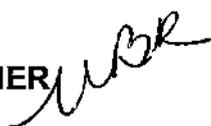


City of Costa Mesa

Inter Office Memorandum

TO: PLANNING COMMISSION

FROM: WILLA BOUWENS-KILLEEN, AICP, PRINCIPAL PLANNER 

DATE: OCTOBER 11, 2007

SUBJECT: SOLAR ACCESS
PLANNING COMMISSISON MEETING OF OCTOBER 22, 2007

At a Planning Commission meeting earlier this year, Commission reviewed staff approval of a proposed second story addition that had been appealed by the adjoining homeowner. The adjoining homeowner was fearful that the addition would shade the one place on her property where she could install solar panels. Commissioner Eleanor Egan became concerned that approval of some second stories may diminish solar access to adjoining homeowners. This is especially critical because even partial shading of a solar panel between 10 a.m. and 3 p.m. can substantially decrease its power production.

There can be many instances where solar access may be unimpeded because of the orientation of the affected houses. At a worst case scenario a house, constructed to the maximum allowable height of 27 feet, could cast a shadow from 42 feet in length to a maximum of 83 feet in length between 10 a.m. and 3 p.m. during the Winter solstice (December 21st). However, the 27-foot maximum overall building height in residential zones (reduced from 30 feet several years ago) and the 20-foot rear setback requirement (versus 10 feet for a one-story construction) contained in the Zoning Code, as well as the 10-foot average second story side setback and 80% second-to-first floor ratio recommended in the Residential Design Guidelines, can serve to reduce impacts on solar access for adjoining neighbors by reducing the mass and size of the second floor.

Because there can be many factors that affect solar access, and demand on the part of homeowners to install solar panels is still relatively low, cases such as the one heard earlier this year are extremely rare. However, in this day of increasing "green" consciousness, there could be a growing demand to install solar panels and, therefore, the desire to protect solar access. If Planning Commission wishes to adopt standards, they could be included as part of the Residential Design Guidelines, perhaps requiring a shade/shadow study when second floor construction is proposed for any houses on a residential street with a north/south orientation. Because amendment of the design guidelines would require preparation and presentation of reports at both Planning

Solar Access

Planning Commission Meeting of October 22, 2007

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Commission and City Council, it is anticipated that more than four hours of staff time would be necessary to complete the process. Therefore, if Planning Commission wishes to proceed, you would be required to forward your proposal to City Council for consideration and direction.

cc: Deputy City Manager – Dev. Svs. Director
Deputy City Attorney
City Engineer
Staff (4)
File (2)