

CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

City Hall Annex

Inman & Broadway

EXTENSION ~~200~~ 9034

To Robert W. Healy, City Manager

From Alan Zimlicki

Date March 5, 1982

Subject Lighting on Memorial Drive

The City has been working with the MDC and the Massachusetts Department of Public Works on the lighting issue for about two years.

The MDC had decided to replace the lights on Memorial Drive with the new shoe box light used on the Jamaica Way and other roads in the MDC system. The choice of the "shoe box light" was the result of in-house discussions at the MDC where a decision was made to choose a distinctive light which was efficient and would eventually become the standard light for the MDC system. Presently the MDC has over 20 different types of lights in its system.

The Community Development Department became involved because the City is designing a new roadway system for East Cambridge and since three of these roads are part of the MDC system, a decision on the type of lights had to be made. Since the Charles River Basin is part of an historic district, the City recommended use of the "1907 pendant light", the light that has been historically part of the Drive.

The discussion that followed the City's recommendation had two parts.

1. What type of light source should be used, mercury or high pressure color corrected sodium?
2. The "shoe box fixture" vs the "1907 historic pendant light."

After presentations from General Electric and the City's efforts to secure the new Westinghouse color corrected bulb, a series of sample sodium lights were installed in four different locations. These lights were viewed by the City and the MDC. No complaints were received from residential abutters. After prolonged discussion, the MDC decided to change its policy from mercury vapor to the use of high pressure color corrected sodium. This decision provides for major savings in electricity costs since mercury vapor is only 60% as efficient as the new sodium lights. This decision was also very important on the East Cambridge roadway project since Federal Highways and the Massachusetts Department of Public Works would only fund sodium lights. If the MDC had decided to stay with their mercury vapor policy the City would have had to pay for the East Cambridge lights.

The MDC's reasons for advocating the shoe box light were as follows:

1. The light would allow them to standardize their system. This would allow the MDC greater cost control on maintenance contracts, assure availability of replacements for knockdowns and repairs, since there were several manufacturers, and standardize their design processes.
2. The MDC felt that the shoe box fixture was decorative and the price was reasonable.
3. The MDC felt that the historic light would not be as efficient as the shoe box.

The City approached these arguments by obtaining a quote on the price of supplying the historic light from Welsback Lighting. Welsback also volunteered to fabricate a historic light to prove that the efficiency would equal the shoe box light. Welsback's quote was \$1500 per fixture and the prototype was fabricated using modern materials. This light was demonstrated at the MDC and hung on a pole near the Hatch Shell on Storow Drive. Lighting calculations and technical memorandum were prepared by Carol Johnson's office to compare efficiency. It was proven that the historic light could be as efficient and maintenance free as the shoe box light.

Since the shoe box light was estimated to cost \$1100 per fixture and the historic light was estimated to cost \$1500 per fixture, the price of the lights and the insurance of an adequate supply were still problems. Additional contacts were made with Union Metals, the original manufacturer of the historic light in 1907, and Spring City Electric. Union Metals submitted a bid for \$1200 per light and Spring City Electric submitted a bid for \$1400-\$1500 per fixture.

These quotes now meant that the cost between the shoe box and 1907 light was as little as \$100 per light and that three manufacturers would bid on and produce the light thus assuring availability. All three manufacturers also agreed to turn out as few as six lights per year for replacement of knockdowns.

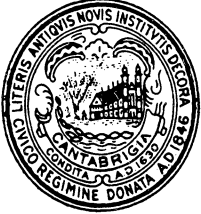
With the above work all arguments for using the historic pendant light had been eliminated except for the cost difference between the shoe box and pendant. The MDC, at this time, decided that if a community wanted a light that cost more than their shoe box, it would be their responsibility to provide the funds to make up the difference in cost. They felt that this would eliminate capricious requests and transfer part of the burden to the community.

David Vickery met with Harvard, MIT and several developers. Harvard and MIT and one of the developers agreed to contribute funds to make up the difference in cost, if any.

The Historical Commission, the Conservation Commission and the Neighborhood Ten Association continually placed their support behind

the historic light. The Neighborhood Ten Association even agreed to go door to door to raise money if necessary. Their active interest and the excellent Globe and other newspaper articles and editorials were a critical part of the process since the MDC kept well informed of these activities.

A final presentation was made to the MDC last Thursday, February 26, 1982, and the Commission voted unanimously to install the historic lights on the Drive if the City made up any cost difference. This project will be bid and constructed in the fall of 1982.



CITY OF CAMBRIDGE

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Tel. 498-9011

EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

March 8, 1982

To the Honorable, the City Council:

With respect to Awaiting Report Item No. 5 relative to alternative possibilities for uniform lighting on property under M.D.C. jurisdiction, enclosed please find copy of a report from the Community Development Department.

Very truly yours,

Robert W. Healy
City Manager

RWH/mbf
Enc.

Agenda Item Number Thirteen *S709*

Re: Response to Awaiting Report Item No. 5
regarding possibilities for uniform lighting
on property under MDC jurisdiction.

In City Council,

March 8, 1982

3/8/1982

Placed on File -