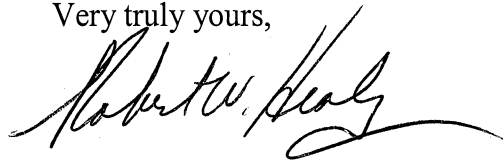


The Honorable, The City Council
October 1, 2001
Page 2

- The recent citywide Zoning Ordinance amendments established green building criteria under the new permanent project review provisions for buildings over 50,000 square feet. The U.S. Green Building Council's LEED rating system, which the Project Review section cites, encourages measures such as green roofs and reflective materials. The City recently became a member of the U.S. Green Building Council.
- The City is in the process of developing a Climate Protection Plan with a committee of residents, experts, business people, and institutions, which will recommend actions to reduce greenhouse gas emissions. Many of these actions will have the added effect of reducing the urban heat island effect. The draft plan will be completed this fall.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert W. Healy", with a long, sweeping horizontal flourish extending to the right.

Robert W. Healy
City Manager



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CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

Robert W. Healy, City Manager Richard C. Rossi, Deputy City Manager

October 1, 2001

To The Honorable, The City Council:

In response to Awaiting Report Item No. 01-226, regarding a report on recommendations to avoid "urban heat island effect", Assistant City Manager for Community Development Beth Rubenstein and Public Works Commissioner Lisa Peterson report the following:

The Problem

The urban heat island effect occurs as a result of impervious surfaces and buildings in urban areas absorbing sunlight during the day and releasing heat, which causes ambient temperatures to be 5 to 10 degrees higher than in nearby rural areas. As a result, urban dwellers use more energy to run cooling equipment in their homes, buildings, and vehicles. The urban heat island effect is also associated with higher levels of air pollution (more ozone is created at higher temperatures), heat-related health effects, and increased emissions of greenhouse gases. Strategies to reduce the urban heat island effect include increasing roof reflectivity (e.g., replace black roofs with lighter colored materials), adding vegetation with rooftop gardens or green roof technologies, using lighter colored paving materials on roads and parking lots, and planting vegetation to shade buildings and surfaces.

Current Activities

The following policies and actions are currently in place which address this issue:

- Public shade tree protection and management – The Department of Public Works acts as the City's tree warden and administers the Public Shade Tree Act and conducts planting and maintenance programs on City property.
- In response to a council order, the City is reviewing the feasibility of green roofs on City building projects. Such a review has been performed for the renovation of City Hall Annex. While a green roof is not feasible, the architects have specified a reflective roof which will reduce the heat-absorbing properties of the roof and lower the energy demand of the building. A study is currently being conducted on all City owned buildings to determine the feasibility and costs of installing reflective, light colored material, and green-roofs.



3465

Consent Agenda #10

Awaiting Report Item
Number 01-226, regarding a
report on recommendations
to avoid "urban heat island
effect".

In City Council October 1, 2001

PLACED ON FILE

and Referred to
Finance Committee
and Climate
Protection Task Force
on motion of
Councillor Davis.

Copies
sent
10-5-01
mc