

21 MARCH



10 21March-900AM

21 JUNE



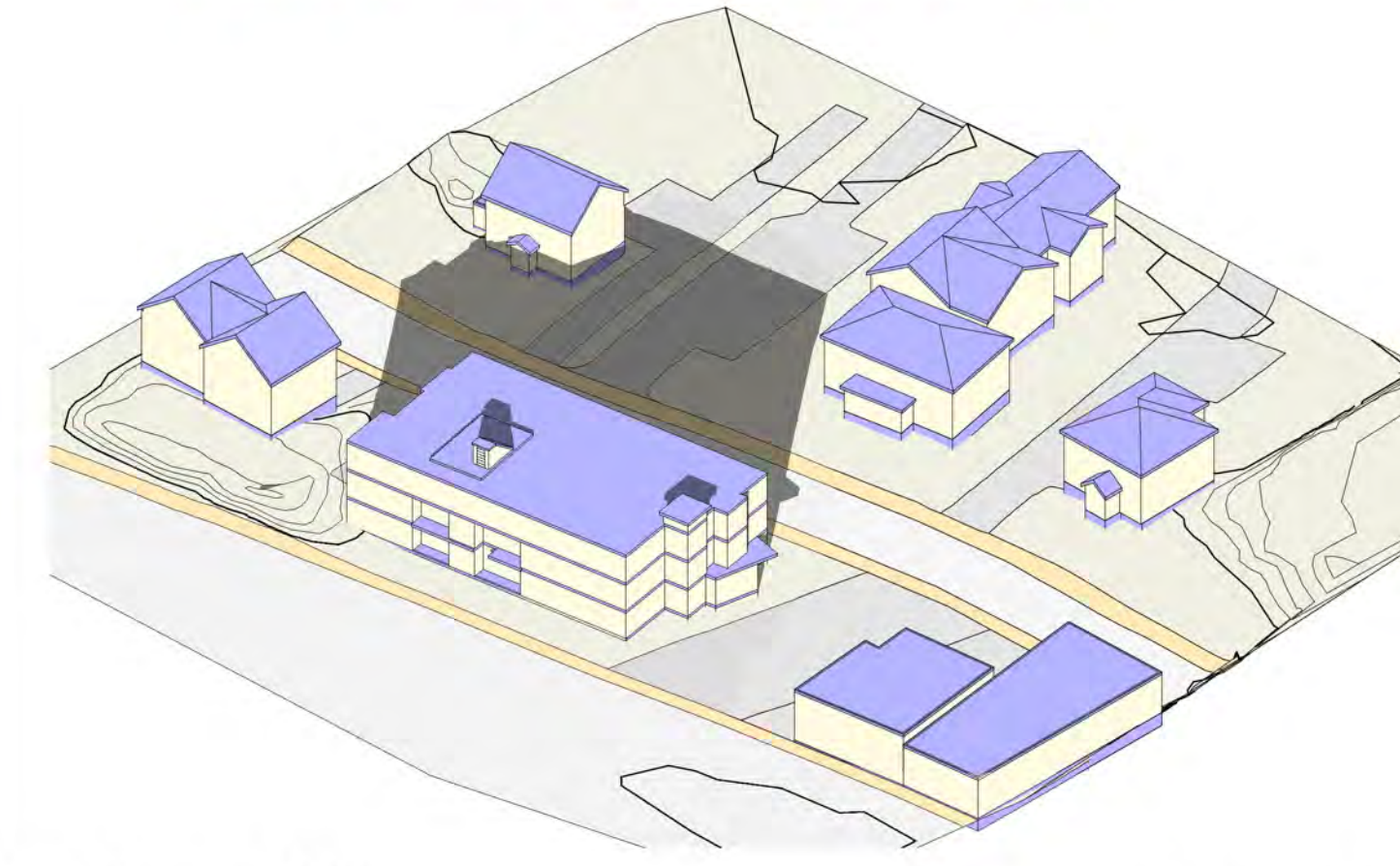
7 21June-900AM

21 SEPTEMBER



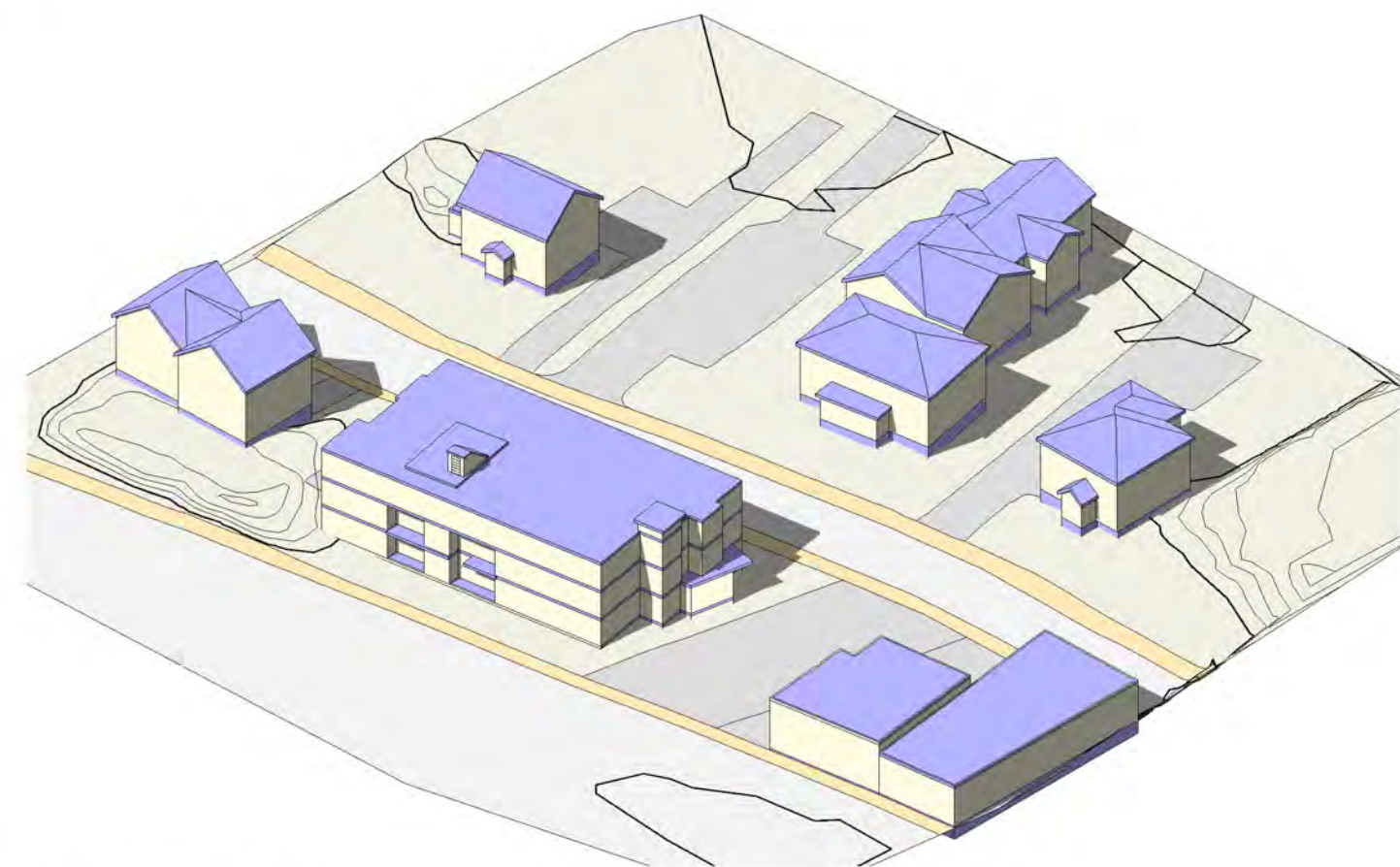
4 21September-900AM

21 DECEMBER



3 21December-900AM

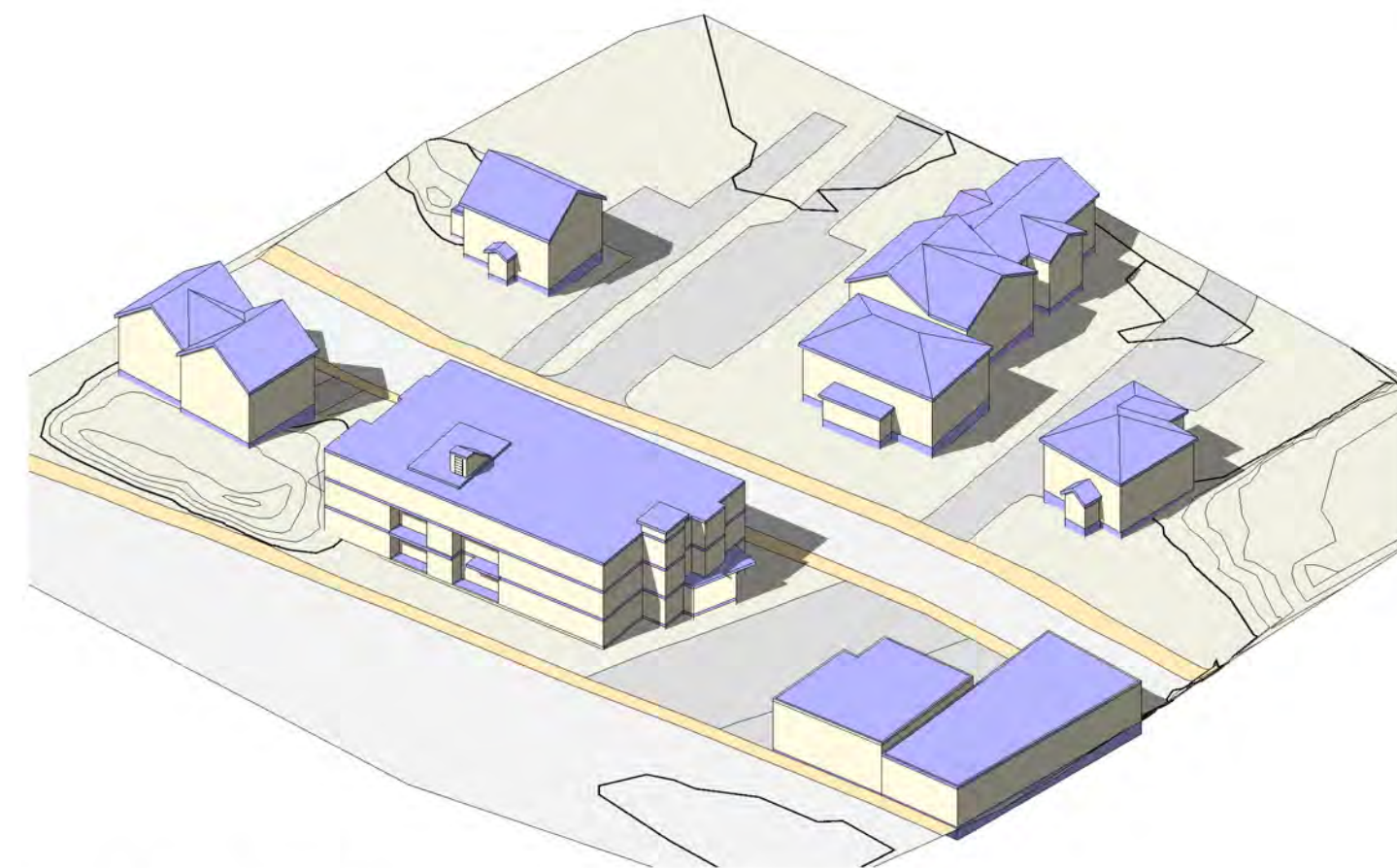
383-387 SHADOWS ONLY SHOWN



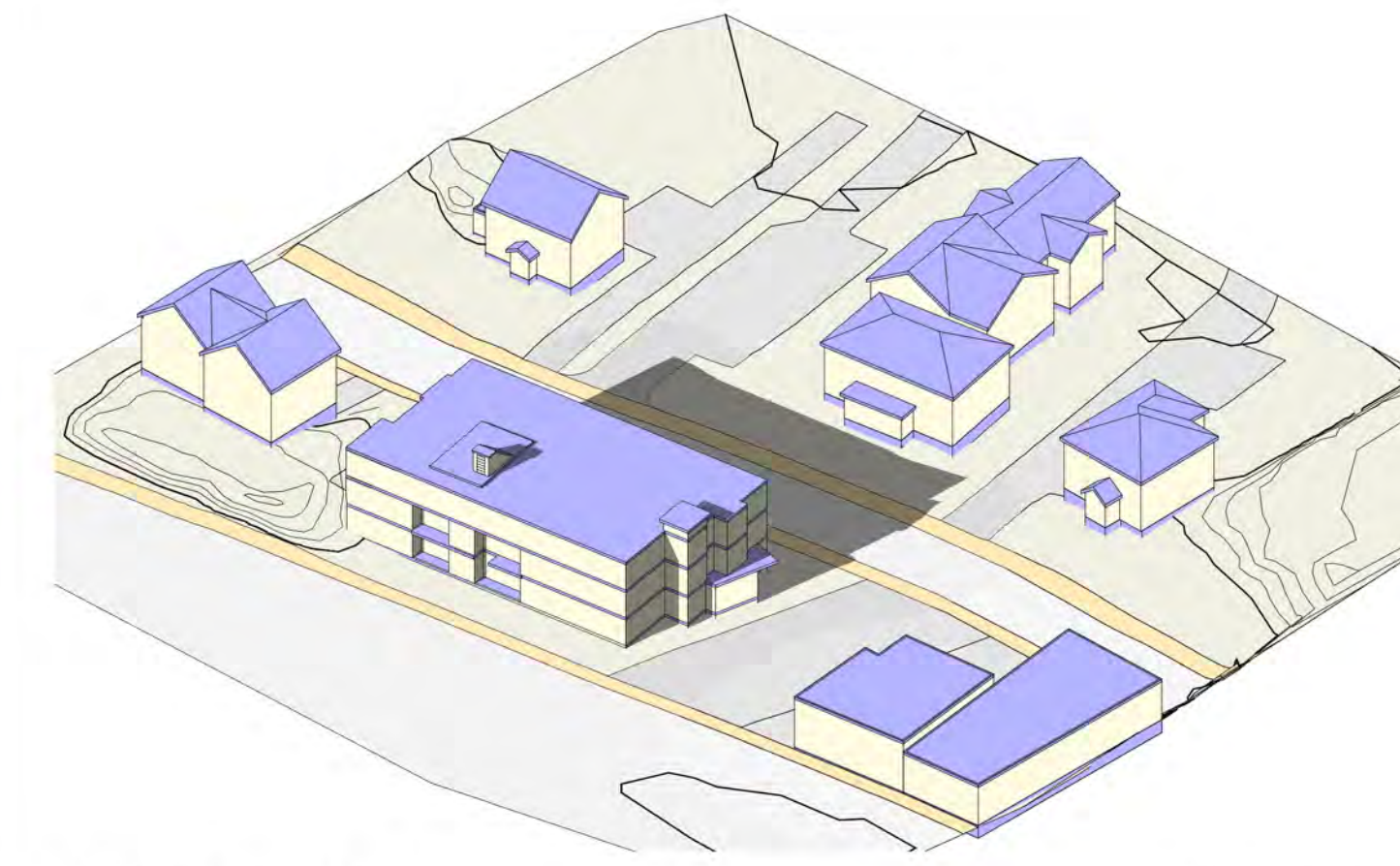
11 21March-1200PM



8 21June-1200PM



5 21September-1200PM

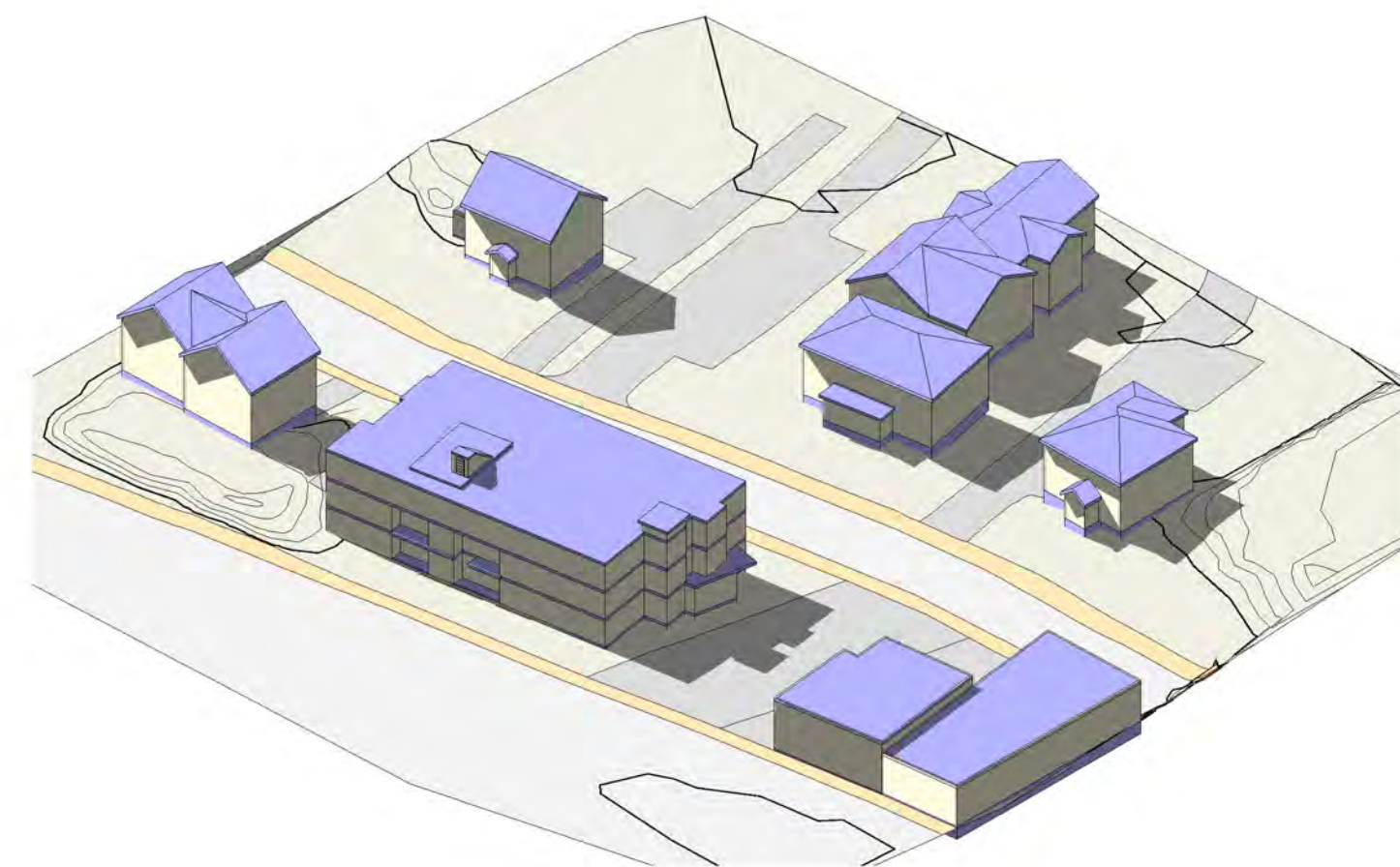


14 21December-1200PM

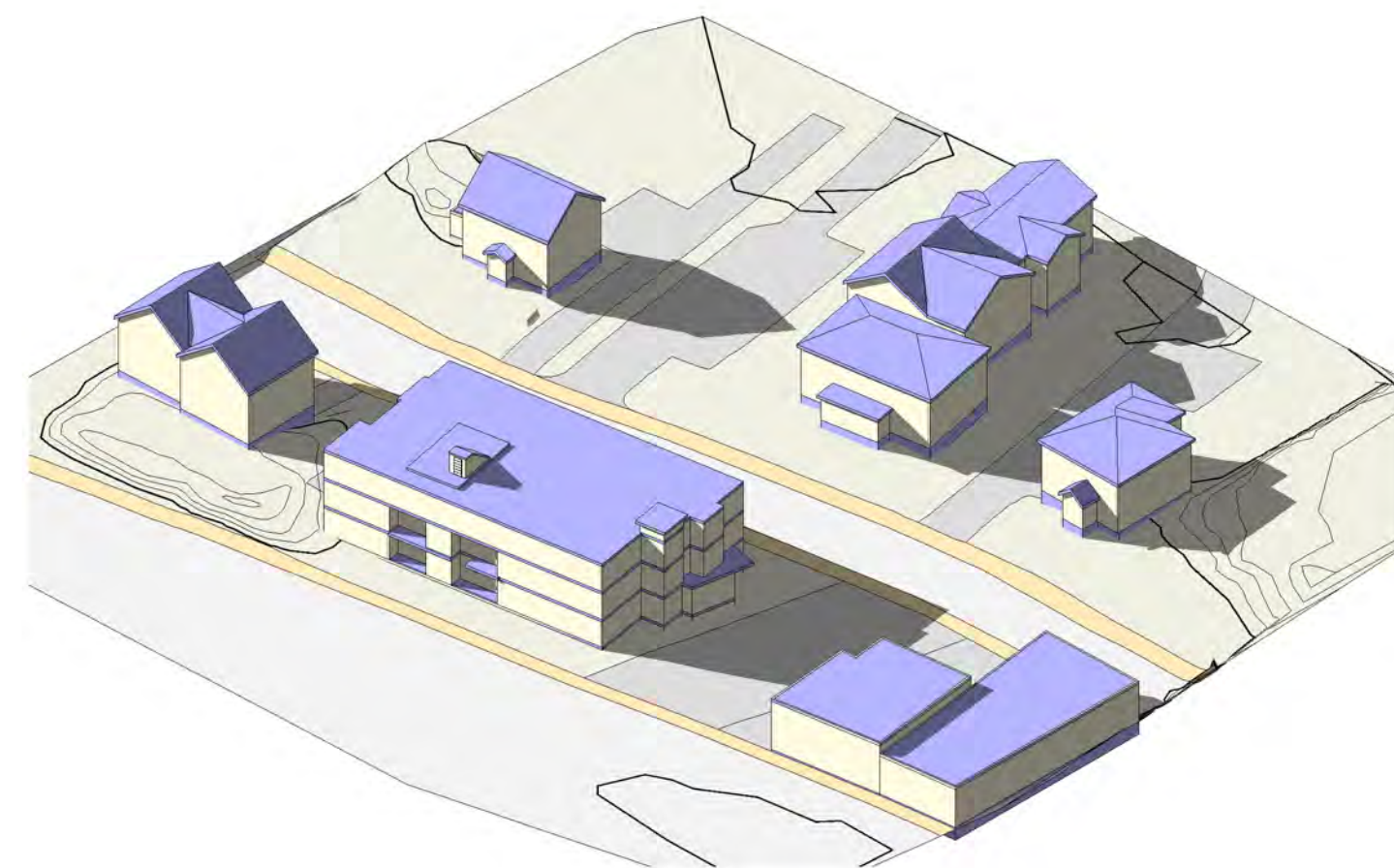
383-387 SHADOWS ONLY SHOWN



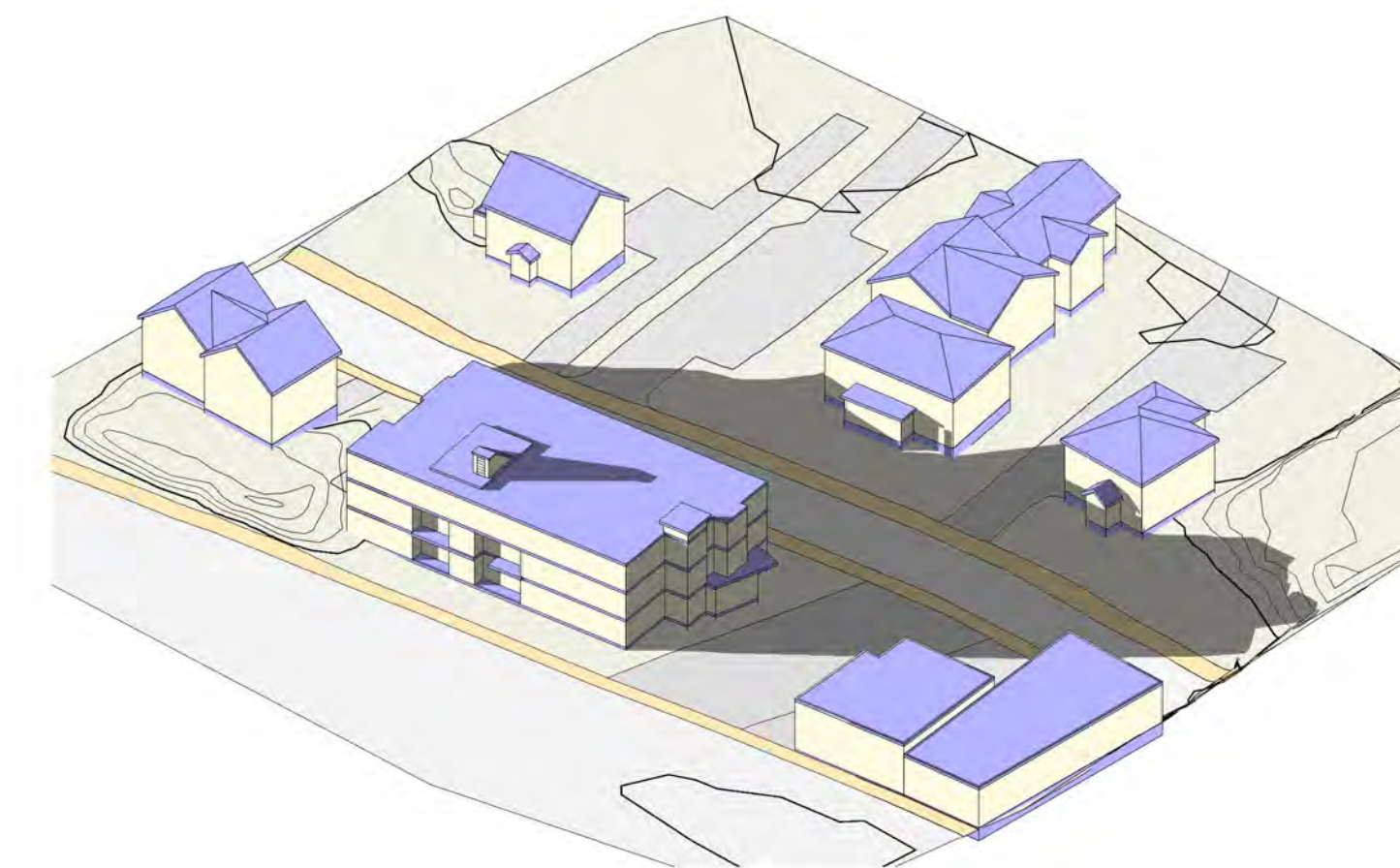
12 21March-300PM



9 21June-300PM



6 21September-300PM



2 21December-300PM

383-387 SHADOWS ONLY SHOWN

Sunrise	Sunset	Time	Altitud	Azimit	Shadow (1m)
6:45am	6:58pm	9:00 am	23.46°	112.52°	2.30 m
		12:00 pm	46.60°	160.97°	0.95 m
		3:00 pm	39.29°	223.29°	1.22 m

Sunrise	Sunset	Time	Altitud	Azimit	Shadow (1m)
5:07am	8:25pm	9:00 am	39.86°	93.40°	1.20 m
		12:00 pm	68.78°	149.19°	0.39 m
		3:00 pm	56.58°	246.24°	0.66 m

Sunrise	Sunset	Time	Altitud	Azimit	Shadow (1m)
6:31am	6:43pm	9:00 am	25.87°	115.35°	2.06 m
		12:00 pm	47.29°	166.04°	0.92 m
		3:00 pm	37.31°	227.02°	1.31 m

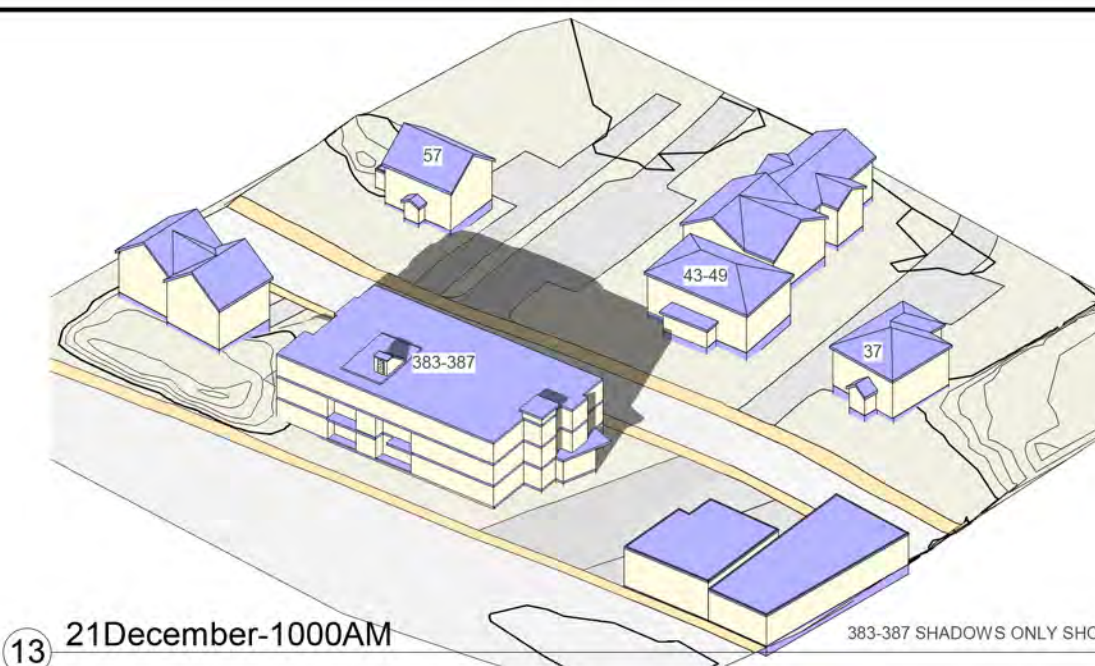
Sunrise	Sunset	Time	Altitud	Azimit	Shadow (1m)
7:10am	4:15pm	9:00 am	14.31°	141.84°	3.92 m
		12:00 pm	24.16°	184.27°	2.23 m
		3:00 pm	10.18°	224.89°	5.57 m

Typical standard dates and times were selected for the shadow study. Solstices & Equinoxes. 9:00am, 12:00pm, and 3:00pm.

Overall, the length of the shadow of the proposed structure is not different compared to the length shadows of the surrounding neighbors.

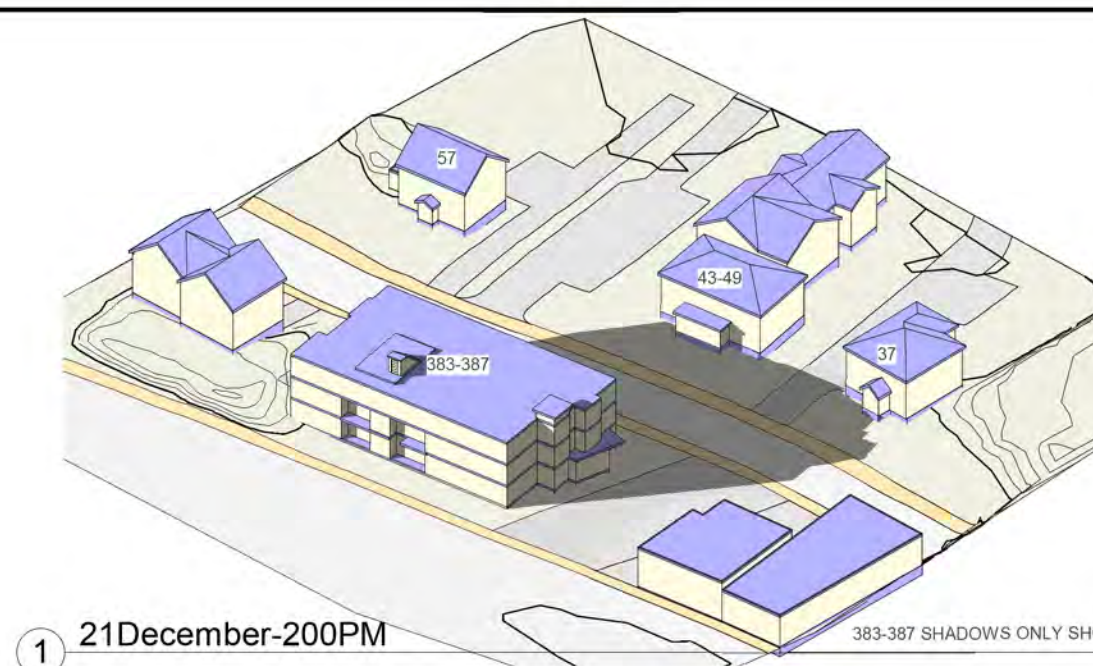
December 21st. is close to the shortest day of the year with the longer shadow. On that day at 3:00 p.m. (one hour before to the sunset) the solar angle is very low around 10 degrees plus/minus. However, the 3d massing shadows shown, that the shadows reaches only a small portion of the first floor front exterior wall of the structures at 43-49. Similar situation happens in the morning around 9:00am at the property on 57 Jackson St.

From 10 to 2p.m. on December 21st, the building's shadows does not affect the surrounding buildings. See graphics beside this note from 10am to 2pm on December 21st.



13 21December-1000AM

383-387 SHADOWS ONLY SHOWN



1 21December-200PM

383-387 SHADOWS ONLY SHOWN



REVISIONS

No	DATE	DESCRIPTION

SCALE: DRAWN BY: FA

PROJECT No: CADD FILE:
Project Number: -

DWG No: