

## STAFF DESIGN COMMISSION REPORT

### PROJECT INFORMATION:

**Project Name:** Arlington International Racecourse  
**Project Address:** 2200 W. Euclid Ave.  
**Prepared By:** Steve Hautzinger

### PETITIONER INFORMATION:

**DC Number:** 16-144  
**Petitioner Name:** Carol Coffey  
**Petitioner Address:** Arlington International Racecourse  
 2200 W. Euclid Ave.  
 Arlington Heights, IL 60004  
**Meeting Date:** February 14, 2017

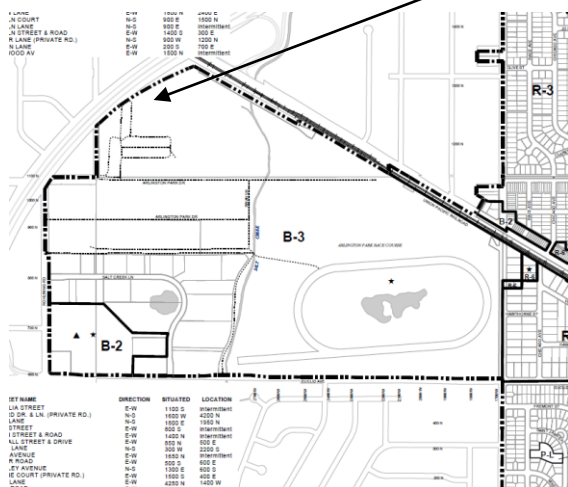
**Date Prepared:** February 6, 2017

### Requested Action:

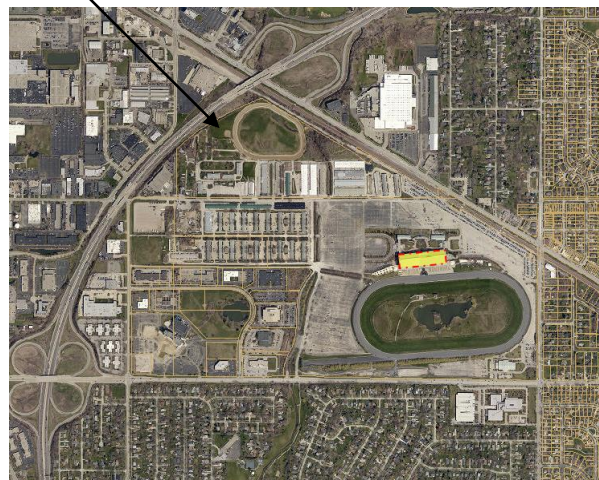
1. A variation from Chapter 30, section 30-120.a, Prohibited Signs, to allow an electronic changeable LED sign.
2. A variation from Chapter 30, section 30-120.f, Prohibited Signs, to allow a sign with changing advertisements for multiple off-premises businesses, where it is prohibited to advertise a business or services that is not located on the same property as the sign.
3. A variation from Chapter 30, section 30-303.a, to allow a 95 foot tall ground sign, where 16 feet 6 inches is the maximum allowed.
4. A variation from Chapter 30, section 30-303.c, to allow a 1,200 square foot ground sign, where 80 square feet is the maximum allowed.
5. A variation from Chapter 30, section 30-117.a, to allow a sign to be illuminated to .3 footcandles above ambient light levels as measured from 150 feet from the sign face, where 250 foot candles measured at the face of the sign is the maximum allowed.

The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code, specifically Section 6-501 (e)(1), which states that the Design Commission "shall review all Plan Commission, Zoning Board of Appeals, Building Permit and Sign Permit applications for new construction...to determine whether it meets with the standards, requirements and purposes of the Design Guidelines and Chapter 30, Sign Code."

### Subject Property and Location of Proposed Sign



Zoning Map of Property



Aerial of Property

**Summary:**

Arlington International Racecourse is proposing to install an electronic changeable LED billboard sign facing Route 53. The proposed sign will be double-sided, 60 feet wide and 20 feet tall, and 1,200 sf in size. The sign will be supported on a single steel column and will be 95 feet in overall height above grade. The petitioner is proposing to use the sign to advertise events at the racecourse, as well as to sell advertising space on the sign to off-premises businesses. The messages displayed on the sign are proposed to change every ten seconds (six messages per minute). The racecourse intends to utilize approximately 2 messages per minute for racecourse advertising, which may vary during racing season (April through September) versus off-season (October through March). The remaining message slots are intended to be sold to other businesses for off-premises advertising, approximately 4 messages per minute. Therefore, the sign would be used approximately 1/3 of the time for Arlington Racecourse advertising, and 2/3 of the time as a revenue generator.

The proposed sign is prohibited by code due to: the electronic changeable display is not permitted, off-premises (billboard) advertising is not allowed, size, height, and brightness. However, Arlington International Racecourse is a major tourism venue unlike any other business in Arlington Heights, and there are eight other existing billboard signs located in Rolling Meadows that are facing Route 53, directly adjacent to the location of the proposed sign. Three of the eight existing billboards are electronic (refer to the attached Map and Photos of the existing billboards). The subject site is located in a B-3 Zoning District, and there are no adjacent Residential Zoning Districts.

**Background:**

Per Chapter 30, Section 30-120.f, off-premises advertising on signs is prohibited in Arlington Heights. Large scale billboard signs are also not allowed, and electronic message board signs are currently prohibited, with the exception of the price display on gas station signs.

However, there are two electronic message board signs existing in Arlington Heights: one received a sign variation in 1996, and the other is a Village owned Civic Events sign:

- Daily Herald. A sign variation for an electronic message board sign for the Daily Herald was granted in 1996 with restrictions that the message board copy remain stationary and messages change no more frequently than: time and temperature - one minute, traffic and major news messages - 5 minutes, Daily Herald messages – 1 hour, and community service messages – one per hour. This was determined to be a unique condition being adjacent to the I-90 tollway.
- Arlington Heights' Civic Events Sign was installed in approximately 2004. This sign is allowed by code as an exempt Municipal sign providing non-advertising information as a public convenience per Section 30-103.



Image 1. Daily Herald electronic sign viewed from I-90.

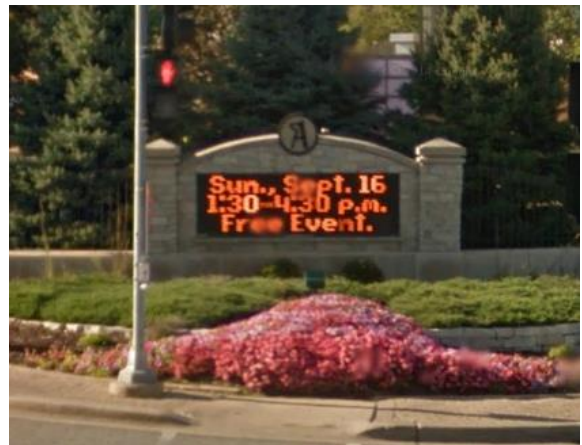


Image 2. Arlington Heights' Civic Events sign.

Two other electronic message board signs were installed by School District 214 without Village approvals.



Image 3. Hersey High School electronic message sign.



Image 4. Forest View School electronic message sign.

The Design Commission first discussed the matter of electronic signage in 2007 relative to several specific sign variation requests, all of which were recommended for denial by Staff and the Design Commission, and one request denied by the Village Board. After detailed research by Staff, the Design Commission discussed the matter again in 2008 at a kick-off meeting and then in detail in 2009, at which time the Design Commission recommended that the Village continue to not allow electronic LED signs. Since then, the Design Commission has discussed the matter of electronic signage in 2012 as part of a Visual Preference Survey and in 2015 relating to Patton Elementary School's request for an electronic sign.

On February 19, 2016, Mayor Hayes sent a letter to the Design Commission requesting that the Design Commission complete the following tasks for Village Board review:

- Develop a general overview of the issues related to electronic signage.
- Report on a range of general approaches regarding electronic signage.
- Recommend an approach for the Village Board to discuss this matter by early June of that year.

In response to Mayor Hayes' request, Staff and the Design Commission completed a preliminary Village-wide study of electronic signage and discussed the matter at three Design Commission meetings:

- February 23, 2016. Kick-off meeting, preliminary discussion and thoughts.
- March 29, 2016. Staff presented a survey of other communities' electronic sign requirements along with photos and videos of electronic signs from other communities for discussion.
- April 12, 2016. Review and approval of Position Statement and Recommendations.

On July 18, 2016, the Design Commission's Position Statement & Recommendations regarding electronic signage was presented to the Village Board. The Design Commission's report outlined the issues related to electronic signs which included: Arlington Heights' image, nuisance to adjacent properties, traffic safety, code enforcement, and energy consumption. The report also included the Design Commission's recommendations regarding different possible applications for electronic signs, as follows:

- Electronic LED signs should not be allowed for commercial businesses community wide. Commercial signs should be used for business identity, not advertising.
- Electronic LED signs should not be allowed for major tourism venues. **However, major tourism venues represent a possible good application for electronic signs, and they should be considered on a case-by-case basis as sign variations.**
- Electronic LED signs should not be allowed for schools, churches, and park facilities which are commonly located in residential neighborhoods. However, non-light emitting electronic signage technology, such as electronic ink, should be closely monitored for use in these applications.



- **Electronic LED signs should not be allowed along I-90 and Route 53 due to a possible unfair advantage for businesses fronting these highways, and to avoid contributing to signage blight along these highways.**
- Electronic LED signs should not be allowed at this time, but emerging technologies in electronic signs should be monitored for more aesthetically pleasing, environmentally friendly alternatives to LED signs, such as electronic ink.

Highlights of the feedback provided by the Village Board from the July 18, 2016 meeting are as follows:

- Allowing electronic signs in Arlington Heights should be explored to maintain a competitive advantage and/or level playing field with surrounding communities, at least on a limited basis.
- Electronic signs may be appropriate in some applications to promote businesses, if done properly.
- The Board does not want to allow electronic signage by right, but a special review process should be explored.
- Concern that electronic signs may proliferate, even with a special review process.
- Concern over unintended consequences.
- Concern regarding enforcement.
- The desire of businesses to have electronic signs must be balanced with the Village's ability and duty to make the Village look good.
- **Sign variations for electronic signs may be the best process in some cases, such as major tourism venues.**
- Electronic ink would be a better option if it had a full color display.
- The Board is concerned about waiting for new sign technology, such as electronic ink, to become readily available.

At the conclusion of the July 18, 2016 meeting, Staff was directed by the Village Board to further research and draft a special use process to allow electronic signage that meets certain conditions (refer to the attached Village Board meeting minutes dated July 18, 2016).

In accordance with the Village Board's direction to explore a special approval process for the review of electronic signs, and after review of other communities' electronic sign standards and approval processes, a draft Conditional Review Process and Possible Standards have been prepared. Based on concerns expressed by some Board members, research and legal requirements, allowing electronic signs for businesses located along primary commercial corridors has been vetted. This approach will allow electronic signs along major commercial nodes, and will minimize nuisance concerns within residential neighborhoods. The outcome of this approach can then be evaluated, including any unintended, undesirable consequences, as well as feedback from the community. For detailed information, refer to the attached report titled "Electronic Signs - Possible Conditional Review Process". This report is currently under review by the Village Board, and Staff is awaiting further direction.

Also in follow up to the Village Board meeting, Staff met with the Metropolis Theater about a possible electronic theater marquee sign, and met with Arlington Racecourse regarding the proposed electronic billboard sign to face Route 53. It was discussed that, due to the unique nature of both of these requests, sign variations will be required no matter what regulations the Village were to draft.

#### **Sign Variation Criteria:**

The Village Sign Code, Chapter 30, Section 30-901 sets out the criteria for granting a sign variation as follows:

- That the particular difficulty or peculiar hardship is not self-created by the Petitioner.*
- That the granting of said variation will not create a traffic hazard, a depreciation of nearby property values or otherwise be detrimental to the public health, safety, morals and welfare;*
- That the variation will serve to relieve the Petitioner from a difficulty attributable to the location, topography, circumstances on nearby properties or other peculiar hardship, and will not merely serve to provide the Petitioner with a competitive advantage over similar businesses;*
- That the variation will not alter the essential character of the locality;*
- That the Petitioner's business cannot reasonably function under the standards of this chapter.*

The petitioner has submitted a letter addressing the sign variation criteria. The hardship reported by the petitioner is that for the past decade, wagering on horse races has declined 40%, which is their major source of revenue. In response to this decline, the racecourse has changed its business model from dependency on wagering to being dependent on income derived from various entertainment events hosted every weekend from May through September as well as a schedule of trade shows, ride and drive events, and holiday events from October through April. They report that their need for advertising and marketing multiple events with a changing message sign has increased ten-fold, and currently, there is no signage on the property to advertise the multitude of events conducted there.

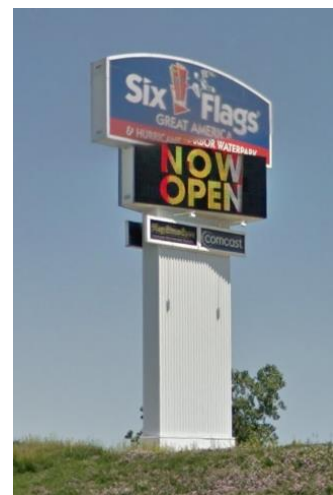
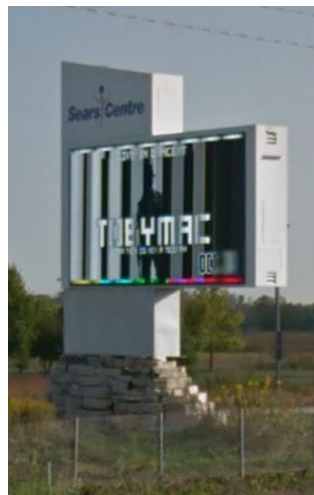
The petitioner's letter states that they currently spend approximately \$100,000 per year to advertise on three electronic billboards for two weeks to promote the opening of race season in May and the Arlington Million event in August, but that this is very limited and insufficient for a year round entertainment destination to adequately promote its brand and market its events. Furthermore, the billboards are located miles away from the property and do not provide the destination reference for Arlington Racecourse.

Finally, the petitioner's letter outlines how the proposed sign will not create a traffic hazard, a depreciation of nearby property values, be detrimental to the public, or alter the character of the locality because the proposed location of the sign is remote from any residents, and there are already many static and digital billboard signs in this location along Route 53.

**Analysis:**

Staff agrees that the Arlington International Racecourse is an important and unique, one of a kind major entertainment venue in Arlington Heights, and that their current signage is inadequate to effectively advertise the various events hosted at their facility. The proposed location for the electronic billboard sign facing Route 53 is a good choice due to the remoteness from residential neighborhoods and due to the existing context of numerous other billboards that already face Route 53 in this general location. The size and height of the proposed sign is consistent with the existing billboards along Route 53.

However, the justification for using the billboard the majority of the time for off-premises advertising of other businesses as a source of revenue needs to be evaluated. The petitioner reports that other major entertainment destinations in the Chicagoland market have large digital billboard signs to prominently mark their destination and market their events. Staff agrees that other major entertainment destinations have large electronic signs, but venues such as the Allstate Arena in Rosemont, the Sears Center in Hoffman Estates, and Six Flags in Gurnee all have prominent permanent signage incorporated as part of their signs to establish their destinations. It should be evaluated whether the proposed sign should include permanent "Arlington International Racecourse" as a destination reference.



Examples of Major Entertainment Venue Signage

Concerns regarding off-premises advertising are:

- Would allowing off-premises advertising set a precedent for other businesses facing Route 53 and I-90 to request electronic billboard signs on their properties?
- If the sign is used the majority of the time (approximately 2/3 of the time) as an off-premises billboard, it will be far less effective in promoting the Racecourse.
- Is it acceptable to have other businesses that may compete with Arlington Heights' businesses promoted on a sign in Arlington Heights? For example, an advertisement for Schaumburg Ford would directly compete with Arlington Heights Ford.
- Would promoting other businesses outside of Arlington Heights have a negative impact on Arlington Heights?

Is the sign's primary purpose to promote Arlington Racecourse, or to be a stand-alone billboard revenue generator? Six Flags, Allstate Arena, and Sears Centre all have permanent signage as part of their electronic signs, and they use their signs primarily to promote events at their venues as well as for advertising their direct business partners/sponsors such as Coca-Cola or Miller beer. However, in speaking with the Villages of Hoffman Estates and Gurnee, the signs at Sears Centre and Six Flags are used some of the time for off-premises advertising, and off-premises advertising is not restricted by the Village. Furthermore, off-premises advertising on these signs is not restricted from competing businesses in other towns. Both Villages reported that advertising from competing businesses in other towns on these signs has been minimal, it has not been an issue thus far, and there have been no complaints from their local businesses. The Village of Hoffman Estates reported that they do use the Sears Centre sign for promotion of community events held at or near the Sears Centre. If the proposed sign for Arlington Racecourse is approved, the Village of Arlington Heights would like the ability to advertise community events on the sign at no cost.

Ideally, Staff recommends that the proposed sign for Arlington Racecourse include permanent "Arlington International Racecourse" signage on the top of the sign, and that the sign be used only for on-premises advertising which would include promoting racing events, promoting other events hosted at the facility, and advertisements for other businesses and products sold on the premises such as Ditka's restaurant, Mr. D's Sports Bar, Miller Lite, and Pepsi.

**Existing Rolling Meadows Billboards:**

There are eight existing billboard signs located in Rolling Meadows that are facing Route 53, directly adjacent to the location of the proposed sign. Three of the eight existing billboards are electronic (refer to the attached map and photos). The City of Rolling Meadows has an overlay district along Route 53 where off-premises signage is allowed. However, the maximum size sign allowed is 200 square feet and 20 feet in height. The existing billboards all exceed those limitations, so variations were required to be approved by the City Council, and IDOT approval was also required. The three electronic billboards operate 24 hours per day, 7 days per week.

**Possible Restrictions:**

If the Design Commission supports the proposed sign, then the following restrictions should be evaluated:

IDOT (Illinois Department of Transportation) Requirements. IDOT has standards for billboards that are applicable to the proposed sign. A summary of IDOT's requirements are as follows:

- **Size.** 30 feet maximum height, 60 feet maximum width, and 1,200 sf maximum size.
- **Display.** Static messages only. Oscillating, rotating, flashing, intermittent or moving lights are not allowed.
- **Frequency of Message Change.** 10 seconds minimum (6 messages per minute). Note: The three existing adjacent electronic billboards all change messages every 10 seconds.

- **Spacing:**
  - o Signs must be a minimum 1,000 feet from official traffic signs, signals, or devices and shall not obscure or interfere with a driver's view of such sign, signal, or device.
  - o Signs must be a minimum 1,000 feet from approaching, merging or intersecting traffic and shall not obscure or interfere with a driver's view of such traffic.
  - o Signs must be a minimum 500 feet from of another such sign structure.
- **Moving Parts.** Signs cannot contain any animated or moving parts.

In addition to IDOT's requirements, the following restrictions are recommended:

- **Display.** The display shall be high resolution, full color. Video not allowed.
- **Brightness:**
  - o Auto-dimming photocell technology is required to adjust the display brightness based on ambient lighting conditions.
  - o Brightness shall be limited to .3 footcandles maximum above ambient lighting conditions at 150 feet from the sign face. (Brightness restrictions are based on IESNA, Illuminating Engineering Society of North America, standards.)
  - o Written certification from manufacturer required to verify auto-dimming function, preset not-to-exceed .3 footcandles above ambient lighting conditions.
- **Sound.** Sound is not allowed.
- **Hours of Operation.** Unlimited.
- **Sign Removal.** If the proposed sign is approved, Staff recommends including a condition requiring the sign to be removed if Arlington Racecourse ceases operations (in accordance with Chapter 30, Section 30-109 "Removal of Signs for Businesses No Longer on Premises"), unless the Village approves a future request.

### **OPTIONS:**

**Option 1.** Approve as submitted (with restrictions as noted above).

**Option 2.** Require revisions to include permanent "Arlington International Racecourse" signage on the top of the sign.  
(Note: The maximum permitted sign size will need to be coordinated with IDOT requirements, which may require a reduction to the electronic display portion of the sign to accommodate the permanent signage.)

**Option 3.** Require revisions to include permanent "Arlington International Racecourse" signage on the top of the sign and limit the use of the sign to on-premises advertising only (with restrictions as noted above).

**Option 4.** Deny the request.

### **RECOMMENDATION:**

Of the four options listed, Staff recommends that the Design Commission **proceed with Option 3** regarding the proposed electronic billboard sign variation requests for *Arlington International Racecourse* located at 2200 W. Euclid Avenue. This recommendation is subject to compliance with the plans received 1/5/17, Federal, State, and Village Codes, regulations, and policies, the issuance of all required permits, and the following:

1. The design of the sign shall be revised to include permanent "Arlington International Racecourse" signage on the top of the sign. (Note: The maximum permitted sign size will need to be coordinated with IDOT requirements.)
2. The display on the sign shall be static only. Oscillating, rotating, flashing, intermittent, moving lights, and video are not allowed.
3. Each message shall be displayed for 10 seconds minimum.

4. The display shall be high resolution and full color.
5. Auto-dimming photocell technology is required to adjust the display brightness based on ambient lighting conditions.
6. Brightness shall be limited to .3 footcandles maximum above ambient lighting conditions at 150 feet from the sign face.
7. Written certification from manufacturer is required to verify auto-dimming function, preset not-to-exceed .3 footcandles above ambient lighting conditions.
8. Sound is not allowed.
9. The sign shall be removed in its entirety if Arlington Racecourse ceases operations (in accordance with Chapter 30, Section 30-109 "Removal of Signs for Businesses No Longer on Premises").
10. The Village of Arlington Heights shall be allowed to advertise community events on the sign at no cost.
11. This review deals with architectural design only and should not be construed to be an approval of, or to have any other impact on, any other zoning and/or land use issues or decisions that stem from zoning, building, signage or any other reviews. In addition to the normal technical review, permit drawings will be reviewed for consistency with the Design Commission and any other Commission or Board approval conditions. It is the architect/homeowner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans comply with all zoning code, building permit and signage requirements.

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Steve Hautzinger AIA, Design Planner  
Department of Planning & Community Development

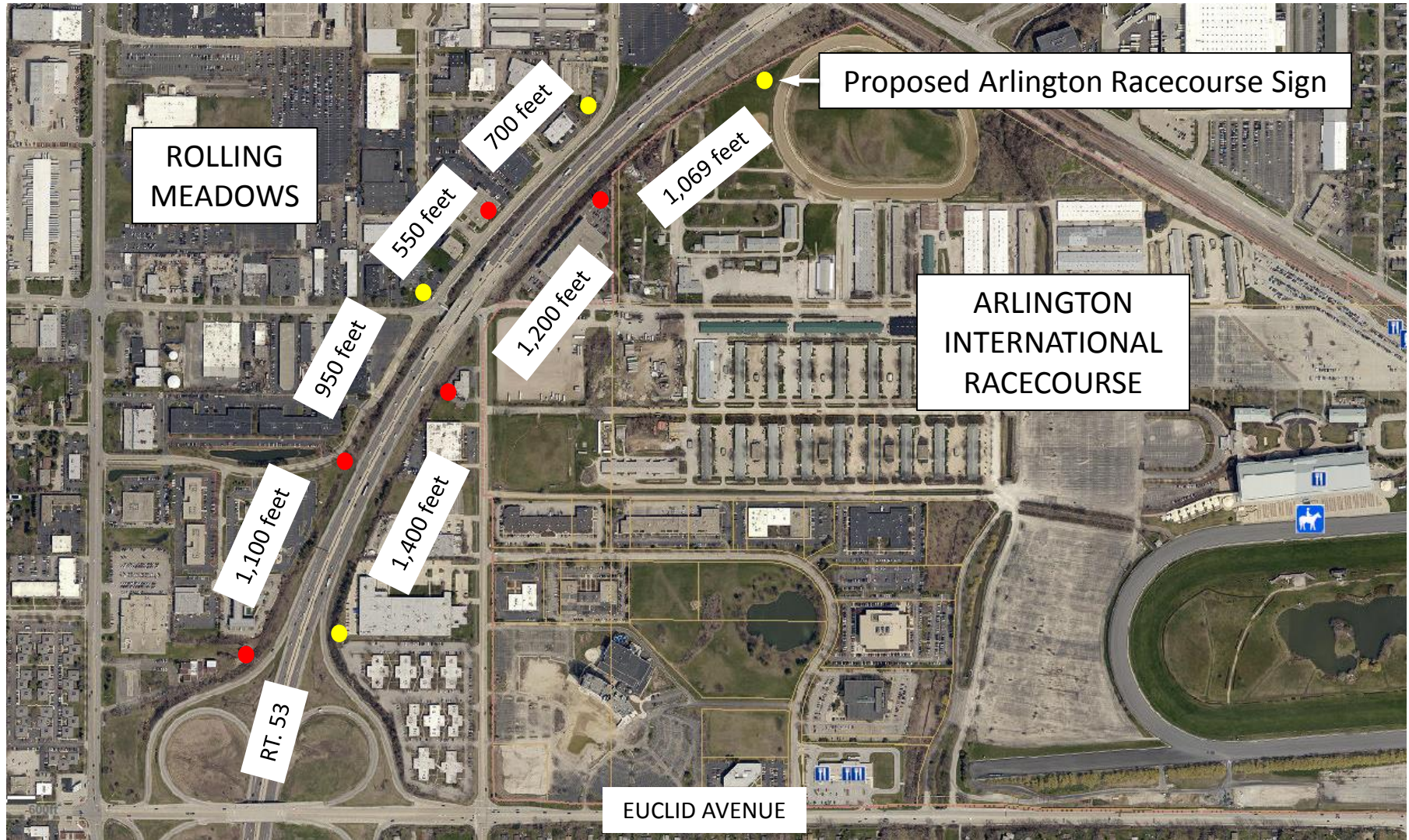
**ATTACHMENTS:**

1. Map of Existing Billboards
2. Photos of Existing Electronic Billboards
3. Examples of Major Entertainment Venue Signage.
4. Electronic Signs, Design Commission Position Statement & Recommendations, approved April 12, 2016.
5. Village Board Meeting Minutes, July 18, 2016.
6. Extracts from the International Sign Association report titled "Night-time Brightness Level Recommendations for On-Premise Electronic Message Centers", updated August 2016.
7. Electronic Signs – Possible Conditional Review Process, dated February 8, 2017.
8. Major Arterial Roads & Primary Commercial Corridors Map, dated January 31, 2017.
9. Newspaper article, "Digital Billboard Plan Heads to Rolling Meadows Council", dated May 27, 2015.

c: Charles Witherington-Perkins, Director of Planning and Community Development, Randy Recklaus, Village Manager, Robin Ward, In-House Counsel, Steve Touloumis, Director of Building Services, Petitioner, DC File 16-144



# Map of Existing Billboards

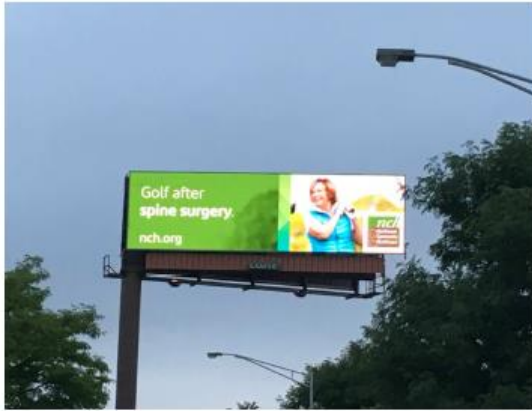


- EXISTING BILLBOARD
- EXISTING ELECTRONIC BILLBOARD

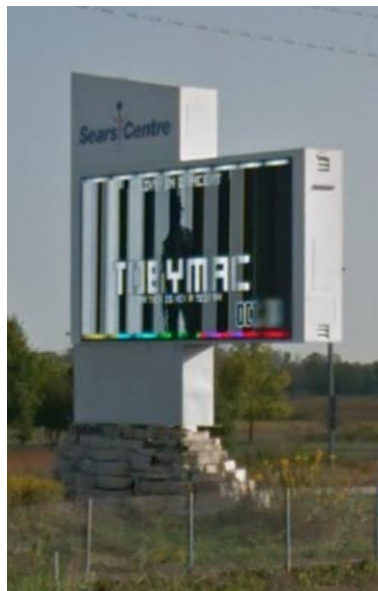
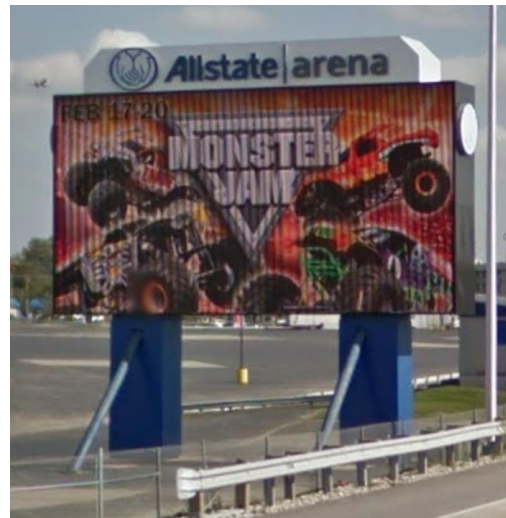
Note: Separation distances between billboards are approximate



# Photos of Existing Electronic Billboards in Rolling Meadows



# Examples of Major Entertainment Venue Signage



# **ELECTRONIC SIGNS**

## **Design Commission Position Statement & Recommendations**

### **Approved April 12, 2016**

**A MOTION WAS MADE BY COMMISSIONER ECKHARDT TO APPROVE THE DESIGN COMMISSION POSITION STATEMENT & RECOMMENDATIONS ON ELECTRONIC SIGNAGE. COMMISSIONER KUBOW SECONDED THE MOTION. ALL WERE IN FAVOR. THE MOTION CARRIED.**

#### **Task:**

On February 19, 2016, Mayor Hayes sent a letter to the Design Commission regarding electronic signage requesting that the Design Commission complete the following tasks for Village Board review:

- Develop a general overview of the issues related to electronic signage.
- Report on a range of general approaches regarding electronic signage.
- Recommend an approach for the Village Board to discuss this matter by early June of this year.

#### **History & Background:**

The Design Commission first discussed the matter of electronic signage in 2007 relative to several specific sign variation requests, all of which were recommended for denial by Staff and the Design Commission, and one request denied by the Village Board. After detailed research by Staff, the Design Commission discussed the matter again in 2008 at a kick-off meeting and then in detail in 2009 where the Design Commission concluded to continue to not allow electronic LED signs. Since then, the Design Commission has discussed this matter in 2012 relative to the Visual Preference Survey undertaken and in 2015 regarding Patton School's request. As a result of the 2015 review, this topic was placed on the Design Commission agenda again in January 2016.

#### **Process:**

In response to Mayor Hayes' request, Staff and the Design Commission have completed an initial Village-wide study of electronic signage, and have discussed the matter at three recent Design Commission meetings:

- February 23, 2016. Kick-off meeting, preliminary discussion and thoughts.
- March 29, 2016. Staff presented a survey of other communities' electronic sign requirements along with photos and videos of electronic signs from other communities for discussion.
- April 12, 2016. Review and approval of Position Statement and Recommendations.

#### **Types of Electronic Signs:**

##### **1. LED (Light Emitting Diode) Signs**

- a. The sign display is created by a series of light emitting diodes arranged on a panel.
- b. Available in monochromatic (red or amber) or full color.
- c. Available in low and high resolution. Best viewed from a distance.
- d. Generally, very bright and glaring.
- e. Capable of static, scrolling, and animated displays.
- f. High resolution displays are capable of full color video.
- g. Uses range from gas station pricing, small message boards, and highway billboards.
- h. It is the most common type of electronic sign due to many manufacturers and competitive pricing.

## **2. LCD (Liquid Crystal Display) Signs**

- a. The sign display is similar to a high definition television.
- b. Capable of static images and full color video.
- c. Generally, very bright.
- d. Less common and more expensive than LED electronic signs.
- e. Typically used for close up viewing, such as indoor fast food menu signage, outdoor drive-through signage, and bus shelters.

## **3. Electronic Ink Signs**

- a. Has the appearance of printed ink on paper, as seen in a Kindle reader.
- b. Does not emit light. No glare.
- c. Extremely low power consumption.
- d. The display can be changed, but not capable of scrolling, animation, or video.
- e. Is currently being used in limited outdoor signage applications such as gas station pricing and bus shelters, but is not currently a production/commodity product.
- f. Is currently under development for more widespread use in outdoor signage applications.

### **Questions to be Answered:**

1. Is electronic signage something that the Village should continue to explore?
2. What is the image that the Village wants for its corridors?
3. Should electronic signage be allowed in residential districts for schools and churches across from residential homes?
4. Should electronic signage be allowed in business and manufacturing districts (with restrictions)?
5. Should electronic signage be allowed for specific uses such as major tourism venues such as Arlington International Racecourse, Metropolis Theater, Star Cinema Grill, or major developments such as Arlington Downs?
6. Should electronic signage be allowed in specific locations such as along I-90?
7. Should electronic signage be allowed as of right, or through an additional discretionary review process?
8. Should electronic signage continue to be deferred until more energy efficient and aesthetically pleasing technology is prevalent, such as electronic ink signs?

### **Summary of March 29, 2016 Design Commission Meeting:**

On March 29, 2016, Staff and the Design Commission continued the review of electronic signs. A survey of other communities' electronic sign requirements along with photos and videos of electronic signs from other communities were presented by Staff for discussion.

### **Highlights of the presentation were:**

1. Photos and videos of electronic signs from surrounding communities such as Mt. Prospect, Prospect Heights, Palatine, and Rolling Meadows were presented.
2. Examples of signs from churches, restaurants, automotive repair, retail businesses, Village, library, fire department, and park district were provided.
3. The technology of these signs were either monochromatic (red or amber) or full color LED displays. Full color signs use a combination of red, blue, and green LEDs to create the full color displays.
4. Overall the electronic LED signs were bright and glaring, and the commissioners were encouraged to visit these signs in person to understand the full impact.
5. All of the signs had changing messages and most utilized flashing, scrolling, animation, and videos.
6. Many of the signs observed were located adjacent to residential properties, which is a concern.



7. Messages on the signs ranged from dancing Easter eggs to hot dog specials, and some signs had burnt out sections of LED lighting which added to the poor appearance of the signs.
8. The value of the advertisements being communicated on the signs for businesses was discussed, as opposed to the value of public information being communicated on the signs for municipalities, schools and churches.
9. Electronic Ink as an alternative to LED signs was discussed, possibly for use at schools and churches in residential neighborhoods.
10. Summary of concerns:
  - a. LED displays are bright and glaring.
  - b. Electronic LED signs in residential neighborhoods are not appropriate.
  - c. Dozens of electronic signs along commercial corridors create character concerns.
  - d. Nuisance to adjacent properties, especially residential.
  - e. Traffic distraction concerns.
  - f. Electronic Ink signage has great potential as an alternative to LED, especially for school and church message boards.
  - g. Electronic signs may be appropriate at major tourism venues, such as Arlington International Racecourse, or possibly along I-90.

#### **Design Commission feedback and areas of concern:**

1. The examples of signs presented raised concerns amongst the Design Commissioners.
2. None of the signs presented were favored by the Design Commissioners.
3. The Design Commission needs to consider the beauty of the Village.
4. Brightness is one of the primary concerns.
5. There would be no way to control the use of electronic signs.
6. Arlington Heights does not need more clutter along the commercial corridors.
7. Large pixel signs look crude and cheap.
8. The purpose of signs should be to locate a business, not to advertise products and services.
9. Until there are more cost effective options for high quality, high resolution or electronic ink signs, electronic signs should not be allowed.
10. Electronic signs should not be allowed along I-90 which is already cluttered with signage.
11. The needs for public information message boards for churches, schools or Park District facilities need to be considered, as compared to advertisements at a business or a fast food establishment.
12. The commissioners were interested in electronic ink signage as an alternative to electronic LED signs.
13. If electronic signs were to be allowed in Arlington Heights:
  - a. A special review process for all electronic signs should be considered.
  - b. Electronic signs should be visually quiet, calm, and small.
  - c. To minimize brightness, only electronic LED message signs with black backgrounds should be considered.
  - d. Only high quality, high resolution displays such as a high definition television screen should be considered.
  - e. If allowed along I-90, it will need to have high quality graphics and be large enough to be easily read.

Chairman Eckhardt requested that the commissioners drive through surrounding communities and be prepared to present 4 or 5 position statements regarding electronic signs at the next meeting.

### **Options:**

1. Continue to not allow electronic signs Village-wide.
2. Allow electronic signs Village-wide.
3. Allow limited applications of electronic signage.

### **General Approaches / Options for Specific Uses, Locations, and Types of Signs:**

1. **Community Wide Commercial Business Electronic Signage**
  - a. Option 1. Continue to not allow electronic signs.
  - b. Option 2. Allow electronic signs by right (with restrictions).
  - c. Option 3. Allow electronic signs with special review process.
2. **Major Tourism Venues** (such as Arlington International Racecourse, Metropolis Theater, Star Cinema Grill, or major developments such as Arlington Downs)
  - a. Option 1. Continue to not allow electronic signs.
  - b. Option 2. Allow electronic signs by right (with restrictions).
  - c. Option 3. Allow electronic signs with special review process.
3. **Schools, Churches, Government, and Park District Facilities**
  - a. Option 1. Continue to not allow electronic signs.
  - b. Option 2. Allow electronic signs by right (with restrictions).
  - c. Option 3. Allow electronic signs with special review process.
4. **I-90 and Route 53.**
  - a. Option 1. Continue to not allow electronic signs.
  - b. Option 2. Allow electronic signs by right (with restrictions).
  - c. Option 3. Allow electronic signs with special review process.
5. **Future Technology**
  - a. Continue to not allow electronic signs at this time, but monitor the developments in electronic sign technology in the future for new, aesthetically pleasing, environmentally friendly alternatives to current electronic signs, such as electronic ink signage.

### **POSITION STATEMENT & RECOMMENDATIONS:**

#### **Issues related to electronic signs:**

1. **Image**
  - a. Electronic LED signs are inherently bright and glaring with blinking, scrolling, animation, and video displays which can be obnoxious, portraying a negative image of the community.
  - b. Allowing electronic signs at numerous businesses along our commercial corridors could result in sign blight and create a negative image for the community.
2. **Nuisance**
  - a. Bright LED signs can create a nuisance to adjacent properties, especially residential uses.
3. **Traffic Safety**
  - a. Changing messages on electronic signs can be distracting to drivers creating a safety concern.

#### **4. Code Enforcement**

- a. The use of electronic signs would be difficult to enforce, and control of message content is legally limited.

#### **5. Environment**

- a. Electronic LED signs consume energy at all times to display their message, day and night.

### **Recommendations:**

#### **1. Community Wide Commercial Business Electronic Signage**

- a. Option 1. Continue to not allow electronic LED signs.  
Commercial signs should be used for business identity, not advertising.

#### **2. Major Tourism Venues** (such as Arlington International Racecourse, Metropolis Theater, Star Cinema Grill, or major mixed use developments such as Arlington Downs)

- a. Option 1. Continue to not allow electronic signs.  
Major tourism venues may be a good application for electronic signage. However, it may be challenging to draft code language and to predict the possible impacts for these unique, individual electronic sign applications. Review of electronic sign requests for major tourism venues may be best handled through the sign variation review process.

#### **3. Schools, Churches, Government and Park District Facilities**

- a. Option 1. Continue to not allow electronic signs, except for electronic ink signs as may be approved by the Design Commission.  
Schools, churches, Government and Park District facilities do have the need for community message board signage. However, since these uses are typically located within residential neighborhoods, electronic signs should continue to not be allowed. Alternate emerging non-light emitting electronic sign technology, such as electronic ink, should be closely monitored for this application.

#### **4. I-90 and Route 53.**

- a. Option 1. Continue to not allow electronic signs.  
Allowing electronic signage along major highways would not directly impact the character within Arlington Heights. However, it may have unintended consequences such as possibly creating a competitive advantage for those businesses with frontage along major highways over similar uses elsewhere in the community, and contributing to signage blight along the highways.

#### **5. Future Technology**

- a. Continue to not allow electronic signs at this time, but monitor the developments in electronic sign technology in the future for new, aesthetically pleasing, environmentally friendly alternatives to current electronic signs, such as electronic ink signage.

## **CONSENT REPORT OF THE VILLAGE MANAGER**

### **CONSENT PETITIONS AND COMMUNICATIONS**

- A. Permit Fee Waiver - Arlington Heights Park District Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.

The Motion: Passed

Ayes: Blackwood, Farwell, Glasgow, Hayes, LaBedz, Scaletta, Sidor, Tinaglia

Absent: Rosenberg

### **XI. APPROVAL OF BIDS**

### **XII. NEW BUSINESS**

- A. **Sign Code Modifications - Electronic Signs**  
**Village-Wide - DC#09-025**

President Hayes stated that at his request, after driving through other communities that have a number of electronic signs that allowing them should be explored in order to make sure that the Village maintains a competitive advantage and/or level playing field with surrounding communities, and at least a limited place for them in the Village of Arlington Heights.

Mr. Ted Eckhardt, Design Commission Chairman thanked the Board, Mr. Perkins and Mr. Hautzinger for their support of the Design Commission. He explained that after the passing of Design Commission member Alan Bombick the Commission has established and passed a resolution for an "Alan F. Bombick Annual Design Award" that would have two or three categories. Mayor Hayes thought that it was very appropriate.

Mr. Eckhardt started by saying that the Design Commission looked at electronic signs in 2006 and reviewed it again in 2007, 2008, and 2012, and talked about some sign requests, including Patton Elementary School that have been denied. He went on to say that he is one of the five voices of the Design Commission that have worked hard on this. He stated that after President Hayes' request for staff to create a report on electronic signs, Village Design Planner, Steve Hautzinger researched and put it together and gave it to the Design Commission to study.

Mr. Hautzinger gave some background on electronic signage history, saying that in 2007 there were a few sign variation requests that were denied by the Design Commission. He also said that in 2009 staff prepared a detail

study on electronic signage that was reviewed with the Design Commission where it was decided not to continue to allow electronic signs, but that manual change bulletin board sign code regulations were clarified and expanded.

In 2012 a visual preference survey that included residents, business owners, and sign companies, was conducted to evaluate many signs including electronic signage saying that there was a lack of support for them. Mr. Hautzinger noted that Patton Elementary School's signage request came back to the Design Commission in 2015 where there was a productive and thorough review, but in the end it was denied because different concerns, specifically being a nuisance in a neighborhood across from residential homes, and the precedent that would be set if approved for all schools, churches, and park facilities in residential neighborhoods.

Mr. Hautzinger continued by showing a map of the Village showing the 74 schools, churches, and parks throughout Arlington Heights, and then talked about the various types of electronic signs; LED, LCD, and Electronic Ink. He explained that LED is the prevalent signage and that it is very bright and glaring which is a big concern. He added that LED can scroll, animate, and play video. Mr. Hautzinger stated that the LCD signs are similar to high definition televisions and that they are full color, very bright, can do static images or video. He said that they are used for close-up viewing applications and have been used more for interior signage for restaurant menus, but are showing up in some drive-through menus.

Mr. Hautzinger stated Electronic Ink Technology was discovered when research was being done for a solution for Patton Elementary School. He said that Electronic Ink is easy on the eyes and has the appearance of printed ink on paper. He also said that it does not emit any light, has no glare, and is very green and sustainable because it uses little power. He said Electronic Ink has great potential, and said that the only limitation is that it is an emerging technology that is not yet prevalent and is under development for widespread signage applications. Currently it only has a white background, but they are working on perfecting it in color. He also noted that this type of signage may work for Metropolis because of all the residents around it.

Mr. Hautzinger went on to show a changeable panel sign which is an aesthetically pleasing way to change information on a sign without introducing electronic signage. He noted that the Arlington Heights sign code was recently amended to allow this type of changeable sign panel.

Mr. Hautzinger went over the questions that were discussed as staff launched into the study with the Decision Commission which included:

- Should the Village continue to explore electronic signage? What image does the Village want for its commercial corridors?
- Should they be allowed in residential districts when they are across from residential homes?



- Should they be allowed for all business and manufacturing districts?
- Should they be used for major tourism venues such as Arlington Race Course, Metropolis, Star Cinema Grill or a major development like Arlington Downs?
- Should they be allowed around Route 90 and Route 53?
- Should they be allowed as of right, or through an additional discretionary review process?
- Should we defer electronic signage until more energy efficient and aesthetically pleasing technology is prevalent and readily available?

Mr. Hautzinger finished his presentation by showing photos of electronic signs in other communities.

Mr. Eckhardt said that coming into this, that his mind was open completely and that he believes that electronic signs are the coming thing and that they are practical but bring with them the need for some control and new technology. He said that the issues that play into this complicated decision is with the image of Arlington Heights, the nuisance factor, traffic safety, code enforcement, and the environment. Mr. Eckhardt then went over some of the Design Commission feedback on electronic signage. He did say that the Commission agreed that there is a need for public information and bulletin board signs that should be considered and that they all supported the Electronic Ink signs as a good alternative to LED.

Mr. Eckhardt stated that staff prepared five categories for electronic signage with recommendations for the Design Commission to consider. They were:

1. Community-Wide Commercial Businesses
2. Major Tourism Venues
3. Schools, Churches, Government, and Park District Facilities
4. I-90 and Route 53
5. Future Technology

The options for each were:

- Continue to not allow electronic signs
- Allow electronic signs by right
- Allow electronic signs with special review process

Mr. Eckhardt stated that the Design Commission chose "continue to not allow all electronic signs" for all five categories. He went on to say that the Design Commission members would encourage anyone to bring a sign to the Design Commission and ask for a variance for it and said that as time goes by they will find a comfortable place for electronic signs so that they are not a distraction or intrusive or be unsafe.

Mr. Jonathan Kubow said that in speaking for the Design Commission, he asks for patience from the Village Board and future and existing businesses, saying that there is new technology out there and that what

they see currently is not aesthetically pleasing. He said that it is hard to support something that they don't think would attribute to a good looking community.

Trustee Scaletta said that based on some of the comments during tonight's presentation, he is concerned that he may have a professional conflict of interest, and to avoid any appearance of impropriety he recused himself and did not participate in the Board's discussion.

Trustee Sidor asked how many participants were in the study for signage. Mr. Perkins stated that there were three sessions with 50-70 people attending each of them. Trustee Sidor felt that because of the insignificant amount of participants compared to Village population, he would not let that weigh very heavily on his opinion. Trustee Sidor thought that the Electronic Ink is boring but that it may work for the Metropolis and asked how it would look in sunlight. Mr. Hautzinger stated that the technology was developed for bright lights and added that light can be added to it at night. Trustee Sidor said he would like to see that technology in color and added that he is not sure how patient the businesses are in waiting for new technology.

Discussion took place regarding the difference between with changeable panel signs compared the electronic signs being discussed tonight. Mr. Perkins explained that the lighting on changeable panel signs is electronic, but it is not an LED sign. Mr. Eckhardt explained that the electronic signs being discussed are ones that have the ability and are programmed to change messaging or images electronically. Trustee Sidor stated that he is in agreement with the majority of the presentation, but added that he does not want to put the Village at a competitive disadvantage. He said that at certain places and under certain applications electronic signs may be appropriate if done properly.

Trustee Farwell thanked everyone on the Design Commission for their hard work, and said that he is not sure he agrees with their recommendation at this time. He asked if LED lights can be dimmed. Mr. Eckhardt stated that they can and that they have four or five settings. Trustee Farwell also asked about the lighting on Electronic Ink signs and said it was unfortunate that it is not yet available in color. Mr. Eckhardt stated that the light is internal and not face lit. He added that they are affordable but currently more expensive than LCD because they are a new technology. He added that the concluding comments from the Design Commission about being patient is because they feel like this product is something more acceptable and is coming sooner than later.

Trustee Farwell felt that he is bothered because the Board approved and installed an electronic sign a number of years ago, and that he feels like the Village is holding itself to a different standard than the businesses. He said that he worries about waiting, saying that Village businesses are smart and know what type of advertising is best for them to promote their

business, which in turn promotes Arlington Heights. Trustee Farwell felt that it may be time for the Village to allow businesses electronic signage and thoughtfully put forward an effort and set standards in a way that makes Arlington Heights look classy.

Trustee Blackwood said that she is similarly positioned with Trustees Farwell and Sidor. She is concerned with the major tourism venues within the Village boundaries and its outskirts. She gave, for example the signage for Tony's Market on Rand Road in Prospect Heights, saying that she has been contacted by several owners of smaller grocers who are very concerned about losing their customers and may not continue to compete on a semi level playing field without proper signage. She said that the Village has the ability to look at the signs, implement good graphic presentation, and satisfy some of the business owners that may not have the patience in waiting for new technology.

Trustee Blackwood asked if 2/3 backlit 1/3 messaging signs were looked at. Mr. Eckhardt stated that discussions had taken place regarding 30% to a maximum 50% movable signage and that none of the commissioners supported 100% movable. Trustee Blackwood then asked why there was such a strong positioning on a "no electronic signs" for the tourism venues. Mr. Eckhardt said that in general the Commission favored those signs but were concerned about allowing them by right and having to police them. He continued by saying that the Design Commission is a recommending body, and said that their position is that if a request comes in and has the right proportions, is classy, and would be able to be policed they would grant a variance for it. Again he stressed that the Commission would not discourage someone for asking for a variance.

Trustee Blackwood asked if there was any discussion on various districts, like the hotel district right off of Route 90, saying that the hoteliers are requesting some assistance in welcoming guests to Arlington Heights and that district. She stated that the reason we have signs is to promote businesses and said that not allowing it by right makes it seem like it is not possible even though a variance will allow it. She suggested that this get looked at in a more opening and softer way to encourage the use of the sign to be just what it is intended for, promotion of Arlington Heights, its businesses, and its entities, and thought the signage should be up to the entity or the district. Mr. Eckhardt said that he personally thought that signage at major events is important and said that the Commission has to go by with what is allowed currently, and that when they see them it will be as a variance.

Trustee Tinaglia stated that he was on the Design Commission for eleven years and that in looking at the minutes from 2009 regarding signage, his comment was that he felt that moving signs were offensive, and that the manual hand change signs were old looking and that something needed to happen. He said that he feels the same way and that the businesses in town really want signs and that something has to change. He also said that

something has to happen for the larger important components of our community, whether it is the Racetrack or Metropolis Theatre.

Trustee Tinaglia questioned the electronic sign that is at Hersey High School. Mr. Recklaus explained that the sign went up during a period where it was believed that the Village did not have the ability to regulate what was done at a high school. Mr. Perkins went on to say that in 1992 the Village Board discussed whether to enforce the zoning and sign codes on schools because of the State school building code. Mr. Recklaus stated that since then there are new interpretations and that it is clearer on what the Village can and cannot enforce. Mr. Perkins stated that about a year ago, there was a case in Crystal Lake where case law clarified what municipalities can and cannot do and said that as a result of that, the Village started enforcing the zoning regulations.

Trustee Tinaglia felt that there can be an opportunity for a special commission, like the liquor commission, to be put together for electronic signs that would not be as overwhelming as the variance process. He said that change in signage is going to happen at some point, saying that the Electronic Ink is a great compromise, especially if they are made in color. Trustee Tinaglia felt that not every business or big entity has the patience to wait anymore and said it is time to do something to give them a break. He is hoping that we can pull together some way to make this happen and give someone a good opportunity. Mr. Eckhardt agreed. Trustee Tinaglia said that he looks at it like a liquor license, saying that the business would need to prove that they can control it and not be offensive with lots of visual movement, and said that if they can't they can be reprimanded or the license can be taken away.

Mr. Recklaus wanted to clarify that the Electronic Ink concept has not been tested in an area with our climate, and said that the manufacturer said that there are heating elements that could be added. He also said that although the Board hires staff and appoints commissions for their expertise and perspective, they are the enforcers of the Board's values. He went on to say that the Design Commission and staff do their best work when the Board clearly defines what it is that it wants to see happen. Mr. Recklaus said that if the Board believes it can define its values and that it can be captured in ordinance type form, he thought that is what should be pursued. He went on to say that if we think this is too difficult, if we do not want to provide something by right, or if it is not possible to capture in ordinance, then he would ask that the Board give staff as much clear direction as they can with what their desire outcomes are.

Mr. Recklaus said that it is dangerous that we will go through an open-ended variance process. He said that since staff understands what the Board would be prone to approve or not, they generally tell applicants that it may be a waste of their time to pursue a variance or that there is a realistic ability to obtain one. He said that the Design Commission is in the "look good business", and that their role is very narrow and only looking at

the design element. The Board looks at things broadly, not only the design aspects but also the compromise, the balance, and the business friendliness. So it may not make sense to have them handle variances on electronic signs at their own discretion without further guidance from the Village Board.

Mr. Eckhardt said that when teardowns were becoming prevalent, guidelines were created, and thought that a similar guideline be developed for electronic signs with what the Board wants.

Trustee Glasgow appreciated Mr. Recklaus' and Mr. Eckhardt's statements of the difference and distinction of formulating policy, which is what the commissions and the Board do, and the implementing policy, which is what staff does. He went on to say that one of the reasons we have specialized commissions is to help the Board formulate policy, and said that the commissions have the time and energy to delve into things that the Board does not have. He said that the Design Commission has had five months to put together a recommendation and that the Board has had about ten days to review it. Trustee Glasgow also said that he has to take into consideration that 2/3 of the people polled were against signs at every venue. He understands that businesses want the signs and need to make a profit, but said that it needs to be tempered with the Village's ability and duty to make sure that the look good business that the Design Commission is in is enforced and aesthetically pleasing.

Trustee Glasgow is concerned with allowing signs as a matter of right, saying that if you make a rule for one, you make it for all which he said creates a law for unintended consequences. He explained that giving someone a license or a right creates a property right, and said that taking that right away because they have too many lumens, leaving the sign on, or because the images change to quickly would create an enforcement nightmare for staff which he is extremely concerned about.

Trustee Glasgow felt that allowing signage in one place, doesn't necessarily set a precedent for somewhere else and said that every piece of real estate is unique in where it sits. He said that he agrees with the Design Commission's recommendations, although with signage regarding major tourism venues he said that he doesn't see how anything other than a variation can be done. He continued by saying that he is not adverse in granting a variation for Arlington Park, Metropolis, or anywhere else that has a unique circumstance and characteristic. Trustee Glasgow said that he is in full favor of following the recommendations of the Design Commission because of the amount of time they have spent on this.

Mr. Eckhardt stated that the Design Commission wants to allow signs in every category, but needs to figure out how it can happen. He said that the major tourism venues category would be the most appropriate to have the electronic signs in order to keep up with larger communities, followed by the Churches and Schools which have messages to get out.



Trustee Glasgow asked Mr. Eckhardt how long the Village is supposed to wait and continue granting variances if the Electric Ink signs are the next big thing the Village should move into. Mr. Eckhardt said he cannot speak to their readiness, but the company is working very hard on some of the issues, and said that they may be more affordable within a year and thinks they may come out in color at the same time. He also said that LCD signs will also become more affordable if the Village has size restrictions, adding that they would have to be site appropriate.

Trustee LaBedz thanked the Design Commission and staff for all their work and historical information provided on this topic, saying that she finds this to be a very difficult issue. She felt that something needs to be done, and that she is concerned with telling people to wait for the Electronic Ink option when it is not fully known if and when it would be ready. Trustee Labedz stated that major tourism venues would benefit tremendously from electronic signage, and asked if there would be a legal issue or first amendment issue if the major tourism venues were allowed to go forward with electronic signs once they are defined, and not allowing them for other businesses. Ms. Ward said that it would not be a first amendment issue, but that there may be challenges in permitting only the major tourism venues and that it would also be challenging to differentiate the types of signs and types of businesses. Trustee Glasgow said that a variance is a safer way to do this rather than excluding others through an ordinance.

President Hayes said that in looking at community surveys that were done, he saw that a neighborhood community allows electronic signs through a conditional or special use process saying that he does not like the outcome. He said he was afraid that if all businesses were allowed to apply through a variation or special use permit process that the Board would have a difficult time saying no. President Hayes said that he is not in favor allowing all businesses and uses to apply for special use. He did say that he was in favor of what Chairman Eckhardt suggested which is allowing application through a variation process for certain categories, specifically to include the major tourism venues and to consider churches, schools, governments, and park district facilities.

Tony Petrillo, Arlington Park General Manager, said that he wanted to let staff know that Arlington Park's intent is to develop a digital billboard on their property. He said that they have been seeking some type of signage at the corner of Euclid and Wilke for some time, but have been reluctant to pursue it because they felt there were too many hurdles. Mr. Petrillo went on to explain that Arlington Park has vendors that rent their buildings or a permanent facility on their property and that they are losing business because some vendors felt that there is not good signage for them to advertise. Mr. Petrillo said they would like to market and promote business for those that drive on Route 53, and said the sign can be community rooted by being able to show amber alerts, weather alerts, and highlight

events being held in the Village, and noted that no residents would be affected. He went on to say that they would like some type of opportunity for some type of process that would allow them to acquire a sign that will be able to change images. He noted that they would not be in favor of moving signage or video type of images, and that static signs would be most appropriate. He asked the Board to consider the sign for Arlington Park when they draw their opinions on electronic signage.

Trustee Farwell mentioned the five requirements for sign variations, and noted one in particular "The applicant's business cannot reasonably function under the standards of this chapter". He said that this requirement has always been hard for businesses to properly argue successfully in front of almost any board. Trustee Farwell stated that we can't use this particular section of the code to give variances on the design elements of a sign, and said that a section of the code would have to be created and shouldn't be called a variation. He said he would be open to a special use process because a special use is given to a business and that once a business transfers hands or closes, then the use sunsets. Trustee Farwell also stated that to be more business friendly, everyone should have the right to apply regardless of what industry they are in or where they are located. Trustee Farwell thought that the Design Commission could tailor special use process and come back to the Board for more dialogue.

Trustee Tinaglia agreed with Trustee Farwell that it shouldn't be a variance. There are a lot of questions to be answered such as; whether it will be a special use, a license, will a committee be involved, who will handle the special use or license, how many of them, how often they are handed out, etc. He also thought there was merit in developing guidelines on what the signs should look like and what they will be allowed to do. He also said that enforcement will be the biggest problem.

Mr. Recklaus said that although a special use or a variance can be done, he wanted to make a distinction and said that if we do anything outside the variation process, like a special use or amendment to the code, then you open the door to be able to get these by right. He went on to say that when you set criteria, and that criterion is met, it is more difficult to turn down. Mr. Recklaus said that as difficult as the variance process is, it does provide more control than a special use.

Ms. Ward explained that in terms of creating guidelines for electronic signs, which you can't create for something that is currently not permitted. She said that the direction would have to be whether you want to move towards letting them continue to be variations but be more encouraging for people to apply for them, or do you want staff to work on some sort of code amendment that permits them but provides some sort of process whether a special use process or a Design Commission process.

Mr. Schuster, added that based on some of the comments brought up this

evening, that there are ways to design certain regulations and criteria that would have to be met in order to have a special use, so that not everybody can come forward with a sign. He mentioned a Supreme Court Reid case where you can get into trouble when you start to regulate types of speech, but said you have the ability to control how bright the signs can be, or where they are placed on property lines, etc. Mr. Schuster said that you have to decide whether you want a system with hardships that have been brought up with a variation, or do you want to go into studying suggestions about what type of specific regulation across the board would apply regardless of the type of message on a sign.

Trustee Glasgow said that staff has gotten a lot of direction from the Board this evening and said that he is in favor of just accepting the recommendations of the Design Commission. He said that to make having these signs a matter of right would be a big mistake of by the Board.

President Hayes asked the Board members if any of them would like to leave things status quo. No Board members would. He then asked if any Board member would like to allow electronic signs by right with some restrictions. No Board member would. President Hayes thought that leaves the Board with two options; a special use process for any and all businesses with Arlington Heights or a special use process for certain categories for business. Ms. Ward said that a special use process for certain categories will potentially cause Reid case issues, and said that a general special use process which sets out within in the kinds of limitations (lumens, locations, etc.) can be more easily drafted under Reid case. President Hayes stated that his preference would be to allow a special use process for electronic signage within the Village based on certain criteria.

Trustee Farwell asked if a special use application or permit be tailored based on zoning. Ms. Ward stated that you can make zoning district distinctions. Trustee Farwell stated that he would be open for a special use based on commercial and multi-use zoning and the variation process for other zoning areas. Trustee Glasgow disagreed and is concerned with having zoning distinctions and that it should be done on a case by case basis. Trustee Farwell said that he would be open to that if it was the will of the Board. Ms. Ward said that currently, special uses go to the Plan Commission, saying that is where the public process is but that it can be changed to go to the Design Commission.

Trustee Tinaglia said that we have to be prepared for what comes next and that the big issue is the policing of the signs and in making sure people do what they say they are going to do or don't do want they are not supposed to do. He has concerns on how to make sure that there is enough staff to make sure that things are dealt with appropriately once they are in place.

The Board directed staff to further research and draft a special use process to allow electronic signage that meet certain conditions.

President Hayes thanked the Design Commission and staff for their hard work on this, saying that there is a long way to go yet.

### **XIII.LEGAL**

- A. An Ordinance Amending Chapter 13 of the Approved  
Arlington Heights Municipal Code  
(Addition of Class "L" liquor license)

Trustee Joe Farwell moved to approve 16-036. Trustee Thomas Glasgow  
Seconded the Motion.

The Motion: Passed

Ayes: Blackwood, Farwell, Glasgow, Hayes, LaBedz, Scaletta, Sidor,  
Tinaglia

Absent: Rosenberg

- B. An Ordinance Amending Chapter 13 of the Approved  
Arlington Heights Municipal Code  
(Making available a Class "A" liquor license)

Trustee Joe Farwell moved to approve 16-037. Trustee Thomas Glasgow  
Seconded the Motion.

The Motion: Passed

Ayes: Blackwood, Farwell, Glasgow, Hayes, LaBedz, Scaletta, Sidor,  
Tinaglia

Absent: Rosenberg

### **XIV. REPORT OF THE VILLAGE MANAGER**

### **XV. APPOINTMENTS**

### **XVI. PETITIONS AND COMMUNICATIONS**

President Hayes stated that National Night Out will be held on Tuesday, August 2, 2016 at North School Park from 5:30 until 8:00 pm where the Police Department and other agencies demonstrate what they do for residents on a daily basis in terms of providing for health, safety, and public welfare.

# RESEARCH

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## Night-time Brightness Level Recommendations for On-Premise Electronic Message Centers

*Updated August 2016*

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PRODUCED BY:



INTERNATIONAL SIGN ASSOCIATION



# INTRODUCTION

## ELECTRONIC MESSAGE CENTERS (EMCs)

Electronic message centers, or EMCs, continue to grow in popularity for business and community use. You may have heard EMCs being referred to as changeable message displays or digital signs.

EMCs are *not* digital billboards, which advertise a good or service that is located away from the sign. Rather, EMCs are digital signs that are located *on the premises*, and that advertise goods and services that are available at the location.



*Electronic Message Center (EMC)/on-premise sign advertising a bank that is located on the same premises as the sign*

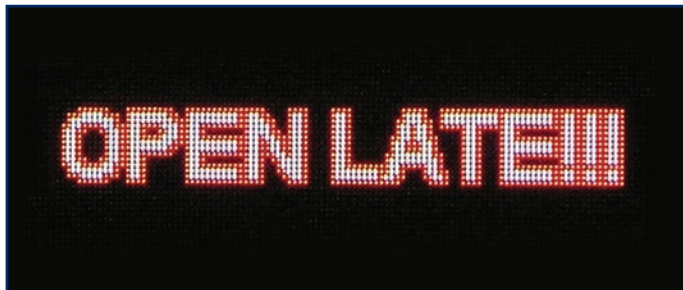


*Digital billboard/off-premise sign advertising an automobile business in another location*

There is often confusion regarding on- and off-premise digital signs. However, EMCs and digital billboards have very distinct capabilities and purposes, each targets a specific audience and each has traditionally been treated under separate legal and regulatory regimes, a zoning practice which was noted in the 2015 U.S. Supreme Court ruling in *Reed v. the Town of Gilbert*. For the purposes of this publication, we are focusing solely and exclusively on EMCs.

EMCs that are too bright at night can be offensive and ineffective. Night-time EMC brightness is an issue where sign users, the sign industry, and local offices have a common goal: ensuring that EMCs are appropriately legible. We know the messages that these signs convey can be rendered unattractive and perhaps even unreadable if they are programmed too bright.

That's why many sign companies recommend to their customers that in order for these signs to be most effective, their brightness be set at such a level to be visible, readable and conspicuous.



The International Sign Association (ISA) retained noted lighting expert Dr. Ian Lewin of Lighting Sciences to help the industry develop scientifically-researched, understandable recommendations for EMC brightness. Dr. Lewin was a past chair of the Illuminating Engineering Society of North America (IES), and was greatly respected within the lighting field. His work for ISA was conducted with the input of experts within the sign industry.

*As a result of his research, Dr. Lewin recommended two different brightness settings based on whether the EMC was located in an area of high or low ambient light. After field testing and utilizing Dr. Lewin's recommendations, it was determined that using the more conservative recommendation is appropriate in areas of both low and high ambient light. In order to simplify Dr. Lewin's recommendations, and to take a more reasonable approach to ensure that EMCs are sufficiently visible but not overly bright, **it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.***

The research and the recommendations contained in this report pertain only to EMCs, not traditionally internally illuminated signs, such as these channel letter and neon signs below. EMCs use a different lighting technology than most of these types of signs, and as such the scientific approach differs.

Community leaders should understand that, while it is recommended that brightness measurements be taken perpendicular to the sign, sign viewers rarely see the sign at that same perpendicular approach. At any viewing point away from or off the forward angle, the apparent brightness will be reduced. In other words, the measurements will capture the recommended brightness levels, but, unless viewers are looking at the sign directly perpendicular, they will not perceive the brightness at the full level.

We have provided recommended statutory language and tips to measure brightness with and without control of the EMC. If you need further assistance, feel free to contact ISA, [signhelp@signs.org](mailto:signhelp@signs.org) or at (703) 836-4012 to answer any of your EMC questions.



## FOOTCANDLES VS. NITS: WHICH MEASUREMENT IS BETTER?

This document recommends communities adopt illumination measurements in footcandles as compared to nits. Here are a few reasons why more than 200 localities and many state departments of transportation have adopted the footcandle measurement for EMCs:

### FOOTCANDLES

- Measures illuminance
- Accounts for ambient light conditions
- Luxmeter measuring device \$100
- "Twilight" measurement possible
- Measures light impact and appearance
- Works with roadway lighting standards
- Easier to check and enforce

### NITS

- Measures luminance
- Measures only the amount of brightness emitted
- Luminance spectrometer (nit gun) - \$1,000
- Does not allow adjustment based on ambient light
- Does not measure appearance
- Difficult to measure accurately
- Difficult to enforce

\* While the main advantage of using nits as compared to footcandles is that daytime measurement is possible, EMC brightness is typically more of an issue at night.

# EXECUTIVE SUMMARY

## ISA ELECTRONIC MESSAGE CENTER NIGHT-TIME BRIGHTNESS RECOMMENDATIONS

This summary has been developed with an understanding that EMCs that are unreasonably bright are not effective for the communities or end users. This intends to help communities and stakeholders develop brightness standards for on-premise EMCs. The summary comprises:

- 1) *An overview of the importance of ensuring appropriate brightness,*
- 2) *Technology utilized to ensure appropriate brightness, and*
- 3) *Recommended brightness standards*

### 1. Overview of the importance of ensuring appropriate night-time brightness.

EMCs that are too bright at night can be offensive and ineffective. There are significant advantages to ensuring than an electronic display is not overly bright. These advantages include:

- » Conservation of energy
- » Increased life expectancy of the electronic display components
- » Building goodwill with the community
- » Ensuring the legibility of the display

It is in the best interest of all stakeholders to ensure that EMCs are sufficiently bright to ensure clear legibility, while at the same time avoiding a display that is overly bright.

### 2. Technology utilized to ensure appropriate brightness.

Most EMCs are designed to produce sufficient brightness to ensure clear legibility during daylight hours. However, daytime brightness settings are usually inappropriate for night-time viewing. The following general methods are used to dim an EMC for appropriate night-time viewing:

1. **Manual Dimming.** Using this method, the sign operator dims the display in response to changing ambient light conditions.
2. **Scheduled Dimming.** Sunset-sunrise tables allow an EMC to be programmed to dim at the same time that the sun sets and rises. This method is generally acceptable, but is more effective when used as a backup to automatic dimming controls capability, such as photocell technology.
3. **Photocell Technology.** An EMC that utilizes photocell technology can automatically dim as light conditions change. A photocell sensor alerts the display to adjust brightness according to ambient light conditions.

### 3. Recommended night-time brightness standards.

Dr. Lewin recommended the development of brightness criteria based on the Illuminating Engineering Society's (IES) well-established standards pertaining to light trespass, IES Publication TM-11-00. The theory of light trespass is based on the concept of determining the amount of light that can spill over (or "trespass") into an adjacent area without being offensive.

In order to simplify Dr. Lewin's recommendations, and to take a more reasonable approach to ensure that EMCs are sufficiently visible but not overly bright, **it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.**

Email [signhelp@signs.org](mailto:signhelp@signs.org) to receive Dr. Lewin's original research.



*...it is recommended that EMCs not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.*

# RECOMMENDED LEGISLATIVE LANGUAGE



**Electronic Message Center (EMC) Criteria:** The night-time illumination of an EMC shall conform with the criteria set forth in this section.

**A. EMC Illumination Measurement Criteria:** The illuminance of an EMC shall be measured with an illuminance meter set to measure footcandles accurate to at least two decimals. Illuminance shall be measured with the EMC off, and again with the EMC displaying a white image for a full color-capable EMC, or a solid message for a single-color EMC. All measurements shall be taken as close as practical to a perpendicular plane of the sign at the distance determined by the total square footage of the EMC as set forth in the accompanying Sign Area of a Sign versus Measurement Distance table.

**B. EMC Illumination Limits:** The difference between the off and solid-message measurements using the EMC Measurement Criteria shall not exceed 0.3 footcandles at night.

**C. Dimming Capabilities:** All permitted EMCs shall be equipped with a sensor or other device that automatically determines the ambient illumination and programmed to automatically dim according to ambient light conditions, or that can be adjusted to comply with the 0.3 footcandle measurements.

**D. Definition of EMC:** A sign that utilizes computer-generated messages or some other electronic means of changing copy. These signs include displays using incandescent lamps, LEDs, LCDs or a flipper matrix.



## SIGN AREA VERSUS MEASUREMENT DISTANCE

AREA OF SIGN sq. ft.	MEASUREMENT (ft.)
10	32
15	39
20	45
25	50
30	55
35	59
40	63
45	67
50	71
55	74
60	77
65	81
70	84
75	87
80	89
85	92
90	95
95	97
100	100
110	105
120	110
130	114
140	118
150	122
160	126
170	130
180	134
190	138
200	141
220	148
240	155
260	161
280	167
300	173

\* For signs with an area in square feet other than those specifically listed in the table (i.e., 12 sq ft, 400 sq ft, etc), the measurement distance may be calculated with the following formula: Measurement Distance =  $\sqrt{\text{Area of Sign Sq. Ft.} \times 100}$



# HOW TO MEASURE THE NIGHT-TIME BRIGHTNESS OF AN EMC WITH OPERATIONAL CONTROL

*(Note: This method can be completed by one individual, but requires operational control to shutoff the EMC)*

## STEP 1

### OBTAIN AN ILLUMINANCE METER.

Purchase or otherwise procure an illuminance meter. Most city/county traffic departments have an illuminance meter, which are also referred to as lux or footcandle meters (lux is the metric measure of illuminance; footcandles is the English measure of illuminance). The illuminance meter must have the ability to provide a reading up to two decimal places and must be set to read footcandles. It is preferred to have an illuminance meter with a screw-mount that allows the sensor to be mounted on a tripod. A tripod ensures that the highly sensitive sensor is held perfectly still; otherwise it may be difficult to obtain an accurate reading.

## STEP 2

### DETERMINE SQUARE FOOTAGE.

Determine the square footage of the face of the electronic message sign (EMC) by multiplying the height and width of the EMC. This information may be available in a permit application, or can be determined by physically measuring the height and width of the EMC. Do not include the sign face square footage attributable to any additional static signs associated with the EMC (if applicable).



## STEP 3

### DETERMINE THE MEASUREMENT DISTANCE.

Using the total square footage found in Step 2, look up the measurement distance in the table provided in the Recommended Legislative Language on page 8, to determine the distance to measure the brightness of the EMC. The distance should be measured perpendicular to the EMC sign face. The use of a measuring wheel, laser finder or a smartphone app are the most convenient ways to measure the distance.



## STEP 4

### PREPARE THE DISPLAY FOR TESTING.

Ensure that the EMC is programmed to alternate between a solid white (or in the case of a monochrome display – the solid color of the display) message and a blank message. The community may require that the sign owner cooperate with testing by programming the EMC for testing upon written notice.

## STEP 5

### USE AN ILLUMINANCE METER TO MEASURE THE BRIGHTNESS OF THE EMC.

Mount the sensor of your illuminance meter to a tripod and orient the sensor directly towards the face of the EMC at the measurement distance determined in Step 2.

Ensure that the illuminance meter is set to measure footcandles up to two decimal places. As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter. If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance. If not, the display will need to be adjusted to a lower brightness level using the manufacturer’s recommended procedures.



## STEP 6

### ENSURE THAT THE DISPLAY CAN ADJUST TO DIFFERENT AMBIENT CONDITIONS.

Inspect the sign to ensure that it incorporates a photocell or other technology to ensure that the display can adjust according to ambient lighting conditions.



*As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter.*

*If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance.*

# HOW TO MEASURE THE NIGHT-TIME BRIGHTNESS OF AN EMC—WITHOUT CONTROL OF THE SIGN

*(Note: This method requires two individuals, but does not require operational control of the EMC.)*

There will be instances where the EMC illumination needs to be evaluated to ensure that it does not exceed the brightness levels established in the municipal sign ordinance. If the municipality is unable to obtain access to the sign controls or attempting to take the measurement after business hours, this method should be followed.

Unlike the six-step process described previously, this process measures the difference in brightness between the sign in operation and when the sign is completely blocked from the illuminance meter. This procedure is extremely simple and requires only an illuminance meter and a piece of painted cardboard cut to the proper size.

## STEP 1

### OBTAIN AN ILLUMINANCE METER.

(See previous Step 1)

## STEP 2

### DETERMINE SQUARE FOOTAGE.

(See previous Step 2)

## STEP 3

### DETERMINE THE MEASUREMENT DISTANCE.

(See previous Step 3 or use  $\sqrt{(\text{Area of Sign in Sq. Ft.} \times 100)}$ )

## STEP 4

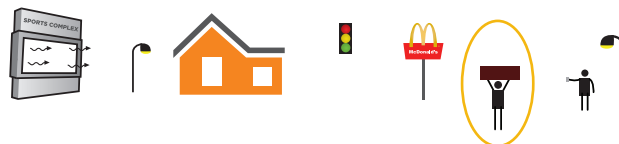
### POSITION THE TESTERS.

Based on the size of the digital display, the person conducting the test should position themselves as close to directly in front of the digital display as practical, at the appropriate distance (calculated in Step 3).

A helper should position themselves about 7 ft. to 10 ft. in front of the light meter and hold up an opaque, black sheet of material that is roughly 12 in. high by 40 in. wide. (Regular cardboard painted matte black works well for this.) The sheet should be positioned so it blocks all light from the EMC, but still allows the remaining ambient light to register on the illuminance meter.

EMC Area	Measurement Distance
24 ft <sup>2</sup>	49 ft
32 ft <sup>2</sup>	57 ft
50 ft <sup>2</sup>	71 ft
100 ft <sup>2</sup>	100 ft

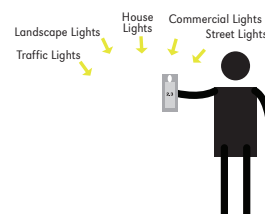
This helper should use a cardboard sheet to block the EMC light from the footcandle meter. This will establish the baseline footcandle reading.



After the cardboard block is held in place, a reading should be taken for the ambient light.

In this example, various light sources are impacting the photocell measuring 2.3 footcandles of ambient light.

This is the baseline for the measurement. Write it down.





## STEP 5

### USE AN ILLUMINANCE METER.

The illuminance meter should be held at a height of about 5 ft. (which is approximately eye level) and aimed directly at the EMC. The illuminance meter will account for surrounding sources of light or the absence thereof.

In this case our ambient light reading was 2.3 fc. The new light reading with the LED displaying a full white frame cannot read above 2.6 fc or 2.3 (ambient) + 0.3 (threshold). If a full white frame cannot be arranged, watch the meter to see if any ad exceeds 2.6 fc.



At this point, readings should be taken from the illuminance meter to establish a baseline illumination level. (ISA recommends that the illuminance meter is capable of levels to 2 decimal places 0.00).

Once the baseline level is established, add 0.3 footcandles to the baseline level to calculate the max brightness limit. (For example: Baseline reading is 3.15 footcandles. The max brightness level is 3.45 footcandles.)

## STEP 6

### DETERMINE THE BRIGHTNESS LEVEL.

Remove the opaque sheet from blocking the EMC. Watch the foot-candle meter for 3 to 5 minutes to see if the max brightness level is exceeded by any of the images on the sign. If the readings do not exceed the max brightness levels, then the EMC illumination is in compliance.

If any of readings consistently exceed the max brightness level, the lighting level is not in compliance. In this scenario, the municipality will need to inform the sign owner of noncompliance and take appropriate steps to ensure that the EMC be adjusted to a lower brightness level using the manufacturer's recommended procedures.



*If any of readings consistently exceed the max brightness level, the lighting level is not in compliance.*



## INTERNATIONAL SIGN ASSOCIATION

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# **ELECTRONIC SIGNS - POSSIBLE CONDITIONAL REVIEW PROCESS**

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Prepared by the Department of Planning and Community Development  
Steve Hautzinger AIA, Design Planner  
February 8, 2017

## **HISTORY & BACKGROUND:**

The Design Commission first discussed the matter of electronic signage in 2007 relative to several specific sign variation requests, all of which were recommended for denial by Staff and the Design Commission, and one request denied by the Village Board. After detailed research by Staff, the Design Commission discussed the matter again in 2008 at a kick-off meeting and then in detail in 2009, when the Design Commission recommended that the Village continue to not allow electronic LED signs. Since then, the Design Commission has discussed this matter in 2012 as part of the Visual Preference Survey and in 2015 relating to Patton Elementary School's request for an electronic sign. As a result of the 2015 review, this topic was placed on the Design Commission agenda again in January 2016.

On February 19, 2016, Mayor Hayes sent a letter to the Design Commission requesting that the Design Commission complete the following tasks for Village Board review:

- Develop a general overview of the issues related to electronic signage.
- Report on a range of general approaches regarding electronic signage.
- Recommend an approach for the Village Board to discuss this matter by early June of that year.

In response to Mayor Hayes' request, Staff and the Design Commission completed a preliminary Village-wide study of electronic signage and discussed the matter at three Design Commission meetings:

- February 23, 2016. Kick-off meeting, preliminary discussion and thoughts.
- March 29, 2016. Staff presented a survey of other communities' electronic sign requirements along with photos and videos of electronic signs from other communities for discussion.
- April 12, 2016. Review and approval of Position Statement and Recommendations.

On July 18, 2016, the Design Commission's Position Statement & Recommendations regarding electronic signage was presented to the Village Board. The Design Commission's report outlined the issues related to electronic signs which included: Arlington Heights' image, nuisance to adjacent properties, traffic safety, code enforcement, and energy consumption. The report also included the Design Commission's recommendations regarding different possible applications for electronic signs, as follows:

- Electronic LED signs should not be allowed for commercial businesses community wide. Commercial signs should be used for business identity, not advertising.
- Electronic LED signs should not be allowed for major tourism venues. However, major tourism venues represent a possible good application for electronic signs, and they should be considered on a case-by-case basis as sign variations.
- Electronic LED signs should not be allowed for schools, churches, and park facilities which are commonly located in residential neighborhoods. However, non-light emitting electronic signage technology, such as electronic ink, should be closely monitored for use in these applications.
- Electronic LED signs should not be allowed along I-90 and Route 53 due to a possible unfair advantage for businesses fronting these highways, and to avoid contributing to signage blight along these highways.
- Electronic LED signs should not be allowed at this time, but emerging technologies in electronic signs should be monitored for more aesthetically pleasing, environmentally friendly alternatives to LED signs, such as electronic ink.

Highlights of the feedback provided by the Village Board at the meeting are as follows (the minutes of the Board meeting are attached):

- Allowing electronic signs in Arlington Heights should be explored to maintain a competitive advantage and/or level playing field with surrounding communities, at least on a limited basis.
- Electronic signs may be appropriate in some applications to promote businesses, if done properly.
- Electronic signage should not be permitted by right, but a special review process should be explored.
- Concern that electronic signs may proliferate, even with a special review process.
- Concern over unintended consequences.
- Concern regarding enforcement.
- The desire of businesses to have electronic signs must be balanced with the Village's ability and duty to make the Village look good.
- Sign variations for electronic signs may be the best process in some cases, such as major tourism venues.
- Electronic ink would be a better option if it had a full color display.
- Concern about waiting for new sign technology, such as electronic ink, to become readily available.

At the conclusion of the July 18, 2016 meeting, Staff was directed by the Village Board to further research and draft a special use process to allow electronic signage that meets certain conditions.

In follow up to the Village Board meeting, Staff has met with the Metropolis Theater about a possible electronic theater marquee sign, and met with Arlington Racecourse regarding a possible electronic billboard sign facing Route 53. It was discussed that, due to the unique nature of both of these requests, sign variations will be required no matter what regulations the Village were to draft. Recently, Arlington International Racecourse submitted a sign variation application for a 60' wide x 20' tall (95' overall height) electronic billboard to face Route 53.

Staff has also completed detailed research of other communities' electronic signage standards and approval processes. The results of this research helped guide the possible standards and Conditional Review process for Arlington Heights. Some of the commonly used standards for electronic signs include restrictions on the location of electronic signs along major roads only, minimum spacing between signs, and limitations when adjacent to residential zoning districts. Common operational restrictions include minimum display change times, no flashing/scrolling/animation/video, and brightness limitations.

### **CONDITIONAL REVIEW PROCESS, FEES AND CRITERIA:**

In accordance with the Village Board's direction to explore a special approval process for the review of electronic signs, and after review of other communities' electronic sign standards and approval processes, the following draft Conditional Review Process and Possible Standards have been prepared. Based on concerns expressed by some Board members, research and legal requirements, allowing electronic signs for businesses located along primary commercial corridors has been vetted. This approach will allow electronic signs along major commercial nodes, and will minimize nuisance concerns within residential neighborhoods. The outcome of this approach can then be evaluated, including any unintended, undesirable consequences, as well as feedback from the community.

### **Conditional Review Process**

In all cases, it is recommended that a Conditional Review Process be required for the approval of electronic message signs. The Conditional Review Process would be similar to the Special Use process before the Plan Commission, but this process would be sent to the Design Commission with their recommendation subject to final approval by the Village Board.

## Conditional Review Fees

A \$500 conditional review application fee is suggested, plus standard permit fees. Annual inspection fees are still being explored for possible in-house or outsourced brightness monitoring along with annual inspection requirements.

## Conditional Review Criteria

All requests for electronic message signs would need to comply with the following Conditional Review Criteria:

- Shall not create a traffic hazard or demonstrable negative impact on nearby properties, or be detrimental to the safety of persons residing or working in the vicinity; and
- Will serve the best interests of the Village of Arlington Heights, will be desirable for the public convenience, and not merely serve to provide the applicant with a competitive advantage over similar businesses; and
- The design of the sign shall be compatible with the essential character of the locality; and
- The business must demonstrate a valid need for an electronic message sign; and
- The proposed sign will comply with the regulations and conditions specified in this ordinance for such signage, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.

## **POSSIBLE STANDARDS:**

In all cases, the following electronic message sign standards are recommended.

**Electronic Message Sign.** A sign on which the message, copy, graphics, or display can be changed by remote or automatic means, used to advertise a business, goods, and/or services that are available on the property on which the sign is placed.

1. **Ground signs only.**
  - a. Allowed on monument style, ground signs only, 10 feet maximum height.
  - b. Not allowed on pole mounted signs.
  - c. Not allowed on wall signs.
  - d. All other ground sign requirements per Chapter 30 shall apply.
2. **Display.** Only high resolution, full color electronic displays shall be allowed.
3. **Size.** Size standards are consistent with existing manual change bulletin board sign requirements.
  - a. Electronic message signs must be incorporated as part of a conventional ground sign which displays the business name or use, and the electronic portion of the sign shall be the lower portion of the sign.
  - b. The maximum size of an electronic message sign shall be no more than 50% of the allowable ground sign size. For commercial businesses, the maximum allowable area of a ground sign is determined on the basis of the width and posted speed limit of the public right-of-way abutting the property on which the sign is located as set forth in Chapter 30, Section 30-303.c, Table A (see below):

**TABLE A**

POSTED SPEED LIMIT		
WIDTH OF PUBLIC RIGHT-OF-WAY	35 MILES PER HOUR OR LESS	OVER 35 MILES PER HOUR
UP TO 66 FEET	40 SQ. FT. TOTAL SIGN AREA PER FACE	60 SQ. FT. TOTAL SIGN AREA PER FACE
OVER 66 FEET	66 SQ. FT. TOTAL SIGN AREA PER FACE	80 SQ. FT. TOTAL SIGN AREA PER FACE

4. **Quantity.** There shall only be one electronic message sign per property permitted.
5. **Spacing.** There shall be a minimum 300 feet spacing between electronic message signs on the same side of any street.
6. **Separation from Residential.** No electronic message sign shall be located within 300 feet of any residential property.
7. **Orientation.** The electronic message sign shall be oriented perpendicular to the roadway to minimize the impact on properties directly across the street from the location of the sign.
8. **Operational Standards**
  - a. Static display only. No scrolling, fading, flashing, animation, or video.
  - b. Frequency of message change. Messages must be displayed for a minimum of 10 seconds, as required by IDOT (Illinois Department of Transportation).
  - c. Brightness:
    - i. Auto-dimming photocell technology is required to adjust the display brightness based on ambient lighting conditions.
    - ii. Brightness shall be limited to .3 footcandles maximum above ambient lighting conditions at the established measurement distance based on the size of the sign (refer to formula below).
$$\text{Measurement Distance} = \sqrt{\text{Area of Sign Sq. Ft.} \times 100}$$
(Brightness restrictions are based on IESNA, Illuminating Engineering Society of North America, standards.)
    - iii. Written certification from the manufacturer is required to verify auto-dimming function, preset not-to-exceed .3 footcandles above ambient lighting conditions.
    - iv. Enforcement. Brightness enforcement shall be accomplished using a footcandle illuminance meter based on procedures as established by the International Sign Association (see attached).
  - d. Off-premises advertising not allowed.
  - e. Hours of sign operation shall be limited to the hours that the business is open, and as set forth in Chapter 30, Section 30-116 which states, "Illuminated signs located on a lot adjacent to or immediately across the street from any residential district shall be turned off at all times between the hours of 11:00 P.M. and 7:00 A.M. that the business is not in operation, unless the permittee shall show good cause to the Director of Building as to why the sign should not be turned off."
  - f. Sound not allowed.

#### **EXPLORATION OF REMAINING OPTIONS:**

Based upon feedback from the Village Board meeting, the following remaining options have been further explored.

#### **Option 1. Allow limited applications of electronic message signage through a conditional review process:**

The Village Board directed Staff to vet out options for limited applications of electronic message signage based upon practical and legal restrictions. As a result, limiting electronic message signs to specified primary commercial corridors has been explored. Due to a recent ruling by the U.S. Supreme Court regarding the Reed vs. Town of Gilbert case, there are legal concerns with restricting electronic signage by use type. In regards to major tourism venues, sign variations will be required no matter what regulations the Village were to draft due to the unique nature of these businesses.

- A. Allow by Use. Due to a recent ruling by the U.S. Supreme Court regarding the Reed vs. Town of Gilbert case, there are legal concerns with restricting electronic signage by use.
- B. Major Tourism Venues. Major tourism venues such as Arlington International Racecourse, the Metropolis Theater, and the Downtown movie theater may be good applications for electronic signage. However, it would be challenging to draft code language and to predict the possible impacts for these unique, individual electronic sign applications. Therefore, it is recommended that the review of electronic sign requests for major tourism venues be handled through the sign variation review process.
- C. Allow by specific Commercial Corridors or Overlay Districts. If electronic message signs are to be allowed, some Board members suggested to start small, allowing them in limited applications only. Allowing electronic signs for businesses located along primary commercial corridors only will allow businesses located along commercial corridors or commercial nodes to have electronic signs, and will minimize the nuisance within residential neighborhoods. This will, however, mean that schools, parks and churches will not be able to use this process since most are located in residential districts. This approach will provide the opportunity to evaluate the outcome and monitor any undesirable, unintended consequences, and to receive community feedback. Refer to the attached map titled, "Major Arterial Roads & Primary Commercial Corridors" to see the locations throughout Arlington Heights that have been identified as being primary commercial corridors where electronic signs could be allowed. Also, for an example of community feedback, refer to the attached news article titled "Palatine rejects car wash's electric sign proposal" dated 8/9/16.

**Option 2. Allow by Sign Variation only.**

Reviewing requests for electronic message signs via the sign variation process would allow the greatest legal control and flexibility over the amount of electronic message signs that get approved, and the applicable restrictions for each sign. Each sign would be reviewed on a case-by-case basis based on necessity, hardship, and unique circumstances. As previously stated, Staff believes this is the only viable option for unique major tourism venues.

**Option 3. Monitor Emerging Technology.**

Continue to not allow electronic message signs at this time, but monitor the developments in electronic sign technology for new, aesthetically pleasing, environmentally friendly alternatives to LED electronic signs.

At the Village Board meeting, several members expressed interest in the concept of electronic ink signage. Since the meeting, there has been further development in electronic ink outdoor signage relating to full color displays and climate conditions. Electronic ink mimics the look of printed ink on paper, but the message can be electronically changed. Electronic ink emits no light, and is highly readable in bright sunlight, whereas LED signs are bright and glaring. Electronic ink is also environmentally friendly with ultra-low power consumption. Electronic ink signage represents an excellent alternative to bright LED signage which requires non-stop power consumption. Electronic ink signage is an ideal option for schools, churches, and park district facilities where brightness and glare are of particular concern in residential neighborhoods.

At the Village Board meeting, there were questions about the capability of electronic ink signage to have a full color display as well as the operability of this technology in cold weather climates. Since that time, a new full-color electronic ink outdoor signage product named "Soofa Sign" has become available. Soofa signs utilize a full color electronic ink display powered by a solar panel. These signs are currently installed in Boston, Massachusetts, which has a cold climate, and they are planned for select early adopter cities across the United States as part of a pilot program. The Village of Arlington Heights has applied for the pilot program to possibly receive free electronic ink kiosk signs for testing in our Downtown as a replacement for our printed ink marketing



poster kiosks. Refer to the attached “Soofa Sign” product data. If this technology continues to develop, it represents an excellent alternative to electronic LED signage.

**NEXT STEPS:**

At this time, Staff is seeking feedback and direction from the Village Board on the preferred option for allowing electronic message signs along commercial corridors, the draft Conditional Review Process/Criteria, and the suggested Standards for electronic message signs. Unless objections are received, the next step will be for Staff to draft the specific ordinance for sign code modifications for electronic message signs. The Village Board should direct whether the Design Commission should review and provide input on the sign code modifications prior to Village Board approval or not.

**ATTACHMENTS:**

1. Major Arterial Roads & Primary Commercial Corridors Map, dated January 31, 2017.
2. Extracts from the International Sign Association report titled “Night-time Brightness Level Recommendations for On-Premise Electronic Message Centers”, updated August 2016.
3. Soofa Sign product data.
4. Electronic Signs, Design Commission Position Statement & Recommendations, approved April 12, 2016. (1)
5. Village Board Meeting Minutes, July 18, 2016.
6. Newspaper article, “Digital Billboard Plan Heads to Rolling Meadows Council”, dated May 27, 2015.
7. Newspaper article, “Palatine rejects car wash’s electric sign proposal”, dated August 9, 2016.

(1) If Board members would like the full report re-issued, please contact Staff.



**Village of Arlington Heights**  
**Cook County - Illinois**

**MAJOR ARTERIAL ROADS - TOTAL LENGTH - ~22.7 miles**

**PRIMARY COMMERCIAL CORRIDORS - TOTAL LENGTH - ~5.14 miles**

**ZONING**

**ZONING DISTRICT DESCRIPTIONS:**

- B-1 - BUSINESS DISTRICT LIMITED RETAIL
- B-2 - GENERAL BUSINESS DISTRICT
- B-3 - GENERAL SERVICE, WHOLESALE AND MOTOR VEHICLE DISTRICT
- B-4 - LIMITED SERVICE DISTRICT
- B-5 - DOWNTOWN DISTRICT
- I - INSTITUTIONAL DISTRICT
- M-1 - RESEARCH, DEVELOPMENT AND LIGHT MANUFACTURING DISTRICT
- M-2 - LIMITED HEAVY MANUFACTURING DISTRICT
- O-P - OFF-STREET PARKING DISTRICT
- O-R - OFFICE AND RESEARCH DISTRICT
- O-T - OFFICE TRANSPORTATION DISTRICT
- P-L - PUBLIC LAND DISTRICT
- R-E - ONE-FAMILY DWELLING DISTRICT
- R-1 - ONE-FAMILY DWELLING DISTRICT
- R-2 - ONE-FAMILY DWELLING DISTRICT
- R-3 - ONE-FAMILY DWELLING DISTRICT
- R-4 - TWO-FAMILY DWELLING DISTRICT
- R-5 - MULTIPLE-FAMILY DWELLING DISTRICT
- R-6 - MULTIPLE-FAMILY DWELLING DISTRICT
- R-7 - MULTIPLE-FAMILY DWELLING DISTRICT

**ZONING AMENDMENTS:**

- DETAILS REGARDING THESE ZONES ARE FILED IN THE PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT.
- ▲ OVERLAY ZONING DISTRICT
- ★ PLANNED UNIT DEVELOPMENT (P.U.D.) OR PLANNED DEVELOPMENT

**LEGEND:**

- VILLAGE BOUNDARY
- PRIVATE ROADS
- RAILROADS
- LAKES AND STREAMS
- LOTS
- ZONING DISTRICTS
- RIGHT-OF-WAY (R.O.W.)
- - - RIGHT-OF-WAY (R.O.W.) WITH PRESERVATION

**MAP PREPARED AND MAINTAINED BY THE DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT AND BY GEOGRAPHIC INFORMATION SYSTEMS 33 S. ARLINGTON HEIGHTS RD. ARLINGTON HEIGHTS, IL 60005 (847) 368-5200 http://www.vah.com**

**ADOPTED BY THE PRESIDENT AND THE BOARD OF TRUSTEES OF THE VILLAGE OF ARLINGTON HEIGHTS, COUNTY OF COOK, STATE OF ILLINOIS, BY ORDINANCE THE 21ST DAY OF DECEMBER 1959 WITH AMENDMENTS AND MAP REVISIONS UP TO AND INCLUDING JANUARY 1, 2016.**

**Disclaimer:**  
This map is for analysis purposes only.  
It is not intended for navigation or location information. The accuracy of this map depends on the accuracy of its underlying base source which have not been verified. Unauthorized duplication or distribution is prohibited.

0 0.25 0.5 1 Miles

0 0.15 0.3 0.6 0.9 1.2 Km

1 inch = 1,350 ft

<b>B-1. BUSINESS DISTRICT LIMITED RETAIL</b>	<b>R-6. ONE-FAMILY DWELLING DISTRICT</b>
<b>B-2. GENERAL BUSINESS DISTRICT</b>	<b>R-1. ONE-FAMILY DWELLING DISTRICT</b>
<b>B-3. GENERAL SERVICE, WHOLESALE AND MOTOR VEHICLE DISTRICT</b>	<b>R-2. ONE-FAMILY DWELLING DISTRICT</b>
<b>B-4. LIMITED SERVICE DISTRICT</b>	<b>R-3. ONE-FAMILY DWELLING DISTRICT</b>
<b>B-5. DOWNTOWN DISTRICT</b>	<b>R-4. TWO-FAMILY DWELLING DISTRICT</b>
<b>I-1. INSTITUTIONAL DISTRICT</b>	<b>R-5. MULTIPLE-FAMILY DWELLING DISTRICT</b>
<b>M-1. RESEARCH, DEVELOPMENT AND LIGHT MANUFACTURING DISTRICT</b>	<b>R-6. MULTIPLE-FAMILY DWELLING DISTRICT</b>
<b>M-2. LIMITED HEAVY MANUFACTURING DISTRICT</b>	<b>R-7. MULTIPLE-FAMILY DWELLING DISTRICT</b>

**ZONING AMENDMENTS:**

DETAILS REGARDING THESE SITES  
ARE FILED IN THE PLANNING AND COMMUNITY  
DEVELOPMENT DEPARTMENT

★ OVERLAY ZONING DISTRICT

★ PLANNED LUT DEVELOPMENT (P.U.D.)  
OR PLANNED DEVELOPMENT

**LEGEND**

VILLAGE BOUNDARY

PRIVATE ROADS

RAILROADS

LAKES AND STREAMS

LOTS

ZONING DISTRICTS

RIGHT-OF-WAY (R.O.W.)

RIGHT-OF-WAY (R.O.W.)  
WITH PRESCRIPTION

 ZONING DISTRICTS  
 RIGHT-OF-WAY (R.O.W.)  
 RIGHT-OF-WAY (R.O.W.)  
 WITH PRESCRIPTION

January 31, 2017



## Digital Billboard Plan Heads To Rolling Meadows Council

**Posted: Wednesday, May 27, 2015 3:16 pm**

Following approval by the Rolling Meadows Plan Commission to allow a new 14-ft. by 48-ft. digital billboard along Route 53 near Euclid Avenue and Rohlwing Road, in the Arlington Office Park, the matter will now go to the city council for a final vote.

The plan commission May 5 approved the request to modify city code, which currently allows billboards to be put only on the west side of Route 53.

During the plan commission meeting David Williams, president of Green Signs, presented a proposal showing how the digital sign does not glow into the neighborhood as the sign is built with hydraulic doors that reduce glare. He also said the sign will be powered by renewable energy.

"It's also very safe to operate," Williams said. "It is all done digitally, which also allows for immediate posting and we can help the city should they need to get an emergency message out right away to motorists."

Green Signs would own the sign. It would have a long-term lease agreement with Arlington Office Park also providing them with needed cash flow, Williams said.

Arlington Office Park has 103,000 square feet of office space that is only 65% occupied, Williams said. Revenue from new tenants attracted by the billboard could fund local upgrades, he added.

According to the proposal, Green Signs would pay Rolling Meadows a one-time \$50,000 permit fee for the billboard, which would sit about 1,000 feet from a residential area to the south.

The revised proposal is expected to be heard at a June Rolling Meadows City Council meeting.