

Parrott Street Apartments Shadow Study

KTGY Architecture conducted shadow studies of the Parrott Street Apartments building to determine how the project's location and the angle of the sun affect the shadows cast by the development. The study looks at the shadows created at three different times throughout the day on the Winter Solstice, Spring Equinox, Summer Solstice, and Fall Equinox.

In the morning, the project casts a shadow northwest, towards San Leandro Boulevard and Parrott Street, shadowing San Leandro Boulevard, Parrott Street, and its own front yard. Around noon, the building casts minimal shadows, mainly shadowing its own front yard along Parrott Street and the adjacent Parrott Street neighbor's driveway. By mid-afternoon, the building casts a shadow over its own podium courtyard and the neighbors to the east in the winter, spring, and fall, with minimal shadowing in the summer. The project casts the longest shadows during the Winter Solstice since the sun is at its lowest angle at this time of year, and the project's shadows are shorter during the other months.

From morning to midday for most of the year, the Parrott Street Apartments project will not impact the neighbor's building or front yard and the shadows cast on the neighbor's front yard are mainly from the neighbor's building. In the mid-afternoon for most of the year, the Parrot Street Apartments project will cast shadows eastward, including over the adjacent neighbor's building and front yard.

We note that the shadows cast by Parrott Street Apartments is not markedly different from a building cast by a shorter building. For illustrative purposes, the same shadow study was conducted on a hypothetical building that was one story shorter (equivalent to 10 feet). Due to the orientation of the land and angle of the sun, this study shows that the shadow lengths and coverage are very similar.