

## STAFF REPORT FOR PLANNING COMMISSION MEETING OF JULY 30, 2014

**FILE NO:** SUP-13-022

**AGENDA ITEM:** F-3

**STAFF AUTHOR:** Lee Plemel, Community Development Director

**REQUEST:** Action to accept a one-year review regarding the Community Center sign illumination, dimming, and message displays to determine that the existing sign operational plan is adequate to minimize impacts to surrounding properties.

**APPLICANT:** Carson City

**ADDRESS:** 851 E. William Street

**RECOMMENDED MOTION:** "I move to accept a one-year review regarding the Community Center sign illumination, dimming, and message displays to determine that the existing sign operational plan is adequate to minimize impacts to surrounding properties."

**LEGAL REQUIREMENTS:** CCMC 18.02.050 (Review); 18.02.080 (Special Use Permits).

**KEY ISSUES:**

- Are the existing controls for the Community Center sign adequate to address potential impacts to surrounding properties?

**BACKGROUND:**

The Planning Commission approved a Special Use Permit for the new Community Center electronic message center sign on March 27, 2013, by a vote of 7-0. A condition of approval included a requirement to create and obtain approval of an operational plan for the sign, including parameters for sign brightness and dimming at night, message transitions, and sign animation. (See attached Notice of Decision)

The Planning Commission reviewed and approved a sign operational plan on July 31, 2013, by a vote of 6-0 (see attached sign operational plan). A one-year review was required regarding the Community Center sign illumination, dimming, and message displays to determine that the existing sign operational plan is adequate to minimize impacts to surrounding properties.

Construction of the sign was completed and the sign was in operation in October 2013.

**DISCUSSION:**

Carson City currently has no specific standards for message center display signs. City staff recommended and Planning Commission approved requirements for the Community Center sign in accordance with recommendations and guidelines from the International Sign Association (ISA). The operational plan includes the following sign operation standards:

1. Sign brightness and dimming at night – The sign brightness at full white shall be no more than 0.3 foot-candles (Fc) above ambient light (sign at full black), measured in accordance with the operational policies and procedures.

The sign operational policies and procedures establish the method for making this measurement in accordance with ISA standards. The standard is that the sign brightness at full white, with the entire sign white, is not more than 0.3 foot-candles brighter than the sign when

dark. The measurement is taken from a distance based on the square area of the sign, per the recommended ISA formula in the sign operational plan. A foot-candle is a standard light measurement that approximates the brightness of a candle at a distance of one foot.

City staff conducted a test of the new sign after dark (more than 30 minutes after official sunset) on November 7, 2013, with Community Center staff on hand to adjust the sign brightness during the testing. Based on the sign area, the test was conducted at a distance of 91.6 feet from the sign with a light meter capable of measuring to the hundredth of a foot-candle. The test was conducted on the west-facing sign, where the background ambient light is less than for the east facing side where the Roop intersection is in the background. The sign brightness is the same on both sides.

Staff was able to obtain consistent readings at full white and full black. The brightness of any given measurement varied slightly primarily depending on the number of cars approaching with headlights shining towards the light meter. With the original “factory” setting for sign brightness, the difference in brightness was 0.5-0.6 Fc for the first seven tests. Then staff reduced the brightness setting on the sign so that the difference between full white and full dark was less than 0.3 (0.25-0.28). The test results are below.

Test #	Fc Dark	Fc White	Diff.	Sign setting
1	0.94	1.50	0.56	28
2	0.95	1.51	0.56	28
3	0.95	1.52	0.57	28
4	0.85	1.41	0.56	28
5	0.85	1.38	0.53	28
6	0.91	1.48	0.57	28
7	0.93	1.49	0.56	28
<b>8</b>	<b>0.93</b>	<b>1.18</b>	<b>0.25</b>	<b>20</b>
<b>9</b>	<b>0.90</b>	<b>1.17</b>	<b>0.27</b>	<b>20</b>
<b>10</b>	<b>0.90</b>	<b>1.18</b>	<b>0.28</b>	<b>20</b>

Once the sign brightness was dialed down to the lower setting, Community Center staff evaluated the regular sign content to ensure that messages were adequately visible. All agreed that the brightness was appropriate to ensure the visibility of the messages. The lower brightness setting also appeared to improve the contrast for various sign graphics, i.e. the photos looked clearer than they did on the brighter setting. The sign has been operating at the lower brightness setting since the test was conducted and no complaints have been received regarding the sign. (Note: The sign automatically adjusts brightness for daylight, and brightness of the sign during daylight is not a concern for staff based upon observations.)

2. Message hold times – The minimum message hold time is three seconds.

A minimum message hold time is intended to limit driver distraction from continuously moving or changing messages. Studies have shown that the mean driver glance time at digital billboards is less than one second. The sign has been operating with message hold times of at least three seconds and staff recommends continuing with this requirement.

3. Message transitions – Transition time between messages shall be a maximum of one second.

Maximum message transition times are intended to limit driver distraction from overly animated transitions, getting to the message quickly while allowing for some transition time for message fades, fly-ins, etc. No changes are recommended to this operational requirement.

3. Video and animation – The policies and procedures allow the use of video and animation. However, it requires the Parks and Recreation Department to evaluate video and animation capabilities and parameters and bring back further recommendations to the Planning Commission at the one-year review.

The Parks and Recreation Department has used minimal animation as part of the sign advertisements. Staff recommends no further modification to the sign operational plan regarding the use of animation.

Based on this review, staff recommends that the Planning Commission accept this report and include no further requirements on the Community Center sign operational plan.

**PUBLIC COMMENTS:**

Public notices were mailed to 125 property owners within 300 feet of Mills Park pursuant to the provisions of NRS and CCMC. No comments were received prior to the completion of the staff report packet for the Planning Commissioners. Any comments that are received after this report is complete will be submitted prior to or at the Planning Commission meeting, depending on their submittal date to the Planning Division.

**OTHER CITY DEPARTMENT OR OUTSIDE AGENCY COMMENTS:**

No comments have been received from other city departments.

Attachments:

- 1) SUP-13-022 Notice of Decision, July 31, 2013
- 2) Adopted Community Center Electronic Message Center Operation Policy



# Carson City Planning Division

108 E. Proctor St.  
Carson City, Nevada 89701  
(775) 887-2180  
Planning@carson.org  
www.carson.org

**PLANNING COMMISSION  
JULY 31, 2013**

## **NOTICE OF DECISION**

★ CLERK ★  
**FILED**  
Time 9:02a  
AUG 13, 2013  
By K. King  
Deputy  
Carson City, Nevada

A Special Use Permit application, SUP-13-022, was received from the Carson City Parks and Recreation Department (property owner: Carson City) to review the operational conditions for a previously approved sign to replace the existing Community Center sign, on property zoned Public Regional (PR), located at 851 E. William St., APN 002-181-01, pursuant to the requirements of the Carson City Municipal Code.

The Planning Commission conducted a public hearing on July 31, 2013, in conformance with City and State legal requirements, and approved SUP-13-022 based on the findings contained in the staff report and subject to the following conditions of approval:

### **CONDITIONS OF APPROVAL:**

**The following shall be completed prior to commencement of the use:**

1. The applicant must sign and return the Notice of Decision within 10 days of receipt of notification. If the Notice of Decision is not signed and returned within 10 days, the item may be rescheduled for the next Planning Commission meeting for further consideration.
2. The applicant shall meet all the conditions of approval and commence the use (obtain and maintain a valid building permit) for which this permit is granted within twelve months of the date of final approval. A single, one-year extension of time may be granted if requested in writing to the Planning Division thirty days prior to the one-year expiration date. Should this permit not be initiated within one year and no extension granted, the permit shall become null and void.
3. All development shall be substantially in accordance with the development plans approved with this application, except as otherwise modified by the conditions of approval herein.
4. All improvements shall conform to City standards and requirements.
5. The applicant shall obtain approval of an operational plan for the sign from the Planning Commission prior to operation of the sign, including sign brightness,

sign dimming at night, message transitions, and other sign animation parameters. Such plan shall be submitted to the Planning Division at least 30 days prior to the Planning Commission meeting at which the plan is to be reviewed. The proposed sign shall have dimming capabilities.

6. The Special Use Permit shall be reviewed by the Planning Commission one year from approval regarding the sign illumination (dimming) and message displays to determine if controls are adequate to minimize impacts to surrounding properties and motorists.

**The following shall be submitted with or included as part of a building permit application:**

7. The applicant shall submit a copy of the Notice of Decision, signed by the applicant and owner.

This decision was made on a vote of 6 ayes, 0 nays, and 1 absent.

  
Susan Dorr Pansky  
Planning Manager

SDP:jmb

Mailed by: 8/13/13

By: AMT

**PLEASE SIGN AND RETURN THIS NOTICE OF DECISION WITHIN  
TEN DAYS OF RECEIPT**

This is to acknowledge that I have read and will comply with the Conditions of Approval as approved by the Carson City Planning Commission.

  
OWNER/APPLICANT SIGNATURE

8-19-13  
DATE

Tom GRUNDY  
PLEASE PRINT YOUR NAME HERE

**RETURN TO:**

Carson City Planning Division  
108 E. Proctor St., Carson City, NV 89701

- Enclosures: 1. Planning Commission Notice of Decision (2 copies)-Please sign and return only one. The second one is for your records.
2. Self-addressed stamped envelope

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## POLICY AND PROCEDURE

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<b>Subject:</b> Carson City Community Center Electronic Message Center Operation Policy		<b>Index:</b>	
		<b>Number:</b>	
<b>Effective Date:</b> June 26, 2013	<b>Supersedes:</b> N/A	<b>Pages:</b> 2	<b>Approved by:</b>

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1.0 **PURPOSE:**

This Electronic Message Center Operational Policy (EMCOP) sets the policy for a number of functions of the Electronic Message Center (ECM) at the Carson City Community Center, including sign brightness, sign dimming at night, message transitions, message hold times as well as animation and video parameters.

This policy was developed pursuant to Condition 5 of SUP13-022 approved March 27, 2013 by the Carson City Planning Commission on behalf of the Carson City Parks and Recreation Department:

“The applicant shall obtain approval of an operational plan for the sign from the Planning Commission prior to operation of the sign, including sign brightness, sign dimming at night, message transitions, and other sign animation parameters. Such plan shall be submitted to the Planning Division at least 30 days prior to the Planning Commission meeting at which the plan is to be reviewed. The proposed sign shall have dimming capabilities.”

Standards in this EMCOP are based, where possible, on the recommendations of the International Sign Association.

2.0 **ORGANIZATIONS AFFECTED:**

Carson City Parks and Recreation Department  
All users of the Electronic Message Center

3.0 **DEFINITIONS:**

“Electronic Message Center” or “EMC” is defined as a device which uses a combination of lights, or lighted or unlighted panels which are controlled electrically and electronically to produce words, symbols, pictures or messages which may change within a given panel area.

“Illuminance” is defined as the total luminous flux incident on a surface, per unit area. Illuminance is the photometric quantity most closely associated with the perception of brightness and is a measurement of the intensity of light falling on a surface.

“Illuminance measurement distance” has units of feet and is defined by the value of the following equation, rounded to the nearest foot:

$$\text{Illuminance measurement distance} = 10\sqrt{\text{sign area in square feet}}$$

“Illuminance meter” is defined as a device which is able to measure illuminance in foot-candles, and is accurate to a minimum of two decimal places.

“Luminous flux” is defined as the measure of the rate of flow of luminous energy, evaluated according to its ability to produce a visual sensation.

“Message hold time” is defined as the period of time for which the text of a single message is visible, exclusive of transition time. Animation or video may be present within a single message, but the text of a message shall remain unchanged for the entire message hold time.

“Sign brightness over ambient light” is defined as the value obtained using the following procedure:

The illuminance of the EMC shall be measured with an illuminance meter with the EMC off, and again with the EMC displaying an all-white image over the entire area of the display. All measurements shall be taken perpendicular to the face of the sign at the illumination measurement distance. The difference between the white image state and the off state measurements shall be the “sign brightness over ambient light”.

“Transition time” is defined as the time elapsed from the end of the complete display of one message to the full display of the next message.

#### 4.0 POLICY:

##### Sign Brightness and Night Dimming:

Sign brightness over ambient light of the EMC shall be limited to 0.3 foot-candles over current ambient lighting, measured at the "illuminance measurement distance" defined in this plan at all times. The EMC shall be equipped with technology that automatically dims the electronic message center according to ambient light conditions. By utilizing a brightness standard which is measured relative to current ambient light conditions, and utilizing technology which automatically dims the electronic message center according to ambient light conditions, sign dimming at night will be inherent in the operation of the sign.

##### Message Hold Time:

The minimum message hold time shall be three seconds.

##### Message Transitions:

Transition time for messages shall be a maximum of 1 second.

##### Video and Animation:

This EMCOP recognizes that video and animation can be powerful tools for conveying messages. However, this EMCOP also recognizes that video and animation can be overused on EMC's, creating a nuisance. The Carson City Parks and Recreation Department will investigate various video and animation techniques on varying areas of the EMC for a period of one year from the date of adoption of this EMCOP to determine reasonable parameters for the use of video and animation which will facilitate effective communication without creating a nuisance. After the Carson City Parks and Recreation Department determines what those parameters are, they will return to the Planning Commission for review and possible approval of those parameters.

##### Operation During Urgent Situations:

Occasional operation of the EMC during urgent situations to convey to important information to the public is anticipated. When the operation of the EMC is controlled by the Fire Department, Health Department, Public Works Department or the Sheriff's Department to display information regarding urgent situations, the standards for sign brightness and night dimming, message hold times, message transitions as well as video and animation parameters may be disregarded.