be controlled by an occupant sensor.
§ 150.0(x)68:	common area in a single building diguite more than 20 percent of the floor area, perminently installed lighting for the interior common areas in that folding must. L. Correly with the application requirements in Sections 110.9, 100.0, 100.1, 100.5 and 110.0, and
Solar Ready Bui	idings:
§ 110.10001	Single Family Residences. Single family residences located in subdivisions with 10 or none single family residences and where the application for a initiative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a protocytical system in making, may comply with the requirements of \$ 1.0° (30) in rough \$ 1.0° (30) in rough \$ 1.0° (30).
§ 110.10(s)2:	Low-rise Multibrarily Suiddings. Low-rise must family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(a) through § 110.10(a).
§ 110.10(b)(1:	Minimum British Zoor Ken, This seat zone mout bear a minimum before an a stored before the same zone must comply with concess, produces, some arrivation of produces, produces existing on a specimen as produced in Test, 14 or 14 or 16
6 110,109(2)	Azimuth. All sectors of the salar zone located on sleep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
6 110 100 CA	Shading. The sciar zone must not contain any obstructions, including but not limited to vents, chimneys, architectural features, and not
§ 110.10(1)AL	mounted equipment. Shading, Any stateution located on the roof or any other part of the building that projects above a solar zone must be located at least two of fine distance, measured in the footpartial place, of the hospit difference between the highest point of the obstitution and the historiatal projection of distance.
§ 110.10(b)4:	the rearned point of the suiter core, measured in the vertical planet. Shouthard Design Leads on Constitution Decuments, for areas of the roof design sted as a solar zone, the structural design scale for roof dead test and roof live load must be clearly included on the construction documents.
\$ 110.1003	Interconnection Pathways. The construction documents must indicate a location reserved for meetiers and metering equipment and a justilisely reserved for musting of conduct from the solar zone to the point of interconnection with the selectional service; and to single tunify enacherous and control search existing systems a justilisely reserved for most justilisely from the solar prote to the easter heading system.
§ 110.10em	Documentation A copy of the construction discinents or a comparable document including the information from § 110.10(c) through § 110.10(c) must be provided to the occupant.
£ 110.10(e)1:	Main Electrical Jervice Panel. The main electrical service panel must have a minimum busber rating of 200 amps.
§ 110.10(c)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit benefits for a finite production and the production and



2019 Low-Rise Residential Mandatory Measures Summary

Building Envelop	Warner Warner
Designing Enverop	
\$ 110.6(a)1:	Air Leakage, Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per equare foot or less when tested per NFRC 400, ASTM E383 or AA86V NDMA/CSA 1011 S 2/6440-2011.
\$ 110.60x05	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
\$ 110.6(0)	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHSC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stopped."
\$ 110.7	Air Leakage, All jurits, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulted, gasketed, or weather stripped.
\$110.8iac	Insulation Certification by Manufacturers. Insulaton must be settled by the Department of Consumer Affairs, Bureau of Hausehold Goods and Services (8HOS).
\$ (10 Right	Insulation Requirements for Heated Stab Floors. Heated stab floors must be insulated per the requirements of § 110 A(g).
\$ 110.800	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10.1(1) when the installation of a cool not is specified on the CFTR.
\$ 110.8(E):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
\$ mouse	Calling and Rather Roof Insulation. Minimum 8.2 in maximum is smooth-time rating; or the energistic always by Caster must be exceed 0.000. Minimum 8.7 St or exceeded everages U-board of 0.000 or less in our later and attention. And access doors must be experienced, section or maximum fractions for 0.000 or less and the energistic ansiendation is making in the energistic ansiendation insulation and the entitles and the energistic ansiendation in the entitle of the energy of the entitle of t
§ 150,000	Leose-fill Insulation, Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ (50.0)()	Wall insulation, Minimum R-13 insulation in 2x4 in th wood faming wall or have a U-factor of 0.102 or less, or R-20 in 2x8 with wood faming or have a U-factor of 0.517 or less, or R-20 in 2x8 with wood faming or have a U-factor of 0.517 or less, or R-20 in 2x8 with word family useful mast mark and in 512 in 4x in 82. Washington walls must mark and 512 in 512 in 4x in 82.
§ (50.0(d)	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor."
g 150.00%	Side Edge Inevalue. Sub-odge invalidor must meet all of the following have a water absorption tale, for the insulation material stone without fourties, no greater than 2 persons to the protected from physical damage and UV light determinant, and, then installed as part or a hadred stale floor, once the requirements of § 118.80;
ş isologin	Vapor Retarder. In climate zones 1 through 16, the earth foor of unvented clavel space must be covered with a Class II ar Class II support returner. This requirement about applies to controlled restriction care space for buildings corrupting with the ecopolism (s. 150.00). Vapor Retarder, in climate zones 4 and 15, a Class I or Class I wapor returner mustbe related on the controlled on
\$ 150.00g2 6 150.00g2	resulation in all extense walls, vertied affice, and unwested affice with air permeatite insulation. Fenestration Products. Ferrestration, including skingtills, separating conditioned space from unconditioned space or indicons trust have a
-	maximum U-factor of 0.58; or the weighted average U-factor of all ferrestration must not exceed 0.58."
	rative Gas Appliances, and Gas Log Measures:
§ (10.5(e)	Plot Light. Continuously burning plot lights are not allowed for indoor and outdoor finishoes.
§ 150.0se(1)	Closable Doors, Maconry or factory-built freplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion intake. Maconly or factory built freplices must have a combustion outside air intake, which is all least six square inches in area and is equipped with a readily accessible, operable, and fight-fitting damper or combustion-air control devote."
§ 150.0(4)3:	Flue Damper. Nasovry or factory-built freplaces must have a flue damper with a readly accessible control."
Space Condition	ing, Water Heating, and Plumbing System Measures:
\$ 110.04 110.3	Cartification, Hosting, vertilation and air conditioning (H/AC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be cartified by the manufacturer to the California Energy Commission
§ (10.25a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K
\$ 110,250	Controls for fixed Pumps with Supplementary Excision Resistance Healers. Next jumps with applicantinary seconds resistance Healers. A leaf jumps with applicantinary seconds resistance Healers. The pump with a second in the resistance of the pump without and in which the color of temperature for compression healers and resistance for compression healers and the pump without and in which the color of temperature for supplementary healers, and the cul-off temperature for compression healers as highly for their for cell off temperature for applementary healers.
\$ (10.2(c)	Thermostats. At heating or cooling systems not controlled by a central energy management control system (EMCS) much have a settack thermostat.
§ 110.3(c)4:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release wifer. backflow prevention, guing prinning outly laddation wifer, and recirculation loop connection requirements of § 110,3014.
\$ 110.3kg/k	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBu per hour (2 kW) must have lookson valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
\$ 110.8	Pliet Lights. Continuously burning plot lights are prohibited for natural past fan type central furnaces, household conking appliances (accept appliances without an electrical supply voltage connection with pilot lights that consume less than 150 little per hour); and pool and spa heaters.
	Building Cooling and Heating Loads. Heating an live cooling leads are calculated in accordance with the ASHRAE Hardbook,



2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five heat from the outlet of any dryer
\$ 150.0pgab	Liquid Line Orier. An conditioners and heat pump lystems must be equipped with liquid line filter others if required, as specified by the manufacturer's instructions.
\$ 150.001	Storage Tank Insulation, United Institute Tanks, such as storage tanks and trackup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation or R-16 internal insulation or R-16 internal insulation R-12 external insulation or R-16 internal insula
\$ 150.0gzw.	Water Prints, Sales Mater-handing System Prints, and Space Conditioning System Line Insulation. All transits for sales printy must be insulated as position in Section (SSI) of the Calciman Pulmage (SSI) in addition, the Solesing proper condition and these a remount regulation will Dictions of one or for a molecum insulation. Pervision of the let of cost sales prips will be more discrete let pass for a molecum insulation. Pervision of the let of cost sales prips will be more discrete let pass for a molecum discrete let pass for a molecum discrete let pass for a molecular section of the sales prints of the molecular discrete lets as a few of that is associated with a discrete for sales reconsidation system, from the heading source to stronge task or between tasks, pointed below pages, and for the fewaring source to below the fewaring source.
	Insulation Protection. Piping insulation must be protected from damage, including that due to surright, moisture, equipment maintenance, and

\$ 150.0((3)	wind as required by Section 120.3(b). Insulation exposed to essafter must be water retardant and protected from UV light (no adhesive layers). Insulation covering children value painty and infligerant actions by pring busined must avoid us of a protected by, as Class to Class 1 and 1 super retardant Prop insulation to be being paide must be installed on a weempood and non-constraint casing as inserts.
\$ 150.0pg/t:	One or Program Mater Marking Systems. Systems using past or programs seem health to seem reducted dending units multi-table all of the Moning. An ideal of See 1, 20 any epictories resemble to elevative produced by the second count, with these leaf of the select seem seem about dentity or the select seem of the selec
§ 150.00162	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
	Salar Water heating Systems. Solar easier heating systems and collectors must be cartified and retail by the Sylar System and Cartification.

terça:	Solar Water-besting Systems. Solar water-healing systems and collectors must be critified and rated by the Solar Rating and Certification Carponation (SRCC), the International Association of Pulmibing and Mechanical Officials. Research and Tasting (APMO R&T), or by a listing associa that a approved by the Seculular Director.	

	Ducts, Insuli	athor install
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660	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.5 of the California Mechanical Code (CMC). If a contractor installs the insulation meets this requirement.
Djesjit.	CIK Completion. All or destination symmetric contract and previous must come the requirement of the COS (\$40.00, \$40.0

§ 150.0(m)2:	reactives and closures, joints and seams of duct systems and their components must not be assess with clash back nutber adhesive duct topics unless such tapes unless text tapes is used in combination with reado and time bands.
# 150 Access	Field-Fabricated Duct Systems. Field-labroated cust systems must comply with applicable requirements for pressure-sensitive tapes.

§ 150.0(m)?.	Backdraft Damper. Fan systems that exchange einbetween the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readly accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
	Protection of Insulation, Insulation must be protected from damage, surright, moisture, equipment maintenance, and wind, Insulation expose

§ 150.0(m)(it)	Protection of Insulation, Insulation must be protected from damage, surright, mointure, equipment maintenance, and wind, Insulation on to establish insulation expended in such the statistic for outdoor service. For example, protected by surminum, sheet must, parented cannot, or plants cover. Chall have insulation must be protected as above or governed with a custing that is water networked and provides sheeting from size insulation.
§ 150.00n010:	Pergus Inner Core Fies Duct. Purgus inner core fies ducts must have a non-porcus layer between the inner core and older expor barrier
6 150 00m011	Duct System Susting and Laskage Test. When space conditioning systems use forced an duct systems to supply conditioned air to an occupiable space. The ducts must be easied and duct leakage tested, as confirmed through field verification and diagnostic testing, in

§ 150.0(w)12	Air Filtretion. Space conditioning systems with ducts exceeding 10 feet and the supply side of vertilation systems must have NEPO' 13 or equivalent filters. Filter to space conditioning systems must have a bar lovel high or can be one with it stand per Equation 150-0A. Pressurings and whether your feet employments in \$150.09(12, Filters must be accessible for regular service.)
	Space Conditioning System Airflow Rate and Fox Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole

§ 150.0(m)13:	Space Conditioning System Arthur Rate and Fire Efficacy, Space conditioning systems that use ducts to supply coving must have a how to the parament of a static pressure proteit, or a premierably relatived dated pressure protein in the supply parties. Afficient sets 250 CFM pair to of control condition grouples, and an amounting and than efficiency 5.5 of waiting cFCFM pays for an artist excellent and 5.5.5 which pays for the protein and pays for a state of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of committee or 25.5 of 25.5 which pays for the passion of 25.5 of 25.5 which pays for the passion of 25.5 of 25.5 which pays for 25.5 of
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Provide responsibility for the accuracy of the information.



B E Y O N D S P A C E DESIGN & DEVELOPMENT

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ADDITION TO SINGLE FAMILY RESIDENTIAL AT 2847 SYCAMORE WAY, SANTA CLARA, CA 95051

DESIGNED BY: SANGWOOK LEE

KEVISION HISTORY - THIS SHI

PROJECT NO: 2020-030

SHEET TITLE TITLE 24 **ENERGY** COMPLIANCE FORM-2

DATE: MAY 05, 2020

CONSTRUCTION DOCUMENTS