



MEMORANDUM

TO: Leonard Bauer, Director, Community Planning & Development
FROM: Joyce Phillips, Senior Planner, Community Planning & Development
DATE: December 29, 2020
SUBJECT: Early Action to Pursue SolSmart Designation: Review zoning requirements and identify restrictions that limit solar development

In December of 2020 a preliminary review of the subdivision and zoning codes (Titles 17 and 18 of the OMC, respectively) was completed to identify barriers to the installation of solar energy installations, primarily for residential properties.

Division of Land

- 17.16.090 – Review Criteria for Preliminary Plats does not contain any reference to the layout or orientation of the lots regarding solar access (for passive solar), although plats are required to serve the public interest in order to be approved.

The council, hearing examiner and Planning Department shall inquire into the public use and interest proposed to be served by the establishment of the subdivision and dedication. The council or hearing examiner shall determine if appropriate provisions are made for, but not limited to, the public health, safety and general welfare, for open spaces, drainageways, streets, alleys, other public ways, water supplies, sanitary wastes, parks playgrounds, sites for schools and school grounds, fire protection and other public facilities, and shall consider all other relevant facts, including the physical characteristics of the site and determine whether the public interest will be served by the subdivision and dedication. If the council or hearing examiner find that the proposed plat makes appropriate provisions for the above, then it shall be approved. If the council or hearing examiner find that the proposed plat does not make such appropriate provisions or that the public use and interest will not be served, then the council or hearing examiner shall disapprove the proposed plat. (Emphasis added)

Note: To date, provision of renewable energy systems such as a solar installation, has not been identified as necessary to serve the public health, safety and general welfare. As an option for addressing climate change by reducing energy consumption, this could change.

Example from City of Lacey (15.12.080, Title 15):

*B. Consideration should be given to orientation of lots that take advantage of solar access.
F. ...Other setback options can be considered by the director at the subdivision stage if requested by the developer to promote better design. Alternative setback concepts should create opportunities for such things as a more interesting streetscape, more privacy for lots, or be necessary to maximize solar orientation or other desired design outcomes that require flexibility from standard setbacks.*

- Chapter 17.24 – Final Plats. No information is required to be included on the final plat map about solar conditions of the land or specific lots, nor for the potential use of solar energy systems.

- 17.32.120 – The review criteria for short subdivisions (9 or fewer lots and tracts) does not include any provisions for the layout or orientation of the lots regarding solar access but does state the City shall review the proposal for “relevant facts to determine whether the public use and interest will be served by the short subdivision.”
- 17.34.060 – The review criteria for Binding Site Plans (divisions of commercial or industrial lands) does not include any provisions for the layout or orientation of the lots regarding solar access.
- Chapter 17.48 – Design Standards for subdivisions does not include any provisions for the layout or orientation of the streets or lots regarding solar access to future building sites.

Definitions

- Chapter 17.12 includes definitions for easements and utility easements but there is no specific reference to solar access, nor other key terms for rooftop solar PV.
- There are no definitions for renewable energy types or installations, lot orientation for solar access considerations, or for solar access in 18.02.180.

Historic Structures and Properties

The City’s Historic Preservation Planner and Heritage Commission are working on provisions that would better align solar installation issues with historic preservation interests and requirements.

Zoning Code Development Standards

- 18.04, 18.05 - In residential zoning districts, the maximum building height and number of stories allowed is set for the district. However, this does not prevent a one story home from being shaded by an adjacent two-story home – or a two story home from being shaded by an adjacent but taller two-story home – or from any property owner from being shaded by a tree on adjacent property (this can be especially troublesome for trees planted after a solar installation is made or for trees that grow into a size that shades an installation over time). Any property owner who installs a solar energy system either “takes their chances” or is “on their own” to negotiate and obtain a solar rights easement from the adjoining property owner. To the best of my knowledge solar access easements are rarely, if ever, obtained. The city has no example or template easements that I am aware of.
- Design Review. The City’s design review chapters are silent on solar installations.

Tree & Landscaping Issues (size at maturity, type, placement)

- 18.36.060 – General Requirements (for Landscaping). Subsection E: Suitability and Vegetation.

The vegetation selected for the landscape plan shall be suited to the climate, location, and physical conditions of the site so it can be reasonably expected to survive. Trees shall be selected and located to minimize the potential for interfering with or damaging power lines, underground utilities, or impervious surfaces. Trees shall be selected for their compatibility with the site design at their mature size. Trees shall be selected and located to minimize potential damage to structures and injuries to people. (Emphasis added)

Note: The language above could be modified to include provisions to protect existing or future solar installations on the site or adjacent sites.

- 18.36.100 – Alternative Landscape Plans. Allows alternative landscaping plans when the proposed landscaping maintains or increases solar access for purposes of solar energy devices.

Conclusions & Findings

1. Balancing Competing Goals (Tree Canopy and Solar Access). As with many issues, the City must work to balance its goals of increasing tree canopy and solar installations. The City may benefit from looking to other jurisdictions to gain insights into how codes can be written to balance those goals and increase both.
2. Where mentioned, provisions are permissive/encouraged rather than required. As a way to combat climate change, the City may wish to establish new requirements to help facilitate, or even require, solar installations. As currently written, the City's subdivision and zoning codes do not require orientation of streets, lots, or buildings in order to optimize current or future uses to be served by solar energy. Subdivision Codes could be revised to include the analysis or requirement of streets and/lots to be oriented for optimal solar access for both passive solar and solar installations.
3. The City's codes could be better coordinated for standards for trees (retention and planting) and solar installations. Such work should include information regarding tree varieties, placement at time of planting, and size at time of maturity.
4. City codes are silent on Solar Access and related easements. The City could consider the pros and cons of providing a template for a solar access easement as well as to identify issues property owners (both those considering providing an easement as well as those seeking an easement) should consider.
5. Design Review standards do not preclude – but also don't support – solar installations. Basic provisions such as acceptance of visibility from the public ROW, at least when parallel solar panels are parallel to the roof plane (or whatever is deemed appropriate) could help.
6. Building Issues (weight of solar installations on existing structures, electrical permits and capacity in existing panels, keep roof space free from things like vents or pipes, conduit from roof area to panel for future use, etc.) were not reviewed in this effort.
7. Review of the City's Urban Forestry and Engineering standards should also be reviewed to identify any potential barriers to solar installations.
8. The City (or all regional partners) may need to coordinate with private utility providers (e.g., Puget Sound Energy) since connection to primary grid is still likely to be needed or desired by property owners.
9. This review did not consider permitting provisions (tracking solar ready structures, streamlining permit issuance and inspections, flat rate building permit fees for simple projects) that could also be implemented to increase support for solar installations.