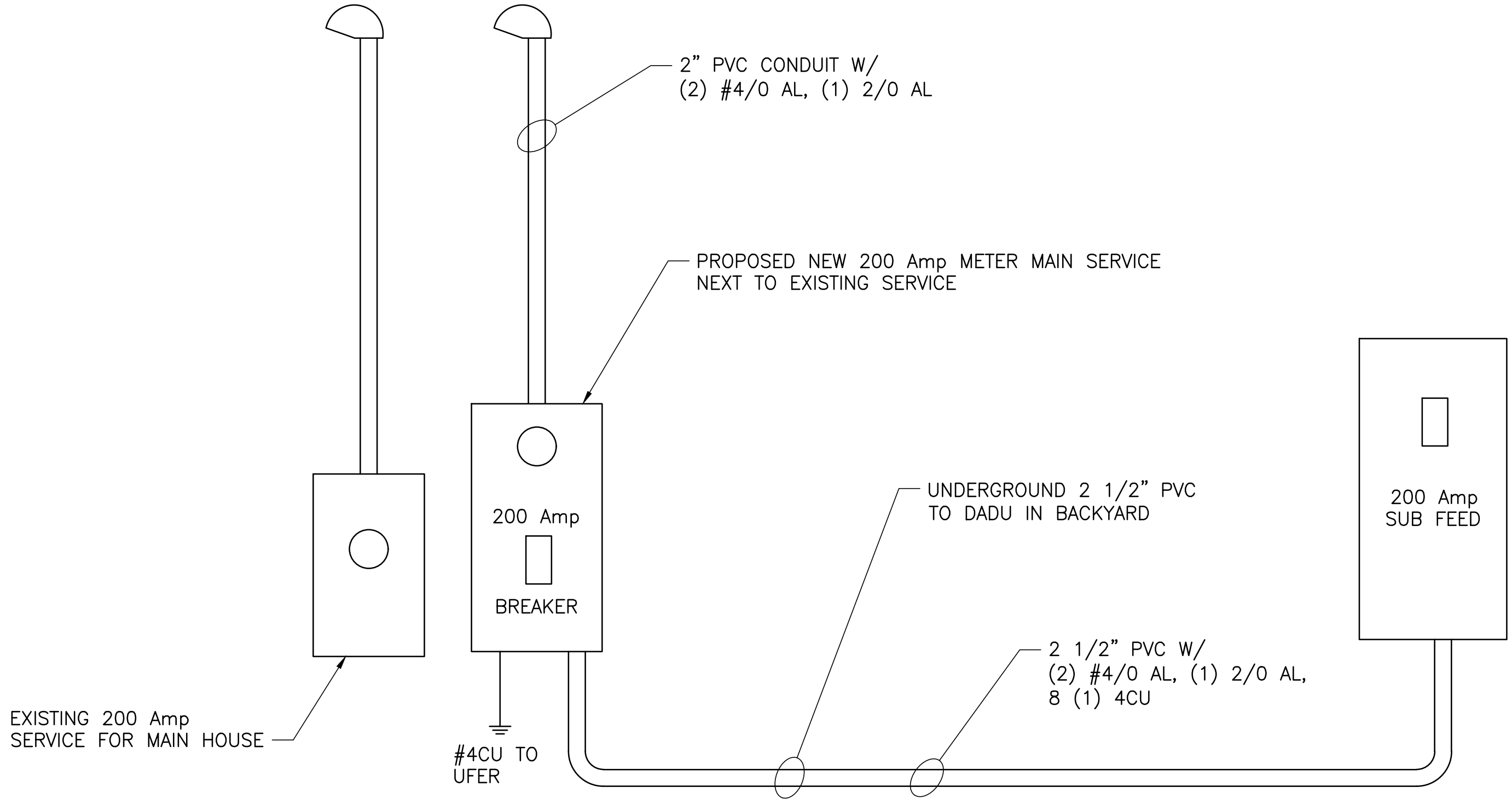




ONE INCH AT FULL SIZE	REVISIONS		THIS DRAWING IS THE PROPERTY OF THE CITY OF SEATTLE AND ITS SEATTLE CITY LIGHT DEPARTMENT. IT IS PRODUCED SOLELY FOR THE USE BY SEATTLE CITY LIGHT AND OTHER CITY DEPARTMENTS. THE USE, REPRODUCTION, AND TRANSFER OF THIS DRAWING AND/OR ANY INFORMATION CONTAINED IN THE DRAWING REQUIRES THE WRITTEN PERMISSION OF SEATTLE CITY LIGHT.	ENDORSEMENTS		 Seattle City Light Distribution Engineering	PROJECT TYPE RISER DIAGRAM		SHEET 1 OF 1			
	DATE			SIGNATURE			PROJECT NAME SFR AND DADU PLAN		WORK ORDER NO.-TASK			
	DRAWN BY: CHECKED BY: APPROVED BY:			DRAWN:			PROJECT ADDRESS		CITY			
	WORK ORDER #:			CHECK:			APPROVED FOR SEATTLE CITY LIGHT		DRAWING NO.		REV. NO.	
	DESCRIPTION			APPROVED:			PROJECT ENGINEER		SHEET CONTENTS		0	
						QUARTERSECTION NUMBER(S)		SECTION / TOWNSHIP / RANGE				

NEC STANDARD ELECTRICAL LOAD CALCULATION FOR SINGLE FAMILY DWELLINGS

(ONLY FOR SERVICE RATINGS OF 120/240V, 225 AMPS MAX)

OWNER: JOHN DOE

LOCATION: 123 MAIN St – SFR

TOTAL FLOOR AREA OF DWELLING (NEC 220.12): 2223 SQFT.

FACTOR	QUANTITY	VOLT AMPERES (VA)
GENERAL LIGHTING		
1. GENERAL LIGHTING (SQFT x 3 VA/SQ FT) (TABLE 220.12)	3 x 2223 SQFT.	6669
2. SMALL APPLIANCE CIRCUITS (1500 VA PER CIRCUIT) (NEC 220.52(A)) (MINIMUM 2)	1500 x 2	3000
3. LAUNDRY CIRCUIT (1500 VA PER CIRCUIT) (NEC 220.52(B))	1500 x 1	1500
4. TOTAL GENERAL LIGHTING LOAD (ADD LINES 1, 2 & 3):		11169
5. FIRST 3000 VA @ 100%:		3000
6. TOTAL GENERAL LIGHTING LOAD – 3000 = 8169 @ 35% =		2859.15
7. NET GENERAL LIGHTING LOAD (PER NEC 220.42) (ADD LINES 5 & 6):		5859.15
*FIXED APPLIANCES (IF INSUFFICIENT SPACE, USE BACK):		
• GARBAGE DISPOSAL	✓	750
• BATHROOM FAN x 4	✓	320
• MICROWAVE	✓	1200
• DISHWASHER	✓	1100
• OTHER: H2O	✓	4500
• OTHER: WASHER	✓	840
TOTAL		8690
8. 3 OR LESS APPLIANCES, TOTAL APPLIANCE VA;		
4 OR MORE APPLIANCES, 75% OF TOTAL APPLIANCE VA (NEC 220.53)		6517.5
*OTHER LOADS (INCLUDING MOTORS, EV CHARGER(S), ETC.):		
9. ELECTRIC RANGE (8000 VA OR NAMEPLATE)**	✓	9200
10. HVAC	✓	8160
11. ELECTRIC OVEN		
12. ELECTRIC DRYER (5000 VA MINIMUM)**	✓	5000
13. ELECTRIC VEHICLE CHARGER	✓	9600
14. OTHER:		
15. OTHER:		
16. 25% OF LARGEST MOTOR (NEC 430.24)		2040
TOTAL SERVICE LOAD VOLT–AMPERES (VA) (ADD LINES 7, 8 & 9 THRU 16) =		46376.65
TOTAL SERVICE LOAD VOLT–AMPERES / 240–VOLTS = AMPERES		193.25
***SERVICE RATING (AMPERES) =		200 Amps SERV.

*FOR EVERY "YES" ANSWER, INDICATE VA RATING OF EQUIPMENT

**NAMEPLATE RATING MUST BE USED IF LARGER

***SERVICE RATING SHALL BE GREATER THAN OR EQUAL TO THE SERVICE LOAD

ONE INCH
AT FULL SIZE

REVISIONS

REV	DATE	IMAGE	DESCRIPTION

DRAWN BY: CHECKED BY: APPROVED BY:

WORK ORDER #:

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ENDORSEMENTS

SIGNATURE	DATE
DRAWN: CB	9/02/2025
CHECK:	
APPROVED:	

Seattle City Light

Distribution Engineering

APPROVED FOR SEATTLE CITY LIGHT

PROJECT ENGINEER	SHEET CONTENTS
QUARTERSECTION NUMBER(S)	SECTION / TOWNSHIP / RANGE

PROJECT TYPE

SFR LOAD CALCULATION

PROJECT NAME

SFR AND DADU

PROJECT ADDRESS

SHEET

1 OF 1

WORK ORDER NO.-TASK

CITY

DRAWING NO.

REV. NO.

0

NEC STANDARD ELECTRICAL LOAD CALCULATION FOR SINGLE FAMILY DWELLINGS

(ONLY FOR SERVICE RATINGS OF 120/240V, 225 AMPS MAX)

OWNER: JOHN DOE

LOCATION: 123 MAIN St – DADU

TOTAL FLOOR AREA OF DWELLING (NEC 220.12):

FACTOR	QUANTITY	VOLT AMPERES (VA)
GENERAL LIGHTING		
1. GENERAL LIGHTING (SQFT x 3 VA/SQ FT) (TABLE 220.12)	3 x 905 SQFT.	2715
2. SMALL APPLIANCE CIRCUITS (1500 VA PER CIRCUIT) (NEC 220.52(A)) (MINIMUM 2)	1500 x	3000
3. LAUNDRY CIRCUIT (1500 VA PER CIRCUIT) (NEC 220.52(B))	1500 x	1500
4. TOTAL GENERAL LIGHTING LOAD (ADD LINES 1, 2 & 3):		7215
5. FIRST 3000 VA @ 100%:		3000
6. TOTAL GENERAL LIGHTING LOAD – 3000 = 4215 @ 35% =		1475.25
7. NET GENERAL LIGHTING LOAD (PER NEC 220.42) (ADD LINES 5 & 6):		4475.25
*FIXED APPLIANCES (IF INSUFFICIENT SPACE, USE BACK):		
• GARBAGE DISPOSAL	✓	1000
• BATHROOM FAN		
• MICROWAVE		
• DISHWASHER	✓	1200
• OTHER:		
• OTHER:		
TOTAL		2200
8. 3 OR LESS APPLIANCES, TOTAL APPLIANCE VA; 4 OR MORE APPLIANCES, 75% OF TOTAL APPLIANCE VA (NEC 220.53)		
*OTHER LOADS (INCLUDING MOTORS, EV CHARGER(S), ETC.):		
9. ELECTRIC RANGE (8000 VA OR NAMEPLATE)**	✓	7200
10. HVAC	✓	4000
11. ELECTRIC OVEN		
12. ELECTRIC DRYER (5000 VA MINIMUM)**		
13. ELECTRIC VEHICLE CHARGER	✓	7200
14. OTHER: HOT WATER	✓	29000
15. OTHER:		
16. 25% OF LARGEST MOTOR (NEC 430.24)		1000
TOTAL SERVICE LOAD VOLT–AMPERES (VA) (ADD LINES 7, 8 & 9 THRU 16) =		46075.25
TOTAL SERVICE LOAD VOLT–AMPERES / 240–VOLTS = AMPERES		192 Amps
***SERVICE RATING (AMPERES) =		200 Amps

*FOR EVERY "YES" ANSWER, INDICATE VA RATING OF EQUIPMENT

**NAMEPLATE RATING MUST BE USED IF LARGER

***SERVICE RATING SHALL BE GREATER THAN OR EQUAL TO THE SERVICE LOAD

ONE INCH

AT FULL SIZE

REVISIONS

REV	DATE	IMAGE	DRAWN BY: CHECKED BY: APPROVED BY:
WORK ORDER #:			
DESCRIPTION			

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ENDORSEMENTS

SIGNATURE	DATE
DRAWN: CB	8/29/2025
CHECK:	
APPROVED:	

Seattle City Light

Distribution Engineering

APPROVED FOR SEATTLE CITY LIGHT

PROJECT ENGINEER	SHEET CONTENTS
QUARTERSECTION NUMBER(S)	SECTION / TOWNSHIP / RANGE

PROJECT TYPE

DADU LOAD CALCULATION

PROJECT NAME

SFR AND DADU

PROJECT ADDRESS

SHEET

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WORK ORDER NO.-TASK

CITY

DRAWING NO.

REV. NO.

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