

## Guidelines for Solar PV in Cheltenham's La Mott and Wyncote Historic Districts

These guidelines are designed to help those considering the installation of solar PV on properties located within Cheltenham's La Mott and Wyncote Historic Districts. All solar panel installations in these districts will be reviewed by the BHARs on a case by case basis recognizing that the best option will depend on the characteristics of the property under consideration. The overall objective of these guidelines is to ensure that all solar PV installations in these historic districts preserve character-defining features and historic fabric of each property while accommodating the need for solar access to the greatest extent possible. A list of the guidelines that the BHAR will use to review each solar PV project is provided below. These guidelines are derived from the National Trust for Historic Preservation: Solar Panels on Historic Properties Guidance, and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Sustainability.

- 1. Installing solar technology should occur only after implementing appropriate treatments to the building to improve its energy efficiency.** On-site, solar technology should be considered only after implementing appropriate treatments to improve energy efficiency of the building, which often have greater life-cycle cost benefit than on-site renewable energy.
- 2. Attempt to locate solar panels on the site (ground mounted), on new additions, or accessory buildings first.** If possible, use a ground-mounted solar panel array. A ground mounted system should respect the building's historic setting, and be sited in an inconspicuous location, such as a rear or side yard, low to the ground and sensitively screened to further limit visibility. Further, ground mounted solar arrays must comply with all applicable zoning regulations as defined by Cheltenham's zoning code. If ground mounted is not feasible for your site, consider locating solar on inconspicuous locations on new additions to the property, or if no new additions exist, on any non-historic buildings or accessory structures that have been added to the property. Only after these aforementioned solutions have been evaluated should installing solar on the rooftop of the primary use historic building on a site be evaluated.
- 3. Place solar panels in areas that minimize their visibility from a public thoroughfare.** The primary façade of a historic building is often the most architecturally distinctive and publicly-visible, and thus the most significant and character-defining. To the greatest extent possible, avoid placing solar panels on street-facing walls or roofs, including those facing side streets. Installations below and behind parapet walls and dormers, or on rear-facing roofs, are often good choices.
- 4. Avoid installations that would result in the permanent loss of significant, character-defining features of historic resources.** Solar panels should not require alterations to significant or character-defining features of a historic resource, such as altering existing roof lines or dormers. Avoid installations that obstruct views of significant architectural features, such as overlaying windows or decorative detailing, or intruding on views of neighboring historic properties in an historic district.
- 5. Avoid solutions that would require or result in the removal or permanent alteration of historic fabric.** Solar panel installations should be reversible. Use of solar roof tiles, laminates, glazing and other technologies that require the removal of historic fabric or would permanently damage such fabric must be avoided. Consider the type and condition of the material upon which installation is proposed as well as the method of installation and removal down the road. For example, metal and slate roofs may be able to accommodate

solar panels better than other types of materials. It may also be possible, through the use of brackets, to minimize the points of attachment to a structure.

6. **Require low profiles.** Solar panels should be flush or mounted no higher than a few inches above the roofing surface and should not be visible above the roofline of a primary façade.
7. **On flat roofs, set solar panels back from the edge.** Flat roofs often provide an ideal surface for solar arrays. To minimize visibility, ensure that the panels are set back from the edge and adjust the angle and height of the panels as necessary.
8. **Avoid disjointed and multi-roof solutions.** Panels should be set at angles consistent with the slope of the supporting roof. For example, avoid solutions that would set panels at 70 degree angles when the roof slopes at a 45 degree angle. In addition, panels should be located on a single roof and arranged in a pattern that matches the configuration of the roof upon which they are mounted.
9. **Ensure that solar panels, support structures and conduits blend into the resource.** The visibility of solar panels and support structures can be substantially reduced if the color matches the historic resource and reflectivity is minimized.