Solar Photovoltaic Installations

This bulletin outlines the required plans and permits for installing a solar photovoltaic (PV) energy system. The requirements vary according to the type of property and the PV system. In addition to these requirements, note that all rooftop panels must be installed to minimize visual impacts and must meet the minimum development standards prescribed in Municipal Code Title 20.

QUALIFYING SINGLE FAMILY/DUPLEX PV PROJECTS
Qualifying projects on single family and duplex properties can secure a permit online at www.sjpermits.org. The City Inspector will review the electrical plan at the job site on the day of inspection if the project qualifies by meeting ALL of the following criteria:

- Must be a rooftop installation
- Total panel weight including frame is less than 5 pounds per square foot
- Maximum concentrated load at each point of support is less than 40 pounds
- Maximum height above the roof surface is less than 18 inches
- PV panels are not ballasted

If the project does NOT meet all of the above criteria, you must follow the permit and plan requirements outlined below.

ALL OTHER PV PROJECTS
For multi-family, non-residential and non-qualifying single family/duplex projects, submit a Building Permit Application with plans to the Permit Center (no appointment necessary for plan review) that include:

- Site plan that shows the building footprint, location of the PV panels, and locations of photovoltaic and utility interconnection point
- Building plans that show:
  - Framing plan that shows and specifies existing and new framing/support
  - Details of anchorage, interconnection of elements, and weather proofing of roof perforations
  - Structural calculations verifying capacity of proposed system to resist vertical and lateral loads
  - Non-ballasted installations need to specify the method of mechanical attachment to supporting structural elements. Structural elements include, but are not limited to, roof rafters, trusses, purlins, beams, and blocking. Plywood sheathing and spaced sheathing are not considered structural members.
- Electrical plans that show:
  - System configuration and location of modules, array, and equipment including location of Balance of System
  - Conduit sizes and routing; location of disconnecting means; and required overcurrent devices
  - Short circuit current and show and summarize open circuit voltage

OTHER PERMITS THAT MAY BE REQUIRED

- **Any PV project not located on a rooftop requires a Planning Permit.** Call or visit the Permit Center and ask to speak with a planner for instructions on how to proceed.
- **Any PV project that uses the public right-of-way requires a Public Works Permit.** If the PV installation entails temporarily occupying right-of-way space or trenching or underground boring in the right-of-way, then you need a Public Works Permit. Call the Permit Center and ask to speak with Public Works staff.
- **Any PV project on a commercial or multi-family (3 or more units) property requires a Fire Department plan review.** The Fire Department reviews plans for multi-family and commercial PV installations and enforces the Photovoltaic Installation Guidelines issued by the California State Fire Marshall. Call 408-535-7750 for more information.