

Staff Report

Outdoor Lighting Standards for Auto & Marine Craft Trade

August 14, 2012

Background:

On July 20, 2012 the City Council received a request from Dan Levi of Levi Architecture, to reevaluate lighting provisions in the recently adopted alternative landscape standards for auto dealers. The request expressed the concern that the standards have no provisions for the lighting of a “merchandise lot”, and stated that Deery Brothers may choose to reevaluate the project entirely without some constructive changes to the lighting level allowed for their dealership. In response, the City Council directed staff to provide a brief report on the lighting issue.

The lighting standards that are the subject of this request did not replace or amend existing outdoor lighting standards; they were included under one of two options in the recently adopted alternative landscape standards for auto and marine craft trade uses. In total, they provide three landscaping options for auto dealers. It is useful to summarize what these three alternative standards are:

Alternative 1 – Standard Landscaping Requirements. These are the current standards generally applicable to all development in most locations. They may be used if developers of auto and marine craft trade prefer not to select the alternative standards for these uses. Under this option, parking lots are landscaped with standard linear alignment of trees around the parking lot perimeter, and **there are no lighting restrictions beyond the City’s standard lighting regulations.**

The advantages of this option is that the standard linear arrangement of trees provides some softening of parking lot lights as seen from surrounding streets and development. No further lighting regulations are needed. However, the disadvantage to the auto dealer is that the linear alignment of trees along the site perimeter may obscure visibility of the site from abutting streets.

Alternative 2 - Eliminate interior parking lot landscaping requirements for auto-dealers in exchange for landscaped entrance and building perimeter features, and retain the standard linear alignment of trees and shrubs around the perimeter of the parking lot. Under this option, **there are no lighting restrictions beyond the City’s standard lighting regulations.**

As with Alternative 1, the standard linear arrangement of trees provides some softening of parking lot lights as seen from surrounding streets and development, so

no further lighting regulations are needed.. This alternative also enhances with landscaping both the entrance to the site and the area surrounding the building as compensation for the loss of landscaping in the middle of the parking lot. However, the linear alignment of trees along site perimeter may obscure visibility of site from abutting streets.

Alternative 3 - Eliminate interior landscaping requirements for auto-dealers, and allow clustering of trees and shrubs around the perimeter of the site.

The clustering of trees allowed under this option will facilitate increased visibility of the site from abutting streets, thereby increasing marketing opportunities. However, this clustering option would leave wide open expanses with no upright landscape features to provide visual relief from light and glare, and no shading (cooling) of pavement. To compensate for this impact, **this option requires on-site lighting to comply with the same lighting levels established for the Northeast Gateway Overlay district, (except for after-hour dimming requirements)**, and requires tree clusters to be within 8 feet of the parking lot pavement to provide some shading.

The lighting standards under Alternative 3 are the same lighting standards required in the Northeast Gateway Overlay district, except that they do not require that lights be dimmed after hours to security level lighting as otherwise required in that district. To date, staff is aware of only one development proposal that was designed to meet the standard, and that was the mall proposal on 13th Street by Bucky Wolford. Unfortunately, no development has actually been built under these standards, so there is no built example showing what the lighting would look like. Nonetheless, the applicant's lighting consultant has indicated that the lighting achievable under these standards would be similar to the light levels of City Hall parking lots – 2 foot candles average.

Issues For Consideration:

The Deerys wish to use Alternative 3, but are concerned that the mitigating lighting standard of that alternative do not reasonably provide the lighting levels that auto-dealers depend upon for marketing purposes. Deery Brother's lighting consultant Bob Brown, KJWW Engineering Consultants, provided information on what a typical lighting plan might entail today. It would include the following:

High Volume Retail – 3 to 5 foot candles average

Auto Dealers:

* *Standard lighting - 3 foot candles average.* These would provide standard lighting levels around customer and employee parking and storage areas.

* *Sales Display Lights* - 15 foot candles average. These are for the balance of the display lot not otherwise lighted with dazzle or highlight levels.

* *Highlight Display Lights* - 150 foot candles at a point. – These are higher lighting levels located along the perimeter to give added focus to cars viewed from the street.

* *Dazzle Display Lights* - 300 foot candles at a point. These are high intense lights in high accent areas, such as near dealership signs or over cars on elevated or rotating platforms.

The only requirement under the alternative standards that Mr. Brown has demonstrated the Deerys can comply with without affecting light levels is the requirement to shield the view of fixture lenses from public rights-of-way. This entails attaching what are called glare shields on the bottom side of the fixtures. These extend down approximately 6 to 8 inches below the fixture housing, and are located on the public right-of-way side of each fixture visible from the right-of-way. The view angles shown on cross sections submitted by Mr. Brown provide compelling evidence that this requirement can be met. **Staff believes that compliance with this standard will significantly mitigate one of the greater glare factors of outdoor lighting by shielding the visual “hot spots” of light around fixture lenses.**

Options for City Council Consideration:

The Council may wish to consider the following options in response to Mr. Levi's request:

Option 1. Retain Status Quo – leave the standards as they are.

Option 2. Amend standards to:

- a. Allow typical sales display light levels (15-foot candles average) in all auto display areas. (no dazzle or highlight levels)
- b. Retain lower lighting levels of code in all non-display parking areas,
- c. Retain glare shield requirements for all lights.
- d. Require security lighting levels in all areas after 10:00 p.m. (2 foot candles average)

Option 3. Amend standards to:

- a. Allow full levels of auto dealers preferred lighting (e.g., standard, sales, highlight, and dazzle) in all auto display areas.
- b. Retain lower lighting levels in all non-display parking areas.
- c. Retain glare shield requirements for all lights.

Option 4. Any combination of the above.

STAFF COMMENTS

When considering these options, the Council may want to consider the impacts that high intensity lighting associated with auto dealer parking lots may have on the visual effectiveness of the light columns planned for installation along highway 30 just east of the Deery Brothers site. Without some means of mitigating or softening the light typically associated with auto dealer parking lots, the visual effectiveness of the light columns may be significantly diminished. With that in mind, the Council may wish to consider Option 2. While it would not allow for the most intense light auto dealers would choose if left unregulated, it would allow light commensurate with what dealers typically provide in their display sale areas while providing reasonable mitigation of lighting impacts on the community.

If the City Council wants to proceed with any changes to the lighting provisions under the existing alternate landscaping standards for auto and marine craft trade, then staff should be instructed to bring back through the Planning and Zoning Commission for approval an amended ordinance based on one of the options discussed above.

(Public Input: Please see attached e-mail from Joe Kollasch)



Deery Brothers car dealership request high Intensity lighting

Joseph Kollasch to: Diane R Voss, sosguthorpe,
bkindred, randerson

08/03/2012 02:44 PM

Please respond to kollasch

city of Ames

As a member of Ames Area Amature Astronomers (AAAA) I want to remind you that we fought long just to get some semblance of decent night skies here in Ames.

I hope you don't throw that all away for a few 'window watchers' when stores are closed and they should be watching the road any way. Certainly Not After 10 pm DST, and earlier in Winter.

Frankly I hope you don't change it at all. Just remind them that we are trying to preserving the Night Sky for our citizens, and if anything we should be more stringent.

Joe Kollasch member AAAA