CITY OF SELMA MINUTES OF PLANNING COMMISSION MEETING August 23, 2021

VIA TELECONFERENCE PURSUANT TO EXECUTIVE ORDER N-29-20 ISSUED BY GOVERNOR GAVIN NEWSOM. THE COUNCIL CHAMBER WAS CLOSED TO THE PUBLIC. THE PUBLIC HAD THE OPTION TO CALL +1(301)715-8592 ID: 824-9542-1417 PASSCODE 2021 TO PROVIDE COMMENTS ON AGENDA ITEMS.

The regular meeting of the City of Selma Planning Commission was called to order at 6:00 p.m. in the Council Chambers by Vice-Chair Coury. Commission members answering roll call were: Gonzalez, Juarez, Sandhu, and Singh.

Also present were: City Attorney Carlson, Community Development Director Santillan, Contract City Planner Noguera, & Building-Planning Technician Macias.

The agenda for this meeting was duly posted in a location visible at all times by the general public seventytwo hours prior to this meeting.

PLANNING COMMISSION OATH OF OFFICE: Building-Planning Technician Macias administered the oath of office to newly appointed Commissioner Theresa Salas.

<u>REORGANIZATION OF PLANNING COMMISSIONERS</u>. Community Development Director Santillan opened nominations for the office Chairperson. Commissioner Juarez moved to nominate Commissioner Coury to Chairperson. Motion was seconded by Commissioner Salas and carried unanimously.

Chairperson Coury opened nomination for the office of Vice-Chair. A motion was made by Commissioner Sandhu to nominate Commissioner Juarez to Vice-Chair. The motion was seconded by Chairperson Coury and carried unanimously.

<u>STILLMAN STREET DEVELOPMENT PRESENTATION</u>: Mr. Dwight Nelson stepped forward to discuss Stillman Street development options and requested that the Planning Commission consider the feasibility of the proposal.

<u>CONSENT CALENDAR</u>: A motion was made by Commissioner Sandhu to approve the minutes of May 24, 2020 as written. The motion was seconded by Chairperson Coury and carried unanimously.

Consider approval of a resolution recommending amendments to Section 11-28-8, of Chapter 28, of Title XI, of the Selma Municipal Code relating to placement, design, and electronic display standards for off premises advertising sign structures (billboards), including static billboards and LED billboards: Contract City Planner Noguera provided a PowerPoint presentation outlining the proposed amendments to the Ordinance. She advised that the applicant, Mr. Jeremy Gregory, would like to construct two billboards (off-premises signs) that exceed the current size and height requirements of the Selma Municipal Code ("SMC") and that the applicant has applied for a Zoning Text Amendment to amend the SMC to accommodate for the height and size of the proposed off-premises signs.

Currently, the maximum allowable height for a billboard is thirty-two (32) feet. The amendment would increase the allowable height to fifty-five (55) feet. The total sign area would be amended from an allowable area of three hundred (300) square feet to six hundred and seventy-two (672) square feet. The amendment would require approval of a Conditional Use Permit (CUP) for the expansion of existing billboard and design guidelines have been included to require architectural embellishments on support columns and City of Selma branding. Specific standards for electronic message displays and LED billboard signs also include the Caltrans Outdoor Advertising (ODA) standards as a requirement.

Chairperson Coury opened the public hearing portion of the meeting at 6:46 p.m.

Mr. Jeremy Gregory, representing West Coast Billboards addressed new billboard opportunities within the City of Selma and invited Mr. Joshua Haygood also representing West Coast Billboards to address questions from the Commission.

There being no further public comment, Chairperson Coury closed the public hearing at 6:51 p.m.

After much Commission discussion, a motion was made by Commissioner Gonzalez to continue agenda the matter to the September 27, 2021 Planning Commission meeting. Motion was seconded by Commissioner Singh and carried unanimously.

Consider approval of a resolution recommending amendments to various sections of Chapter 10, of Title X of the Selma Municipal Code relating to truck/trailer/RV parking on residential streets and other public rights-of-way: Community Development Director Santillan reported that City Staff has received numerous complaints regarding commercial trucks, truck tractors, trailers and recreational vehicles ("RVs") on residential streets. The City Council has directed staff to make changes to the Selma Municipal Code ("SMC") to more effectively address this issue. The purpose of the code amendment now being proposed is to establish clearer, more specific and easily enforceable restrictions on parking of trucks, truck tractors, trailers, and recreational vehicles. The proposed code amendment also provides clearer definitions for each type of vehicle, and specifies which City officials have the authority to enforce this section of the code. The code also makes allowances for loading and unloading of RVs, and makes exceptions for certain types of trucks and tractors.

Chairperson Coury opened public hearing portion of the meeting at 7:23 pm. There being no public comments, Chairperson Coury then closed the public portion of the meeting at 7:24 pm.

After much Commission discussion, a motion was made by Vice-Chair Juarez to adopt a RESOLUTION OF THE PLANNING COMMISSION RECOMMENDING APPROVAL OF AN ORDINANCE AMENDING VARIOUS SECTIONS OF CHAPTER 10, OF TITLE X OF THE SELMA MUNICIPAL CODE RELATING TO TRUCK, TRUCK TRACTOR, TRAILER, AND RECREATIONAL VEHICLE PARKING ON RESIDENTIAL STREETS AND OTHER PUBLIC RIGHTS-OF-WAY. Motion was seconded by Commissioner Sandhu and carried unanimously.

ADJOURNMENT: There being no further business, meeting was adjourned at 7:30 p.m.

Minutes submitted by:

Lupe Macias Building-Planning Technician

SELMA PLANNING COMMISSION STAFF REPORT

Meeting Date: September 27, 2021

TO: Selma Planning Commission

FROM: Community Development Department

SUBJECT: AGENDA ITEM NO. 2

Public Hearing to Consider Submittal No. 2021-0010, a Zoning Text Amendment to amend the Selma Municipal Code Section 11-28-8: Billboards (off-premises sign structure).

Summary and Purpose

The purpose of this agenda item is to hold a public hearing to consider a Zoning Text Amendment to amend the Selma Municipal Code (SMC) Section 11-28-8: Billboards (off-premises sign structure) relating to off-site signage. The Planning Commission will make a recommendation to the City Council regarding the Zoning Text Amendment. This agenda item was first heard by the Planning Commission on August 23, 2021, and was continued to this date.

Application Information

Applicant:	Jeremy Gregory 1056 Parkwood Ave, Madera CA 93637
Project Location:	M-1 and M-2 zones along Highway 99
Applicant's Proposal:	To amend SMC Section 11-28-8 relating to off-premise signage

Summary and Purpose

The applicant would like to construct two billboards (off-premises signs) that exceed the current size and height requirements of the SMC. The applicant has applied for a Zoning Text Amendment to amend the SMC to accommodate for the height and size of the proposed off-premises signs. Currently, the maximum allowable height for a billboard is 32 feet. The amendment would increase the allowable height to 55 feet. The total sign area would be amended from an allowable area of 300 square feet to 672 square feet.

Exhibits are attached showing size comparisons of billboards that are currently allowed versus what would be allowed under the proposed ordinance amendments (Exhibits A & B). The illustrations show the current maximum height for billboards is 32 feet and the current sign face size is 300 square feet. The applicant's proposal would increase the maximum allowed height to 55 feet and the maximum allowed sign face size to 672 square feet. The proposal would increase the maximum allowed height by 72% and the maximum allowed sign face size by 124%.

The new ordinance also expands the areas of the City where billboards are permitted. The current code restricts billboards to the M-1 and M-2 zones that are located south of Park Street and within

200 feet of Highway 99. The proposed amendment would still limit billboards only to the M-1 and M-2 zones and within 200 feet of Highway 99. However, the proposed amendment would remove "south Park Street" as a limitation. This would open up a new area for billboards on the north side of the city roughly between the Huntsman Avenue and Springfield Avenue alignments along Highway 99. Exhibit C shows the locations where billboards are currently allowed and the proposed new area.

If the amendment is approved, new billboards and redesigned billboards would still be required to obtain a Conditional Use Permit (CUP). Design guidelines have been added that require architectural embellishments on support columns and City of Selma branding. This would be enforced through the CUP process.

Subsection D of the proposed ordinance amendment adds wording to allow electronic message boards on billboards. Specific standards for electronic message displays and LED billboard signs include the requirement to meet Caltrans Outdoor Advertising (ODA) standards, use of signs for emergency messaging, and correcting a malfunction. Caltrans ODA regulates sign appearances including, but not limited to, allowable levels of brightness, how often copy can change, and a prohibition of animated messaging.

A summary of the Caltrans Outdoor Advertising Permit Requirements is attached to this staff report. It shows the standards that Caltrans requires for regular billboard and electronic message billboards. One standard that City staff has added to the proposed City ordinance based on the Caltrans standards (that was not included in the August 23rd staff report) is that two electronic message billboards must be located at least 1,000 feet from each other.

Also attached to this staff report is an explanation of the brightness guidelines that Caltrans enforces and the State law regarding billboard luminescence. This law and guidelines provide standards for how bright the electronic message billboard may be during certain time of the day. The City's proposed ordinance does not address luminescence so that it can be enforced uniformly by Caltrans.

This item was heard by the City of Selma Planning Commission at a regular scheduled meeting on August 23, 2021. After discussion, the Planning Commission continued the item to the September 27, 2021, meeting.

Proposed Text Amendment

The proposed text amendments are as follows

- Proposed deleted text is shown in strikethrough text.
- Proposed new text is shown in *<u>underline italic</u>* text.

11-28-8: BILLBOARDS (OFF PREMISES ADVERTISING SIGN STRUCTURE):

- (A) General Provisions:
 - No billboard shall be constructed, relocated or upgraded within the city without a
 <u>eC</u>onditional <u>uUse <u>pP</u>ermit (<u>CUP</u>). <u>Each application shall be considered separately and
 individually. Multiple billboards on separate parcels shall not be combined into a single
 application.</u> All new, relocated or upgraded billboards shall comply with the following
 regulations:
 </u>

2. Expansion of billboard area or addition of faces to existing billboards: the vested rights held by existing billboards, whether conforming or nonconforming to this Chapter, do not allow expansion of billboard area or addition of billboard faces as a matter of right. No billboard shall have its area increased or have an additional face added unless all of the following conditions are met:

(a) A Conditional Use Permit is obtained by the applicant;

(b) The billboard meets the requirements of this Chapter;

(c) The applicant obtains all required building permits.

(B) Placement:

(a)<u>1.</u> Billboards shall only be permitted within two hundred feet (200') of Highway 99 south of Park Street and only in the M-1, and M-2 zone districts.

(b)2. No billboards shall be permitted within five hundred feet (500') of residential uses, zoning, or general plan designations. Uses across Highway 99 from a proposed billboard shall not be considered in this requirement.

(c)<u>3.</u> No billboard shall be placed within six hundred sixty feet (660') of another billboard or a freeway oriented sign. <u>No billboard with electronic message display shall be placed within one</u> thousand feet (1,000') of another billboard with electronic message display.

(C) Design:

- (d)<u>1.</u> The total height of a billboard shall not exceed thirty two <u>fifty five</u> feet (32')(55') to the top of the structure.
- (e)2. The total area of a single sign face shall not exceed three hundred (300) six hundred seventy two (672) square feet. No billboard shall have more than two (2) sign faces.
- (f)<u>3.</u> All billboards shall be supported by a single pole.
- (g)4. The minimum height to the bottom of a billboard shall be seven feet (7').
- (h)5. All support structures of the billboard shall be fully enclosed.-visible sign support columns for electronic billboards shall be concealed with approved architectural embellishments. The materials used in the sign support embellishments shall be primarily natural stone, brick, approved masonry panels, stucco, or architectural metal.
- 6. Billboards may be illuminated provided no lighting is directed onto adjacent properties or public rights-of-way and, where applicable, have approval from the California Highway Patrol and/or California Department of Transportation (Caltrans).
- 7. Electronic billboards shall have the City of Selma branding on each side that contains advertising.

(D) Electronic message display and LED billboard signs:

- 1. Electronic message display and LED billboard signs are permitted but must have clearance or necessary approvals in writing from Caltrans Outdoor Advertising. Electronic message rotation shall comply with Caltrans safety standards.
- 2. The owner of an LED billboard sign shall coordinate with the local authorities to display, when appropriate, emergency information important to the traveling public including, but not limited to Amber Alerts, alerts concerning terrorist attacks or natural disasters. Emergency information messages shall remain in the advertising rotation according to the protocols of the agency that issues the information.
- 3. The owner of an LED billboard sign shall provide to the City of Selma Community Development Department 24 hour contact information for a person who has the authority and ability to turn off the electronic sign promptly after a malfunction occurs. Any sign not

properly functioning needs to be repaired to the city's satisfaction within 30 days of a written notice or be subject to CUP revocation process, with the possibility of an additional 30-day extension approved by the Community Development Director or City Manager.

Planning Commission Role in Amendment to Zoning Regulations

Any amendment to any zoning provision included in the SMC must be first submitted to this Planning Commission, which must make a recommendation to the City Council on the proposed amendment of such ordinances. (SMC 11-21-4). The Planning Commission can choose to recommend approval or to recommend denial to the Council. Even if the recommendation is for denial, the application will be taken to the City Council for a final decision. The City Council will also hold a public hearing.

Environmental (CEQA)

This project is exempt under California Environmental Quality Act (CEQA) Section15061(b)(3) and Section 15183. The project is exempt under the "common sense" exemption because it does not involve the construction or alteration of facilities that will have a significant effect on the environment. The project includes a Zoning Text Amendment to amend the Selma Municipal Code (SMC) Section 11-28-8: Billboards (off-premises sign structure). Billboards are required to apply for a discretionary permit (CUP) prior to approval and construction. Adherence to the Caltrans Outdoor Advertising Standards will reduce aesthetic and safety impacts to less than significant. The aesthetic impacts of LED billboards have been studied in the past and impacts were shown to be less than significant. The project is exempt under Section 15183 because the existing SMC allows for freeway-oriented signs up to 75 feet high and the M-2 zone district allows for building heights of 100 feet. Therefore, the proposed changes to the billboard code do not exceed similar standards previously adopted.

<u>Notice of Public Hearing</u>

The Public Notice was published one time in The Selma Enterprise on June 11, 2021. At the August 23, 2021, hearing, the item was continued to the specific date of September 27, 2021.

Recommendation

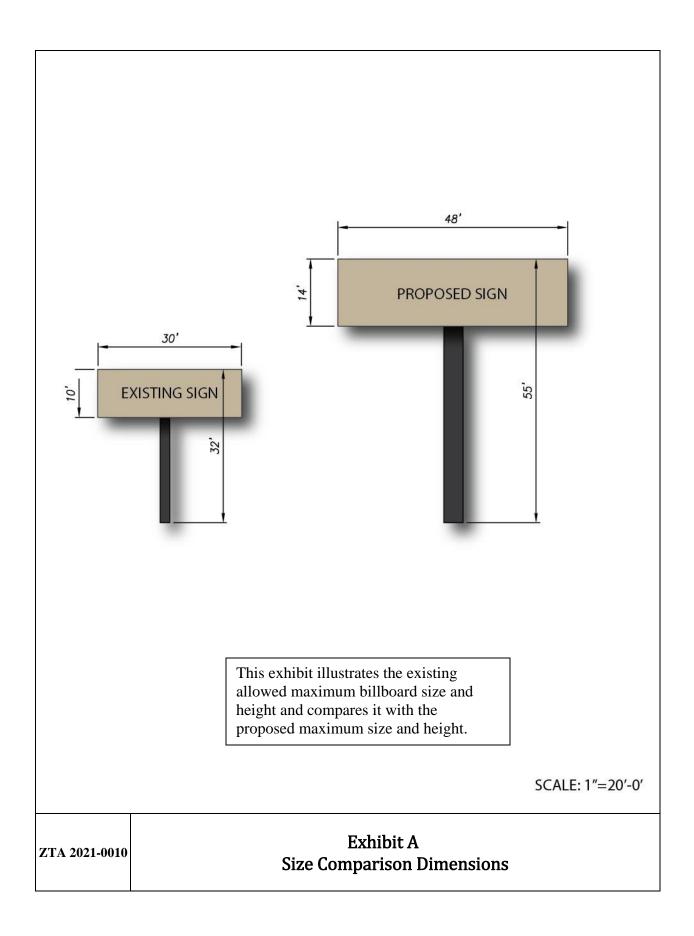
The options before the Planning Commission are to recommend either the approval of this amendment as presented, approve the presented amendment with modifications or adjustments, or to recommend denial of the proposed ordinance amendment.

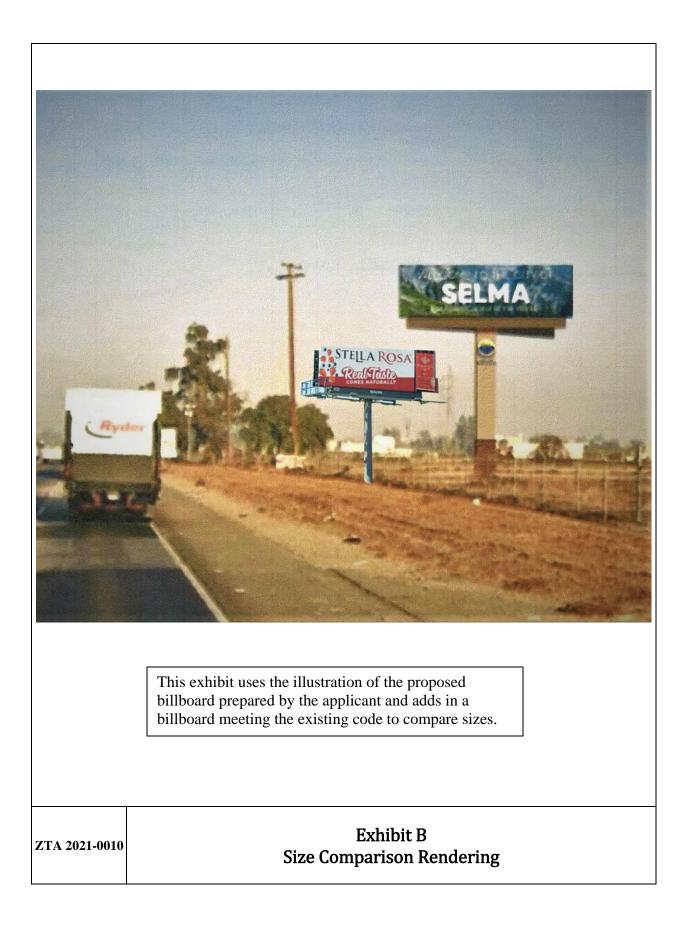
Steve Brandt, AICP Community Development Department

Fernando Santillan, Director Community Development Department

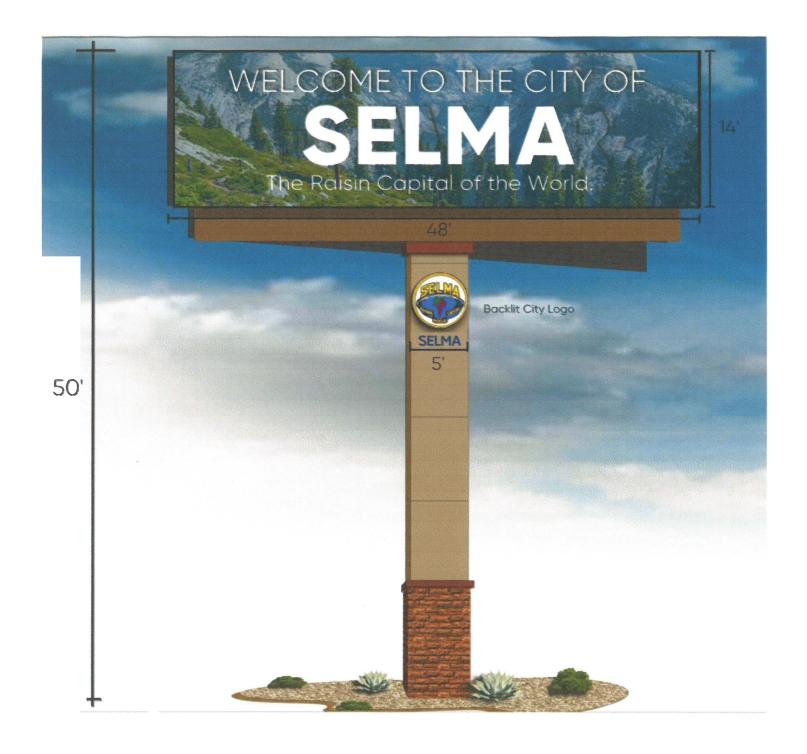
Attachments

- 1. Exhibit A Size Comparison Dimensions
- 2. Exhibit B Size Comparison Rendering
- 3. Exhibit C Allowable Area Map Existing and Proposed
- 4. Applicant's Rendering
- 5. Resolution recommending approval of the amendment
- 6. Resolution recommending denial of the amendment
- 7. Caltrans Outdoor Advertising Permit Requirements
- 8. Explanation of OAAA Recommended Brightness Guidelines
- 9. State Law regarding Billboard Luminescence
- 10. CEQA Notice of Exemption









A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SELMA, CALIFORNIA, RECOMMENDING APPROVAL OF AN ORDINANCE AMENDING SELMA MUNICIPAL CODE SECTION 11-28-8 RELATING TO OFF-SITE SIGNAGE AND LED BILLBOARDS

WHEREAS, pursuant to Chapter 21 of Title 11 of the Selma Municipal Code ("SMC") the Planning Commission is to recommend any amendment or repeal of any provision of any zoning ordinance included in the SMC; and

WHEREAS, the proposed Zoning Text Amendment seeks to amend SMC Section 11-28-8: Billboards (off-premises sign structure) relating to off-site signage; and

WHEREAS, notice of the Planning Commission's public hearing for the proposed Zoning Text Amendment was published in The Selma Enterprise on July 11, 2021, in compliance with the SMC and Government Code Section 65091; and

WHEREAS, on August 23, 2021, the Planning Commission conducted a duly noticed public hearing to consider amendment of Section 11-28-8 of the SMC and continued the public hearing to the September 27, 2021, regular meeting; and

WHEREAS, the Planning Commission considered the CEQA analysis outlined in the staff report and elsewhere in the Administrative Record which concludes no additional CEQA environmental review is required pursuant to CEQA Guidelines Section15061(b)(3) and Section 15183; and

WHEREAS, the Planning Commission has had an opportunity to review and consider the entire Administrative Record relating to the Project, which is on file with the Department, and reviewed and considered those portions of the Administrative Record determined to be necessary to make an informed decision, including, but not necessarily limited to, the staff report, the written materials submitted with the request, and the verbal and written testimony and other evidence presented during the public hearing, which are incorporated herein by this reference.

NOW, THEREFORE, BE IT RESOLVED, that the City of Selma Planning Commission hereby takes the following actions as follows:

1. The Planning Commission finds that all of the forgoing recitals and facts are true and correct and are incorporated by this reference.

2. The Planning Commission finds that it is in the best interest of the City and the health, safety, and welfare of its residents to adopt the proposed Ordinance Amendment.

3. The Planning Commission approves this Resolution and recommends adoption of the attached Ordinance Amending Section 11-28-8 of the Selma Municipal Code.

PASSED, APPROVED AND ADOPTED by the Planning Commission of the City of Selma at a regular meeting held on September 27, 2021, by the following vote:

AYES:	COMMISSION MEMBERS:
NOES:	COMMISSION MEMBERS:
ABSTAIN:	COMMISSION MEMBERS:
ABSENT:	COMMISSION MEMBERS:

ATTEST:

Chairperson

Fernando Santillan, Community Development Director

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SELMA, CALIFORNIA, RECOMMENDING DENIAL OF AN ORDINANCE AMENDING SELMA MUNICIPAL CODE SECTION 11-28-8 RELATING TO OFF-SITE SIGNAGE AND LED BILLBOARDS

WHEREAS, pursuant to Chapter 21 of Title 11 of the Selma Municipal Code ("SMC") the Planning Commission is to recommend any amendment or repeal of any provision of any zoning ordinance included in the SMC; and

WHEREAS, the proposed Zoning Text Amendment seeks to amend SMC Section 11-28-8: Billboards (off-premises sign structure) relating to off-site signage; and

WHEREAS, notice of the Planning Commission's public hearing for the proposed Zoning Text Amendment was published in The Selma Enterprise on July 11, 2021, in compliance with the SMC and Government Code Section 65091; and

WHEREAS, on August 23, 2021, the Planning Commission conducted a duly noticed public hearing to consider amendment of Section 11-28-8 of the SMC and continued the public hearing to the September 27, 2021, regular meeting; and

WHEREAS, the Planning Commission considered the CEQA analysis outlined in the staff report and elsewhere in the Administrative Record which concludes no additional CEQA environmental review is required pursuant to CEQA Guidelines Section15061(b)(3) and Section 15183; and

WHEREAS, the Planning Commission has had an opportunity to review and consider the entire Administrative Record relating to the Project, which is on file with the Department, and reviewed and considered those portions of the Administrative Record determined to be necessary to make an informed decision, including, but not necessarily limited to, the staff report, the written materials submitted with the request, and the verbal and written testimony and other evidence presented during the public hearing, which are incorporated herein by this reference.

NOW, THEREFORE, BE IT RESOLVED, that the City of Selma Planning Commission hereby takes the following actions as follows:

1. The Planning Commission finds that all of the forgoing recitals and facts are true and correct and are incorporated by this reference.

2. The Planning Commission finds that it is not in the best interest of the City or the health, safety, and welfare of its residents to adopt the proposed Ordinance Amendment for the following reasons:

a. [Insert reasons]

3. The Planning Commission approves this Resolution and recommends denial of the attached Ordinance Amending Section 11-28-8 of the Selma Municipal Code.

PASSED, APPROVED AND ADOPTED by the Planning Commission of the City of Selma at a special meeting held on September 27, 2021, by the following vote:

AYES: NOES: ABSTAIN: ABSENT: COMMISSION MEMBERS: COMMISSION MEMBERS: COMMISSION MEMBERS: COMMISSION MEMBERS:

ATTEST:

Chairperson

Fernando Santillan, Community Development Director

https://dot.ca.gov/programs/traffic-operations/oda/permit

Permit Requirements

The below information is to be used as general guidelines and does not guarantee approval.

Outdoor Advertising Permit Requirements

In order for an outdoor advertising display application to be considered for a permit adjacent to an Interstate or primary highway the following criterion must be met:

Display Location

- Must be outside the right of way of any highway.
- Must be outside of any stream, or drainage channel.
- There must be an existing business activity within 1000 feet of proposed display location on either side of the highway.
- Location of property where display is to be placed must be zoned industrial or commercial.
- Must have current property owner consent, in writing, to place the display at desired location.
- Must have written permission (building permit) from the local government having jurisdiction where the display is to be located.
- Location may not be adjacent to a landscaped freeway. (*Requirement notes at bottom of page)
- Location may not be adjacent to a scenic highway. (**Requirement notes at bottom of page)
- If adjacent to a bonus segment (***Requirement notes at bottom of page) of an Interstate freeway, copy, size, and spacing is more restrictive.

Display

- Display must be 500 feet from any other permitted display on same side of any highway that is a freeway.
- Display must be 300 feet from any other permitted display on same side of any primary highway that is not a freeway in an unincorporated area.
- Display must be 100 feet from any other permitted display on same side of any primary highway that is not a freeway and is within the limits of an incorporated city.
- Display must be 500 feet from an interchange; intersection at grade or safety roadside rest if the highway is a freeway and the location is outside the limits of an incorporated city and outside the limits of an urban area.

- An electronic changeable message center display must meet the above spacing requirements and be 1000 feet from another electronic message center display.
- Maximum height for the advertising display area is, 25 feet in height and 60 feet in length, not to exceed an overall maximum of 1200 square feet.

For a permit application contact the Department of Transportation.

REQUIREMENT NOTES:

* FREEWAY: Landscaped freeway is a section of a freeway which is now, or hereafter may be, improved by the planting at least on one side of the freeway right-of-way of lawns, trees, shrubs, flowers or other ornamental vegetation which shall require reasonable maintenance. ** HIGHWAY: Scenic highway is a section of a highway that has been officially designated and maintained scenic pursuant Section 260, 261, 262, and 262.5 of the Streets and Highways Code or as referred to in Section 131(s) of Title 23 of United States Code. *** BONUS SEGMENT: Bonus segment is any portion of an Interstate freeway which is constructed upon any part of right of way, the entire width of which was acquired for right of way subsequent to July 1, 1956, except those segments of the Interstate system that traverse commercial or industrial zones within the boundaries of incorporated municipalities, as such boundaries existed on September 21, 1959, or other areas where the land use, as of September 21, 1959 was clearly established by State law as industrial or commercial



Explanation of OAAA Recommended Brightness Guidelines

There are at least two ways to evaluate the brightness of a LED digital display. A preferred method uses a footcandle meter to determine the amount of light that reaches various points in front of the digital display. A second method uses a luminance meter (frequently called a nit gun) to determine the amount of light emitted by a light source.

Explanation of Footcandles vs. Nits

A brightness standard measured in nits (candelas/square meter) typically contains a maximum value for daytime and nighttime. The footcandle standard has only one value but is measured from different distances based on display size.

An LED sign generates luminance at the source (measured in nits), but this raw source is not what the human eye sees from a distance. The human eye sees illuminance (measured in foot candles) from a point at a certain distance from the LED sign. Illuminance is greatly affected by ambient light and surrounding conditions. As such, it is usually preferred by regulators.

Q: What is the definition of Luminance¹?

lu·mi·nance/'lumenens/ [loo-muh-nuhns]-noun

1. The state or quality of being luminous.

2. Also called luminosity, the quality or condition of radiating or reflecting light: the blinding luminance of the sun.

3. Optics - The quantitative measure of brightness of a light source or an illuminated surface, equal to luminous flux per unit solid angle emitted per unit projected area of the source or surface.

Q: What is the definition of Illuminance?

/i'lumənəns/ Compare irradiance E v, Sometimes called: illumination the luminous flux incident on unit area of a surface. It is measured in lux^2

Q: What is a foot candle?

n. (Abbr. fc or ft-c)

[foot-kan-dl] noun Optics.

A unit of illuminance or illumination, equivalent to the illumination produced by a source of one candle at a distance of one foot and equal to one lumen incident per square foot. Abbreviation: FC³

Also:

A unit of illuminance on a surface that is everywhere one foot from a point source of one candle⁴

¹ Dictionary.com <u>http://dictionary.reference.com/browse/luminance?s=t</u>

² Dictionary.com http://dictionary.reference.com/browse/illuminance?s=ts

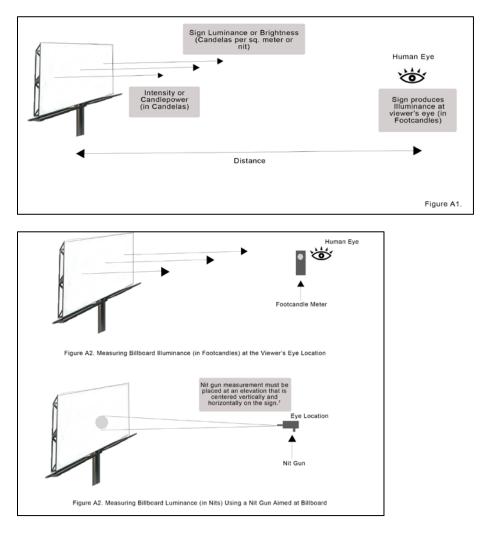
³ Dictionary.com http://dictionary.reference.com/browse/foot+candle?s=t

⁴ TheFreeDictionary.com http://www.thefreedictionary.com/Footcandle

Q: What is a nit? A:

noun Physics.

a unit of luminous intensity equal to one candela per square meter. Abbreviation: nt⁵ -A unit of illuminative brightness equal to one candle per square meter, measured perpendicular to the rays of the source.⁶



⁵ Dictionary.com http://dictionary.reference.com/browse/nits?s=t

⁶ TheFreeDictionary.com <u>http://www.thefreedictionary.com/nit</u>

⁷ Nit gun readings are most accurate when the readings are taken directly perpendicular from the light source. As a result, the best place to take Nit gun readings is from a elevated height perpendicular to the digital display. If this is not possible, moving back from the digital display 350' to 500' on the center line will minimize the loss of accuracy. However, the distance away from the digital display cannot cause the nit gun measurement circle to fall outside the lighted digital billboard face.

-Source: Dr. Ian Lewin, Ph.D. Lighting Sciences, Inc. Digital Billboard Recommendations and Comparisons to Conventional Billboards.

Why use Foot candles over Nits as a unit of measurement?

- Foot candles measure the variance from ambient light. This assures a government that the sign will not be too bright for conditions. At different parts of a day the ambient lighting can be significantly different with clouds or fog. Conversely, the same can be true about nighttime conditions when an adjacent commercial lot turns on or off their parking lot lighting. Regulation using Nits merely sets a maximum and minimum level for day and night time conditions. Using the foot candle standard will not allow the sign to be too bright under a variety of conditions. (See Figure A2)
- Nits measure the brightness of the light at its source, without regard to ambient light. Establishing a lighting standard that ignores the brightness of the area (ambient light) allows the digital billboard to be too bright in dark environments and too dim in highly illuminated areas. In other words, fixed nit standards can allow the digital to operate at significantly higher luminance than is needed over the course of a 24 hour period.
- Nits: To measure nits you need to be directly perpendicular to the sign to measure, and get an accurate measurement. This is factored horizontally and vertically. There is a little bit of leeway on angle. Nits are directional in nature and billboard signs are usually aimed directly at the middle of the roadway. This in many cases puts the person performing the measurement in the travel lanes. In addition, due to the height of the average digital billboard a truck with a man-lift may be required. There is no specified distance you must be away from the sign to measure. (See Figure A2)
- Footcandles: With the footcandle standard you should be as perpendicular to the face as you can, but you do not have to be, to get a valid, accurate measurement. Footcandles can be measured multi directionally. You can take measurements at an angle to the sign face and receive valid measurements. The distance from which to measure is set at 250 ft away from the sign face for 14 x 48 size. This gives a regulator more options on places to stand.
- This makes the footcandle standard superior in ease of implementation. But even if we assumed they are both different, but similar in this regard, other more important factors tip the scales.
 - The footcandle standard is more restrictive in terms of lighting allowed, in a variety of conditions. As such, is usually preferred by regulators once they are educated on the differences.
 - The industry footcandle standard is tied to a required light sensor and dimming software.
 - Footcandles measure what the driver sees through their windshield in terms of light, where his car is.
 - Nits measure the light emanating from the sign face, typically a few hundred feet away. Not necessarily what the driver is seeing.
- It also can benefit a government to use foot-candles instead of Nits as Nit guns are very expensive (estimated cost \$3,000.00). Light meters can cost as little as \$250.00.

There are 3 necessary components to insure a digital billboard will never be too bright for conditions.

- 1. Maximum brightness limits incorporating a footcandle standard
- 2. An ambient light sensor installed on the sign structure
- 3. Dimming software

The ambient light level of a digital billboard will not vary significantly from that of a traditional billboard display and, in many cases it will be less. The light output levels will be set to be appropriate for the surroundings.

OAAA recognized/member companies utilize a photocell on digital billboards so that the display will easily be seen by motorists under changing light conditions. Sophisticated dimming software constantly changes the brightness of the display in response to changing ambient lighting conditions. This insures a digital billboard will never be too bright for conditions.

The range of brightness varies greatly between daytime and nighttime conditions. In bright daylight, the unit must have higher intensity in order to be seen. During darkness conditions, the brightness can be set low and still be easily seen by motorists.

Why was 0.3 Footcandles chosen as the limit?

The 0.3 footcandle maximum illuminance level was carefully derived from a report completed by a former president of the IESNA.⁸ The recommended technique is based on accepted IESNA practice for "light trespass."

The Outdoor Advertising Association of America (OAAA) commissioned Dr. Ian Lewin, in 2008 a principal at Lighting Sciences, Inc., Scottsdale, AZ, to recommend criteria for brightness levels on digital billboards⁹. The standards are designed to minimize the risk of glare or unreasonable driver distraction.

Footcandle measurements are commonly used throughout the United States. Footcandle measures are widely used in the lighting industry, photography, film, television, conservation lighting, and construction related engineering and building code regulations¹⁰. In addition, footcandles are frequently cited in OSHA regulations. The OAAA believes that these lighting standards reflect the best practices of the Out of Home Industry.

⁸ IESNA – Illuminating Engineering Society of North America

⁹ Digital Billboard Recommendations and Comparisons to Conventional Billboards, by Dr. Ian Lewin Ph.D., FIES, L.C. Lighting Sciences, Inc., 7826 East Evans Road, Scottsdale, Arizona 85260

¹⁰ wikipedia.org/wiki/Footcandles

Appendix

OAAA Recommended Brightness Guidelines

Criteria #1 - Lighting Standards – Measurements:

The industry recommended criteria follows the lighting standards established by the Illuminating Engineering Society of North America (IESNA). The OAAA and member companies voluntarily adhere to the following guidance.

Recommended regulatory criteria:

Lighting levels should not exceed 0.3 foot candles (over ambient levels) as measured using a foot candle meter at a pre-set distance.

Pre-set distances to measure the foot candles impact vary with the expected viewing distances of each size sign. Measurements should be taken as close to perpendicular to the face as practical.

Measurement distance criteria:

Nominal Face Size	Distance to Measure From
12' x 24'	150'
10'6 x 36'	200'
14' x 48'	250'
20' x 60'	350'

Each display must have a light sensing device that will adjust the brightness as ambient light conditions change.

Criteria #2 - Alternate Regulatory Criteria

The brightness of light emitted from a changeable message sign should not exceed 0.3 foot candles over ambient light levels measured at a distance of one hundred fifty feet (150') feet for those sign faces less than or equal to three hundred square feet (300 sq. ft.), measured at a distance of two hundred feet (200 ft.), for those sign faces greater than three hundred square feet (300 sq. ft.) but less than or equal to three hundred eighty-five square feet (385 sq. ft.), measured at a distance of two hundred fifty feet (250 ft.), for those sign faces greater than three hundred eighty-five square feet (385 sq. ft.), measured at a distance of two hundred fifty feet (250 ft.), for those sign faces greater than three hundred eighty-five square feet (385 sq. ft.) and less than or equal to six hundred eighty square feet (680 sq. ft.), measured at a distance of three hundred fifty feet (350 ft.) for those sign faces greater than six hundred eighty square feet (680 sq. ft.).

Or use Alternate Table:

Sign Face Size	Distance of Measurement
681-1200 square feet	350 feet
385-680 square feet	250 feet
300-385 square feet	200 feet
200-300 square feet	150 feet

Each display must have a light sensing device that will adjust the brightness as ambient light conditions change.

Criteria #3 - Optional Regulatory Addendum - (If standardized distances cannot be achieved in compliance with MUTCD roadside work, or if the site conditions will not allow measurements from the previous distances.)

In the event it is found not to be practical to measure a digital billboard at the set distances prescribed above, a measurer may opt to measure the sign at any of the alternative measuring distances described in the applicable table set forth below. In the event the sign measurer chooses to measure the sign using an alternative measuring distance, the prescribed footcandle level above ambient light shall not exceed the prescribed level, to be determined based on the alternative measuring distances set forth in the following tables (A), (B), (C), and (D), as applicable:

(A) For changeable message signs less than or equal to 300 square feet:

Alternative Measuring Distance	Prescribed Foot Candle Level
100	0.68
125	0.43
150	0.3
200	0.17
250	0.11
275	0.09
300	0.08
325	0.06
350	0.06
400	0.04

(B) For changeable message signs greater than 300 square feet but less than or equal to 385 square feet:

Alternative Measuring Distance	Prescribed Foot Candle Level
100	1.2
125	0.77
150	0.53
200	0.3
250	0.19
275	0.16
300	0.13
325	0.11
350	0.1
400	0.08

(C) For changeable message signs greater than 385 square feet but less than or equal to 680 square feet:

Alternative Measuring Distance	Prescribed Foot Candle Level
100	1.88
125	1.2
150	0.83
200	0.47
250	0.3
275	0.25
300	0.21
325	0.18
350	0.15
400	0.12

(D) For changeable Message Sign greater than 680 square feet: Alternative Measuring Distance: Prescribed Foot Candle Level:

Alternative Measuring Distance	Prescribed Foot Candle Level
100	3.675
125	2.35
150	1.63
200	0.92
250	0.59
275	0.49
300	0.41
325	0.35
350	0.3
400	0.23
425	0.2
450	0.18
500	0.15

State of California

VEHICLE CODE

Section 21466.5

21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be considered vision impairing when its brilliance exceeds the values listed below.

The brightness reading of an objectionable light source shall be measured with a $1\frac{1}{2}$ -degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness of the light source in foot-lamberts or less, the measured brightness of the light source in foot-lambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's line of sight and the light source.

The provisions of this section shall not apply to railroads as defined in Section 229 of the Public Utilities Code.

(Added by Stats. 1970, Ch. 968.)

Notice of Exemption

Appendix E

To: Office of Planning and Research P.O. Box 3044, Room 113	From: (Pub	lic Agency):	<u> </u>	
Sacramento, CA 95812-3044				
County Clerk County of:		(Address)		
		(*********)		
Project Title:			<u>.</u>	
Project Applicant:				
Project Location - Specific:				
Project Location - City:	Proiec	t Location - County:		
Description of Nature, Purpose and Beneficia				
Name of Public Agency Approving Project: _				
Name of Person or Agency Carrying Out Pro	ject:			
Exempt Status: (check one): Image: Ministerial (Sec. 21080(b)(1); 15268 Image: Declared Emergency (Sec. 21080(b)(4) Image: Emergency Project (Sec. 21080(b)(4) Image: Categorical Exemption. State type and the statutory Exemptions. State code not state)(3); 15269(a)); 4); 15269(b)(c)); nd section numbe			
Reasons why project is exempt:				
Lead Agency Contact Person:	Area (Code/Telephone/Extension:		
If filed by applicant: 1. Attach certified document of exemptio 2. Has a Notice of Exemption been filed	n finding.	ncy approving the project?	Yes	No
Signature:	Date:	Title:		
Signed by Lead Agency Sigr	ad by Aralisant			