# IV. Environmental Impact Analysis

# A. Aesthetics (Light and Glare)

#### 1. Introduction

This Section describes the existing visual setting of the Project Site and vicinity within the context of the surrounding community, identifies applicable laws, regulations, guidelines and policies relating to aesthetics, and evaluates potential aesthetic impacts related to implementation of the Project.

# a) Scenic Vistas

The term "scenic vista" generally refers to visual access to, or the visibility of, a particular sight from a given vantage point or corridor. The City of Los Angeles (City) recognizes the value of preserving sightlines (view access) to designated scenic resources or subjects of visual interest from public vantage points. The subjects of valued or recognized views may be focal (meaning of specific individual resources), or panoramic (meaning broad geographic area). The nature of a view may be unique, such as a view from an elevated vantage point or particular angle. Existing views may be focused on a single feature, such as a building or garden, or panoramic encompassing a broad field of view, such as ocean/coastal views, distant mountain range, or hilltop ridgelines.

# b) Scenic Resources

Scenic resources refer to natural or manmade features of high aesthetic quality. Such features can include landscaping, heritage trees, or natural trees and landforms, as well as historic buildings and other structures with aesthetic value. Pursuant to CEQA Guidelines Appendix G, this area of consideration includes specific mention of such natural or manmade features when they are located within the viewshed of a State scenic highway.

# c) Scenic Quality

Scenic quality refers to the visual appeal of an area and is informed by features that contribute to overall aesthetic character. Aesthetic features may include unique or prominent natural or man-made attributes or several small features that, when viewed together, create a whole that is visually interesting or appealing. The City has plans, policies and regulations that are relevant to the assessment of scenic quality, such as requirements for street trees, building setbacks, building heights, exterior lighting and signage.

# d) Light and Glare

Sources of artificial light that operate during evening and nighttime hours may include streetlights, illuminated signage, vehicle headlights, and other point sources. Uses, such as residences and hotels, are considered light-sensitive since they are typically occupied by persons who have an expectation of darkness and privacy during evening hours and who can be disturbed by bright light sources.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. Activities, such as driving, and land uses, such as parks and residences, are considered glare sensitive as the presence of glare could interfere with vision and/or result in an irritant to these activities/uses.

The Initial Study prepared for the Project, included in Appendix A of this Draft EIR, determined that impacts related to scenic vistas, scenic resources, and consistency with applicable scenic quality regulations would be less than significant. As discussed in the Initial Study, the Project would not block any scenic vistas across the Project Site from public streets, parks, or scenic overlooks. Field lights would be broadly set back from each other and, due to their narrow character, would not substantially block views of scenic resources across the Project Site. The Project would not encroach into the public right-of-way and would not block views of the Hollywood Hills through south-facing street corridors. The Initial Study, thus, concluded that impacts related to views and scenic resources would be less than significant. The Initial Study also concluded that, because the Project would be consistent with existing zoning (or in the case of taller light poles and fencing would seek approval for structural heights per the provisions of the LAMC), it would not conflict with regulations that govern scenic quality. Therefore, no further analysis of these issues is provided in this Draft EIR, and consistent with the Initial Study determination that impacts related to light and glare are potentially significant, this section of the Draft EIR is focused on evaluation of light and glare effects, including consistency with applicable light and glare regulations.

The analysis of Project impacts related to light and glare is based on the Lighting Technical Report (Lighting Report) prepared by StudioK1, October 2021.<sup>1</sup> The Lighting Report is provided as Appendix B of this Draft EIR.

The analysis of lighting impacts focuses on the potential for the Project to increase ambient nighttime light levels in the Project vicinity and result in light spillover onto neighboring light sensitive land uses. An urban environment such as the Project setting typically has relatively high, or highly variable, ambient nighttime light levels. Project light sources that could increase light levels include field sports lighting, illuminated

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StudioK1, Harvard-Westlake River Park Project, Studio City, CA Lighting Technical Report, October 2021.

scoreboards and signs, outdoor security lighting, building lighting, and other point or mobile sources of lighting that can cause light spillover onto off-site land uses. The analysis of glare impacts examines whether the Project would result in annoying, disabling, or potentially hazardous glare.

# 2. Environmental Setting

# a) Regulatory Framework

There are several laws, regulations, as well as local land use plans that include policies, requirements, and guidelines that relate to Aesthetics at the state, local levels. As described below, these laws, regulations and plans are the following:

- California Code of Regulations, Title 24 (California Building Standards Code)
- Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan
- Los Angeles Municipal Code
- Citywide Design Guidelines

#### (1) State

(a) California Code of Regulations, Title 24 (California Building Standards Code)

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The California Building Code was updated in 2019, with changes effective in January 2020. The following components of Title 24 include standards related to lighting:

(i) California Building Code (Title 24, Part 1) and California Electrical Code (Title 24, Part 3)

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3)<sup>2</sup> stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress.

(ii) Building Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6)

The California 2019 Building Efficiency Standards (Energy Standards) for Residential and Nonresidential Buildings continues the State's long-standing practice of maintaining the energy standards with technical rigor and challenging, but achievable, design and construction practices. The Energy Standards is considered by the State a major step towards meeting the Zero Net Energy (ZNE) goal by the year 2020 and is the last of three updates to move California toward achieving that goal. The Energy Standards define

<sup>&</sup>lt;sup>2</sup> State of California Code of Regulations, Title 24, 2019.

allowances for lighting power and establishes control requirements for different lighting systems, with the goal of increasing efficiency and reducing energy consumption equipment.<sup>3</sup> Title 24, Part 6 incorporates a range of requirements and standards that apply to outdoor lighting and equipment, including standards for luminaire cutoff (a luminaire is the entire structure around the light source), controls for outdoor lighting, illuminated signage, general hardscape lighting allowances, and standards for total outdoor lighting wattage. Subsection 5.106.8 of Title 6 sets forth minimum standards in the design and installation of outdoor lighting systems to achieve light pollution reduction. Title 24, Part 6 further requires that local ordinances regarding luminance levels and design of fixtures, if more stringent than Title 24, must be enforced.

(iii) California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code is commonly referred to as the CALGreen Code. The CALGreen Code stipulates maximum allowable light levels, efficiency requirements for lighting, miscellaneous control requirements, and light trespass requirements for electric lighting and daylighting. Paragraph 5.1106.8 Light Pollution Reduction, specifies that all non-residential outdoor lighting must comply with the following:

- The minimum requirements for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and
- BUG ratings as defined in the IES TM-15-07; and
- Allowable BUG ratings not exceeding those shown in Table 5A.106.8 in Section 5.106.8 of the CALGreen Code; or
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.
  - (2) Local
    - (a) Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan

The 35 Community Plans established throughout the City collectively comprise the Land Use Element of the City's General Plan. Community plans are intended to implement the policies of the Framework Element. Community plans include, among other provisions, guidelines regarding the appearance of development and the arrangement of land uses.

The Project Site is located within the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan (Community Plan) area. The Community Plan specifically identifies issues related to the Studio City Golf Course (currently the Weddington Golf & Tennis facility). The only issue relative to light and glare, which should be considered for any future use of the site is that "Possible future alternative development of the site compatible with the surrounding area," as well as environmental concerns related to non-residential

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<sup>3</sup> State of California 2019 Building Efficiency Standards, https://up.codes/codes/california.

uses. The Community Plan also includes design policies for individual development projects. The following (commercial) design policies related to light and glare that would apply to the Project are as follows:

#### Light and Glare:

- 1. Installing on-site lighting along all pedestrian walkways and vehicular access ways.
- 2. Shielding and directing of on-site lighting onto driveways and walkways, directed away from adjacent residential uses.

#### (b) Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) regulates all aspects of building development in the City, including aesthetic aspects, such as lighting and signage. The code sections applicable to aesthetic concerns include the following:

#### (i) Lighting Regulations

Lighting is regulated by various chapters within the LAMC. The code sections applicable to the Project include the following:

- Chapter 1, Article 2, Section 12.21 A 5(k). All lights used to illuminate a parking area shall be designed, located and arranged so as to reflect the light away from any streets and adjacent premises.
- Chapter I, Article 4.4, Section 14.4.4 E. No sign shall be arranged and illuminated in a manner that will produce a light intensity of greater than three-foot candles above ambient lighting, as measured at the property line of the nearest residentially zoned property.
- Chapter I, Article 7, Section 17.08 C. Plans for street lighting shall be submitted to and approved by the Bureau of Street Lighting for subdivision maps.
- Chapter IX, Article 3, Division 1, Section 93.0117(b). No person shall construct, establish, create, or maintain any stationary exterior light source that may cause the following locations to be either illuminated by more than two-foot candles (21.5 lx) of lighting intensity or receive direct glare from the light source. Direct glare, as used in this subsection is a glare resulting from high luminances or insufficiently shielded light sources that are in the field of view.
  - 1. Any exterior glazed window or sliding glass door on any other property containing a residential unit or units.
  - 2. Any elevated habitable porch, deck or balcony on any other property containing a residential unit or units.

- 3. Any ground surface intended for use but not limited to recreation, barbecue, or lawn areas on any other property containing a residential unit or units.<sup>4</sup>
- Chapter I, Article 3, Section 13.17, F, Division 3 (Specific to River Improvement Overlay/Zev Greenway): The RIO is a special use district established in 2014 by Ordinance Nos. 183144 and 183145 to support implementation of the Los Angeles River Revitalization Plan, a long-term blueprint for a variety of comprehensive improvements intended to make the Los Angeles River a landmark and a catalyst for sustainability. LAMC regulations set forth in the RIO relative to exterior site lighting are as follows: (a) all site and building mounted lighting shall be designed such that it produces a maximum initial luminance value no greater than 0.20 horizontal and vertical foot candles at the site boundary, and no greater than 0.01 horizontal foot candles 15 feet beyond the site. No more than 5.0 percent of the total initial designed lumens shall be emitted at an angle of 90 degrees or higher from nadir (straight down); (b) all low pressure sodium, high pressure sodium, metal halide, fluorescent, quartz, incandescent greater than 60 watts, mercury vapor, and halogen fixtures shall be fully shielded in such a manner as to not exceed the limitation specified in LAMC Section 13.17.

#### (c) Citywide Design Guidelines

Adopted in 2019, the Citywide Design Guidelines (Guidelines) establishes ten guidelines and various best practices to carry out the common design objectives that maintain neighborhood form and character while promoting quality design and creative infill development solutions. The Guidelines are organized around one of three design approaches and consist of the following general design direction:

- Pedestrian-First Design
  - Guideline 1: Promote a safe, comfortable and accessible pedestrian experience for all.
  - Guideline 2: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.
  - Guideline 3: Design projects to actively engage with streets and public space and maintain human scale.
- 360 Degree Design
  - Guideline 4: Organize and shape projects to recognize and respect surrounding context.
  - Guideline 5: Express a clear and coherent architectural idea.
  - Guideline 6: Provide amenities that support community building and provide an inviting, comfortable user experience.

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Certain exceptions apply related to frosted light sources emitting 800 lumens or less, other sources emitting 800 lumens or more not visible to persons on other residential properties, tennis or paddle tennis courts conforming to certain standards, certain temporary decorative lights, emergency lights, agency controlled light sources, and light sources a minimum distance of 2.000 feet from residential uses.

- Guideline 7: Carefully arrange design elements and uses to protect site users.
- Climate-Adapted Design
  - Guideline 8: Protect the site's natural resources and features.
  - Guideline 9: Configure the site layout, building massing and orientation to lower energy demand and increase the comfort and well-being of users.
  - Guideline 10: Enhance green features to increase opportunities to capture stormwater and promote habitat.

The Guidelines apply to all new development and substantial building alterations that seek a discretionary action for which the Department of City Planning has design authority. Projects that are subject to the Guidelines will need to include as part of their application a written statement that describes how their project complies with each of the ten guidelines. Compared to the Zoning Code and other regulations governing the development of a particular property, the Guidelines are intended as a more flexible, less prescriptive means of shaping proposed projects and conveying general design expectations.

Policies related to lighting in are provided in Guideline 1, Guideline 5, Guideline 6, and Guideline 9. Lighting policies under Guideline 1 are to (1) use ornamental low-level lighting to highlight and provide security for pedestrian paths and entrances and ensure that all parking areas and pedestrian walkways are illuminated, and (2) introduce pedestrian lighting in addition to the roadbed lighting to the satisfaction of the Bureau of Street Lighting.

Lighting policies under Guideline 5 are to design lighting to enhance the ground floor environment or to emphasize key architectural features without projecting light into the night sky; to utilize adequate, uniform, and glare-free lighting, such as dark-sky compliant fixtures; and to avoid uneven light distribution, harsh shadows, and light spillage.

Light-related policies under Guideline 6, which is to provide amenities that support community building and provide an inviting, comfortable user experience, are to activate spaces by using benches, lighting, shade structures, trees, lockers and other supportive amenities.

The lighting policy set forth under Guideline 9, which is to configure the site layout, building, massing, and orientation to lower energy demand and increase the comfort and well-being of users, is to integrate solar powered lighting to increase energy efficiency.

# b) Existing Conditions

# (1) Project Site Light and Glare

The Project Site is currently occupied by the Weddington Golf & Tennis facility, which comprises tennis courts with a tennis shack, 27-par golf course, clubhouse, driving range,

putting green, and surface parking lot. The Weddington Golf & Tennis facility operates as a private recreational facility and golf course that are open to the public during the daytime and evening hours. The Project Site is surrounded on three sides by residential neighborhoods, which are considered sensitive to light and glare impacts, and by the Zev Greenway, a segment of the 51-mile Los Angeles River Greenway.

An investigation of existing evening light conditions was conducted at 7:40 p.m. on October 1, 2020, approximately one hour after sunset. The detailed results of this investigation are provided in the Lighting Report in Appendix B of this Draft EIR.<sup>5</sup> As summarized therein, the existing tennis court lighting is provided by eight 500-watt induction floodlights per court for a total of 128 fixtures. The existing 16 tennis courts are currently the brightest sources of light within the Project Site. The Neptune Light floodlights at the tennis court are tiltable and cast lighting across the court instead of only directly below the fixture. These existing fixtures were tilted up from an estimated 30-degree angle to illuminate the courts more evenly. This upward tilt, however, makes the light source more visible from surrounding viewpoints and creates measurable glare.

The driving range at the Weddington Golf & Tennis facility is currently illuminated with six golf ball-shaped light standards that have five 1000-watt floodlights each integrated into the golf ball-like head. There are four additional floodlights mounted to the north end of the driving range canopy bringing the total number of floodlights to 34. These floodlights are all aimed at 90-degrees from the ground so that the lighting is cast horizontally down the range at night toward the west and Bellaire Avenue. The floodlights feature a conical reflector to direct the light from each lamp onto the range, but no additional control features are used to reduce the glare or uplight. The underside of the driving range canopy has fluorescent striplights to provide illumination for golfers at the driving range stalls.

The lighting at the existing parking lot has been upgraded from 400-watt metal halide fixtures to a pair of low wattage LED fixtures at each of the five locations along Whitsett Avenue. The LED fixtures have some optical control to provide illumination for the parking lot with minimal spill, and the fixtures are parallel to the ground, so any off-site glare is nearly nonexistent.

At the clubhouse, there are four wall sconces at the building entries, as well as eight aimable floodlights that are used to illuminate walks or service entries. The putting green adjacent to the clubhouse also has two low level aimable floodlights to illuminate the turf. These fixtures generally use incandescent sockets and traditional light sources, though some may have been upgraded to LED. Most of the aimable fixtures were aimed near 90-degree from straight down (i.e., horizontally) to cast light further out, which results in noticeable glare both on- and off-site. The Lighting Report provides a summary of the affected locations, including proximity to existing light sources within the Project Site and existing light luminance in candelas per square meter (cd/m²). As shown therein, because

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StudioK1, Harvard-Westlake River Park Project, Studio City, CA, Lighting Technical Report, October 2021, pages 9 through 15.

of existing angled flood lights within the Project Site, existing off-site luminance levels are relatively high.

#### (2) Surrounding Area Light and Glare

The Zev Greenway, adjacent to the Project Site, does not have dedicated lighting for nighttime use and is gated for closure after dusk. The Zev Greenway does have views to lighting on the Project Site and receives filtered light through the trees between the Zev Greenway and the existing golf and tennis facilities.

Existing light levels surveyed at off-site locations are illustrated in Table 1, *Measured Existing Luminance*, in the Lighting Report, Appendix B of this Draft EIR. As shown in Table 1, the existing luminance (brightness or glare) generated by the Project Site along Whitsett Avenue, between 4068 and 4122 Whitsett Avenue, ranges from 950 cd/m² to 3,800 cd/m²; luminance along Valley Spring Lane at Whitsett Avenue averages 720 cd/m²; luminance along Babcock Avenue ranges from 900 cd/m² to 3,200 cd/m²; luminance along Beeman Avenue ranges from 30 cd/m² to 230 cd/m²; luminance along Bellaire Avenue averages 550 cd/m²; and luminance along the Zev Greenway is as high as 4,375 cd/m².

# 3. Project Impacts

# a) Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a project would have a significant impact related to aesthetics if it would:

- Threshold (a): Have a substantial adverse effect on a scenic vista;
- Threshold (b): Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- Threshold (c): In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
- Threshold (d): Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

For this analysis, the Appendix G CEQA Guidelines thresholds are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold Questions. The detailed analysis in this section is limited to impacts under Threshold (d). As discussed below, the Project's Initial Study included in Appendix A of this Draft EIR

concluded that impacts under Thresholds (a), (b), and (c) would be less than significant and did not warrant further evaluation in this Draft EIR.

The factors to evaluate lighting impacts are listed below.

- The change in ambient illumination levels as a result of project sources; and
- The extent to which project lighting would spill off the project site and affect adjacent light-sensitive areas.

# b) Methodology

As stated above, the analysis in this section is limited to impacts under Threshold (d) pertaining to light and glare. The analysis of light and glare describes the existing light and glare environments in the Project area, identifies the light- and glare-sensitive land uses in the area, describes the light and glare sources under the Project, and evaluates whether the Project would result in a substantial increase in nighttime lighting and glare, as well as daytime glare, as seen from the area's sensitive uses. A quantitative analysis of luminance, or glare (expressed in cd/m²), is also provided below, as well as a quantitative discussion of illuminance (light levels seen on an object or sidewalk expressed in foot candles) compared to the limitation on foot candle levels set forth in the RIO District Ordinance and LAMC. The analysis of lighting impacts focuses on whether the Project would cause or substantially increase adverse nighttime lighting effects on light sensitive uses. Included in this analysis is consideration of the affected receptor sites (residential properties and the Zev Greenway).

The existing conditions were surveyed from several locations surrounding the Project Site to gather a baseline and document any off-site areas currently affected by light or glare from the existing Project Site. The study locations include 12 residential points along Whitsett Avenue, Valley Spring Lane, and Bellaire Avenue, as well as a 13th location on the Zev Greenway, which is the nearest point on the Greenway to the Project Site and light source. The location on the Zev Greenway was selected because it is subject to the highest levels of light and glare under existing conditions, given its proximity to the existing tennis courts and associated lighting. Additional measurements were not taken along the Zev Greenway because under existing conditions as well as future conditions under the Project, light spillover and glare along the Zev Greenway would be minimal given light locations, changes in elevation, intervening landscaping, and the required lighting limits under the RIO District Ordinance. All measurements were taken after dusk in conformity with standard practice and regulations, and the twilight period had ended, eliminating the chance of additional sky glow affecting the measurements. The increases in illumination levels are not based on incremental changes to existing conditions but on modeled calculations of illuminance levels from Project lighting (expressed in foot candles unit of measurement) at the sensitive receptor locations compared to regulatory standards. All measurements were taken using a Minolta luminance meter, which measures candelas/square meter (cd/m<sup>2</sup>), and from the viewpoint of a pedestrian at ground level to the nearest light fixture on the Project Site.

Using the photometry data, a computer calculation model was created to evaluate each of the athletic facilities proposed for the Project. The model and calculations were created by Musco Lighting, the manufacturer and installer of the sports lighting systems proposed for the Project Site. The sports lighting analyses did not take into consideration low level lighting for pedestrian pathways, sconces or architectural lighting on the gymnasium buildings, or other security lighting. Musco utilized advanced photometric software to design the lighting system to meet the recommendations for athletic field/court/pool illumination. The software uses a laboratory generated lighting fixture data file to simulate each fixture which are placed and aimed in the model as they would be installed on the Project Site. The software then calculates the illumination created by the array of lighting fixtures designed into the model.

Three analyses were prepared for the Project's lighting evaluation, the first two of which are based on the computer calculations that were generated by Musco Lighting of the proposed sports lighting equipment. The third analysis examined compliance of other light sources, such as for general hardscaping and signage, with the California Energy Code (Energy Code) and RIO District Ordinance. Musco Lighting uses a proprietary calculation engine that calculates luminance and/or illuminance at a specified task surface. The engine utilizes photometry files, which define the amount of candela (light) emitted at any angle in a sphere around the fixture.

First, the proposed sports field lighting fixtures were evaluated for off-site spill lighting illuminance at all surrounding properties to determine if the Project would produce two or more foot candles of light at any sensitive receptor, as per LAMC Section 93.0117(b). As per LAMC Section 13.17 F, compliance with the RIO District Ordinance was also evaluated against thresholds of 0.20 horizontal and vertical foot candle at the Project Site boundary and no greater than 0.01 horizontal foot candle 15 feet beyond the Project Site boundary.

Second, the proposed sports field lighting fixtures were evaluated for glare impacts from the nearest, most impactful light fixture at all surrounding sensitive receptors outside the property line of the Project Site per the requirements set forth in LAMC Section 13.17 F.

Finally, general hardscape lighting, building lighting, and sign lighting were evaluated using the Energy Code and the RIO District Ordinance. The RIO District Ordinance determines the type of lighting, the intensity, and the size that may be used on the Project Site between the athletic facilities, as well as surface parking in order to avoid impacting neighboring properties and the Zev Greenway. Compliance with the Energy Code would limit the wattage, the spill lighting, and the operation of the lighting fixtures for pedestrian and vehicular circulation at the Project Site. These factors are all designed to provide neighbor-friendly lighting environments, as well as reduce unnecessary energy use when sites are unoccupied or nonoperational. By also following the requirements of the RIO District Ordinance, the Project's sports lighting designs would essentially eliminate the spill lighting that currently crosses the Project's property line into the Zev Greenway and Los Angeles River areas.

The Project's modeled sports lighting levels included in the Lighting Report did not account for the landscape conditions occurring between the Project Site and the Zev Greenway changes in elevation, the preservation of most of the existing trees along the Project Site's property lines, or the addition of significant new landscaping to be undertaken as part of the Project. The numerous trees and dense landscaping along the property line in proximity to the Zev Greenway would likely block the line-of-sight between the light source and the Zev Greenway trail, with a similar effect at the residential neighborhoods immediately to the west, north, and east of the Project Site. As such, these conditions would work to shield the Project lighting and lower the foot candle levels at the property line beyond those included in the Lighting Report. As such, the Lighting Report represents a conservative analysis of Project impacts.

# c) Project Design Features

There are no Project Design Features that relate to light and glare.

# d) Analysis of Project Impacts

# Threshold (a): Would the Project have a substantial adverse effect on a scenic vista?

As discussed in the Initial Study (Appendix A of this Draft EIR), the Project would not have a substantial adverse effect on a scenic vista, and, therefore, a less-than-significant impact would occur with respect to Threshold (a). No further analysis is required.

# Threshold (b): Would the Project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed in the Initial Study (Appendix A of this Draft EIR), the Project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway, and, therefore, no impact would occur with respect to Threshold (b). No further analysis is required.

Threshold (c): In nonurbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

As discussed in the Initial Study (Appendix A of this Draft EIR), the Project Site is located in an urbanized are and as applicable to Threshold (c), the Project would not conflict with applicable zoning and other regulations governing scenic quality. As such a less-than-significant impact would occur with respect to Threshold (c). No further analysis is required.

# Threshold (d): Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

- (1) Impact Analysis
  - (a) Light Impacts
    - (i) Construction

Construction activities are anticipated to take place during daylight hours, and construction-related nighttime lighting would be used at the construction site only for safety and security purposes. Construction security lighting would be shielded and directed downward and, as required by LAMC regulations, placed in such a manner as to avoid undue light trespass onto adjacent uses. No new light sources would be implemented during daytime hours. In addition, existing tennis court and other building lighting would be removed during construction, so that the overall Project Site would be darker during the evening hours than under existing conditions. Although not anticipated, if Project construction lighting were required, it would be infrequent and occur at grade level. Because of dense landscaping along the periphery of the Project Site, such lighting would be shielded by intervening vegetation and would not adversely affect off-site uses or roadways. Therefore, the Project's construction activities would not create a new source of substantial light that would adversely affect daytime or nighttime views in the area. As such, Project impacts related to construction lighting would be less than significant.

#### (ii) Operation

Operation of the Project would require the development of a lighting program that would increase nighttime lighting over existing conditions for the specific areas in which athletics activities would take place, such as the athletic fields, pool, and tennis courts. However, through the use of precise LED optics and light shields, off-site light spill would generally be reduced as compared to existing uses, as described below. Daytime lighting would not substantially differ from existing conditions.

#### (a) Proposed Lighting Program

The Project would include a multi-purpose gymnasium, located in the southern portion of the Project Site; a swimming pool with locker, meeting room space, and bleachers in the north-central portion of the Project Site; and eight tennis courts with seating located to the east of the pool area. Other new development would include two multi-purpose athletic fields with bleachers, a security kiosk to the south of the tennis courts, and a below-grade parking structure (with internal security kiosk) in the eastern portion of the Project Site. Access to the parking structure would be via a two-way driveway on Whitsett Avenue. A second driveway to access the parking structure would be via a drop-off and roundabout from Valleyheart Drive at the southeastern corner of the Project Site, where a third security kiosk would also be located at grade. This vehicle entrance area would also accommodate 29 surface parking spaces. Bicycle parking, for a total of 100 spaces,

would be provided at various locations within the Project Site, with 72 spaces at grade and 28 spaces below grade within the underground parking structure.

The original, on-site Weddington Golf & Tennis clubhouse, including its café, which is located on the northeastern portion of the Project Site, would remain as part of the Project. An existing putting green to the northeast of the clubhouse, six existing golf ball-shaped light standards and poles, and the low brick retaining wall along the northeastern edge of the property would also remain.

The Project would provide lighting for outdoor athletic events and activities during the evening hours and low-level security lighting along pathways. In addition, sconces and architectural lighting would be provided on the gymnasium building, which would emit low levels of light spillage from interior activities during evening use. Other lighting would include light fixtures in the surface parking area and in entrance areas for security and wayfinding purposes. In addition, lighting to accent signage and landscaping elements would be installed throughout the Project Site. Locations of field lights for athletic activities and signs are illustrated in Figure II-27, Light and Signage Plan for the Project, in Chapter II. Project Description, of this Draft EIR. Field lights shown in Figure II-27 would utilize LED technology, timer controls, and shields directed only to the use intended to be illuminated to prevent spillover and glare and, as with all other exterior lighting, would be designed to comply with LAMC and RIO District requirements, which would meet California Building Code requirements. As required by LAMC Section 93.0117(b), exterior light sources and building materials would be designed such that they would not cause more than two foot candles of lighting intensity or generate direct glare onto nearby sensitive uses (i.e., residential and Zev Greenway uses). The RIO District Ordinance, set forth under LAMC Section 13.17 F.3(a), requires that all exterior lights be designed to not exceed a maximum initial illuminance value of 0.20 horizontal and vertical foot candles at the site boundary and not exceed 0.01 horizontal foot candles 15 feet beyond the Project boundary.

As shown in Figure II-27, Field A would utilize six 70-foot-tall field light poles, three along the east sideline and three along the west sideline. A 25' x 8' LED scoreboard (that would not include a display video), reaching a maximum height of 21 feet when combined with approximately 10-foot support poles and 3-foot lettering and donor signage on top of the scoreboard, would be installed along the southern edge of the field.

Field B would utilize three, 60- to 70-foot-tall field light poles along the south sideline (from east to west, 60', 70' and 60'); three, 80-foot-tall field light poles along the north sideline; and a single 60-foot-tall field light pole along the eastern edge of the field. The same LED scoreboard as included for Field A would be installed along the western edge of Field B (this scoreboard would also not include a display video). The LED signs would comply with LAMC Section 14.4.4 requirements, which limit light intensity from signage to no more than 3 foot candles above ambient lighting at residential property boundaries.

Lighting in the pool area would include two, 60-foot-tall sports light fixtures, one each along the southeastern and southwestern sidelines, and 12 lights mounted within the 30-

foot-tall canopy, under the northeast and northwest sides of the canopy and ranging in height between 21 feet and 28 feet. In addition, an 18' x 10' scoreboard at 12 feet above grade would be mounted underneath and shielded by the canopy in the pool area.

Lighting for the tennis courts would include three, new 40-foot-tall court lights along each of the four edges of the courts, for a total of 12 light poles. Note that under the Project, the number of tennis courts would be reduced from sixteen to eight and relocated farther from the Zev Greenway and Los Angeles River. The six existing golf ball-shaped light standards between the existing Weddington Golf & Tennis parking lot and the driving range would be relocated to the west and southwest sides of the clubhouse. The golf ball-shaped light standards would be retrofitted from driving range floodlights into pedestrian area lights using new LED sources with glare control (redirection) and reduction from 1,000 watts per fixture to a maximum of 50 watts per fixture. The Project Site would include a total of 45 light poles, including the six relocated golf ball-shaped light standards. Of the 45 light poles, 33 would exceed the 30-foot maximum height limit established by the Property's zoning requirements.

The Musco Lighting fixtures for the Project are specifically designed with precise optics and integral shields to aid in controlling the light and preventing unwanted spill light, uplight, or glare. The Light Control Visor is specifically engineered such that the light from the fixture can reach the destination surface, in this case athletic fields, a pool, or tennis courts, while the edges of the visor block any high angles, which would otherwise impact neighboring sites. Additionally, the Musco lighting fixtures are designed to be tilted downward toward the target which further enhances effectiveness of the Light Control Visor. By contrast, the existing fixtures on the Project Site have no integral shielding and a more generic optical pattern common to floodlighting. Many of the existing fixtures use legacy lamp sources, induction and metal halide, with internal fixture optics around the lamp to control the beam pattern. Due to the size of the lamps in the fixtures, controlling the light is less precise than when a small point source, such as LED, is used. Additionally, the lamp itself is directly visible with no optical control, which contributes to the perceived glare. Finally, these fixtures are tilted upward to cast the lighting across the intended area to maximize their effectiveness, but this further exposes the lights to the surrounding receptors and is the primary source of glare found during the survey.

With the exception of the proposed welcome sign at the vehicle entrance on Whitsett Avenue, other entrance and identification signs for the Project would not be illuminated. All proposed signage would be designed in conformance with applicable LAMC requirements.

During periods in which the Project's field lights are being used, the Project would contribute to the region's sky glow or ambient light levels, such as is already produced by existing Project Site lighting. However, sky glow is prevalent in urban areas near active boulevards, such as Ventura Boulevard and other commercial districts. The Project's field lights would be directed to the ground and, although the lighting would contribute to an increase in ambient light, these light sources would not be directed skyward. Light increases from the Project would not result in a substantial change in the character of the

ambient light or sky glow in the existing developed region and would produce a glow over a smaller area as compared to existing conditions (as can be seen by the extent of the contour lines in Figure 5, Existing Off-Site Illuminance, and Figure 8, Off-Site Illuminance, of the Lighting Report). As shown in Figure 5, the existing Weddington Golf & Tennis facility produces measurable lighting within the surrounding area between 0 and 1 footcandles. The blue isoline in Figure 5 represents the extent of measurable lighting that is produced by lighting sources on the existing Project Site. As demonstrated therein, the existing illuminance extends beyond the Project Site boundary and to several lots deep within various areas of the adjacent residential uses. Figure 8 demonstrates illuminance with the development of the Project. When comparing Figure 8 to Figure 5, there is a discernible decrease in the radius and intensity of illuminance from the Project Site. The Project lighting shows far more control with only minimal spill beyond the Project Site boundary in a few areas. This comparison demonstrates the new lighting system would provide less intrusion into neighboring sites than the existing Project Site lighting. Further, the Project's outdoor lighting would be turned off no later than 8:00 p.m. daily (9:00 p.m. for the tennis courts) as compared to existing uses that extend to 10:00 p.m. and 11:00 p.m. for tennis and golf activities, respectively. CEQA Guidelines Appendix G do not provide a question or standard threshold for sky glow, and sky glow within an existing, active urban area (an area not characterized by dark skies) is not a significant light and glare impact.

The Project Site adjoins residential neighborhoods along Whitsett Avenue, Valley Spring Lane, and Bellaire Avenue to the east, north, and west, respectively, and the Zev Greenway to the south. All of these uses are considered sensitive receptor sites relative to light and glare.

#### (b) Evaluation of Off-Site Illuminance

The analysis provided in Table 2 (Summary of Calculated Off-Site Illuminance) of the Lighting Report (see Appendix B of this Draft EIR) indicated that light spill at the property line of all the residential properties surrounding the Project Site would be well within the LAMC maximum of 2.0 foot candles of light, with a range of 0.00 to 0.06 horizontal foot candles and 0.00 to 0.09 vertical foot candles. Figure 8 (Off-Site Illuminance) in the Lighting Report also illustrates these results. The spill lighting from existing fixtures is illustrated in Figure 5 (Existing Off-Site Illuminance) of the Lighting Report. As shown therein, spill lighting from existing lighting conditions extends further into the surrounding areas when compared to the Project's lighting conditions.

As indicated above, per LAMC Section 13.17 F, the RIO District Ordinance requires all site and building mounted lighting to be designed such that it produces a maximum initial luminance value no greater than 0.20 horizontal and vertical foot candle at the site boundary, and no greater than 0.01 horizontal foot candle 15 feet beyond the site. As analyzed in the Lighting Report, lighting generated by the Project would be a maximum of 0.06 horizontal and 0.07 vertical foot candles along the Project Site boundary within the RIO District, and 0.01 horizontal foot candle 15 feet beyond the Project Site in the RIO District. The location on the Zev Greenway/Project Site boundary was selected for

the analysis because it is the point that is closest to a Project sports lighting pole location and, therefore, the most likely to be impacted. In this case, the location is proximate to the southwest pole for Field B. Lighting impacts in all other areas along the Zev Greenway would be less affected and, as such, the evaluated location represents the "worst case scenario." Thus, the Project would comply with the lighting requirements of the RIO District Ordinance. The modeled lighting levels included in the Lighting Report did not account for the numerous trees and dense landscaping along the property line in proximity to the Zev Greenway or berms for landscape massing. As such, these conditions would work to shield the lighting and lower the foot candle levels at the property line beyond those included in the Lighting Report. The effects of the Project on off-site illuminance are summarized in **Table IV.A-1**, Summary of Calculated Off-Site Illuminance, below.

Table IV.A-1
Summary of Calculated Off-Site Illuminance<sup>a</sup>

•		Project Illu (foot car		LAMC/RIO T		
Sensitive Receptor	Location	Horizontal	Vertical	Horizontal	Vertical	LAMC- Compliant
1	4155 Bellaire Avenue	0.00	0.02	2.00	2.00	YES
2	4202 Bellaire Avenue.	0.04	0.09	2.00	2.00	YES
3	4202 Beeman Avenue	0.03	0.07	2.00	2.00	YES
4	12501-12509 Valley Spring Lane	0.00	0.00	2.00	2.00	YES
5	4122 Whitsett Avenue	0.05	0.09	2.00	2.00	YES
6	4068 Whitsett Avenue	0.02	0.06	2.00	2.00	YES
RIO	RIO District at property line	0.06	0.07	0.20	0.20	YES
District	RIO District at 15 feet beyond property	0.01	0.02	0.01	n/a	YES

#### NOTE:

SOURCE: StudioK1, Lighting Technical Report, Table 2, October 2021.

The Project Site and building mounted lighting used for circulation and security lighting around the facilities, as well as architectural accent lighting, would be subject to compliance with Title 24, Part 6 - Energy Code, Outdoor Lighting Controls and Equipment. Energy Code Section 130.2 provides restrictions on all outdoor lighting equipment over 6,200 lumens, requiring that fixtures comply with IES TM-15-11 for lighting pollution reduction. Requirements related to backlight, uplight, and glare, (which is further discussed below), are designed to prevent lighting fixtures from producing any unwanted skyglow,

<sup>&</sup>lt;sup>a</sup> Illuminance refers to the amount of light falling onto a given surface area. It is measured in foot candles (e.g., the amount of light that hits the street below a street light or other light source).

lighting trespass, or glare beyond the property line, effectively reducing the impact on neighboring sites. The Energy Code also provides controls requirements in Section 130.3 for outdoor lighting which requires daily scheduling, dimming capabilities, and motion sensing to reduce lighting when a space is unoccupied, not scheduled for use, or outside of operating hours. Finally, in Energy Code Section 140.7, all outdoor lighting is subject to a maximum allowable wattage by area and use. By limiting the maximum watts per square foot, a lighting design cannot be permitted with excessive use of power or fixture quantity, creating another limiting factor on the total amount of light allowable on the Project Site. The combination of lighting pollution reduction, lighting controls, and power density allowances provide a prescriptive path to compliance which would prevent new on-site lighting from affecting neighboring properties with excessive light.

The golf ball-shaped light standards currently used to illuminate the driving range would be repurposed as area lighting for the courtyard adjacent to the clubhouse and tennis courts. The retrofitted design of these golf ball-shaped light standards would be required to take the same prescriptive path as all other outdoor lighting referenced above. The new design for these fixtures would utilize luminaires that can be accommodated within the existing shell of the golf ball but offer optic control, glare shielding, and power consumption that are consistent with Title 24 requirements. By carefully selecting the retrofit lighting solutions for these existing poles, the Project would be able to utilize the iconic lights for modern area lighting on the Project Site without affecting off-site receptor locations.

Signs and sign lighting would be restricted by the Energy Code limiting the allowable wattage for internally and externally illuminated signs. This applies to directional signs, message boards, as well as scoreboards, on the Project Site. Per Energy Code Section 140.8, internally illuminated signs are allowed up to 12 watts per square foot while externally illuminated signs can use 2.3 watts per square foot of illuminated sign area. Signs must also comply with Energy Code Section 130.3, which requires photosensor control to switch off signs during daylight conditions or at least 65 percent dimming capabilities for signs illuminated both at night and day, and any Electronic Message Center greater than 15kW would be required to reduce power by 30 percent in an energy event. These maximum allowable power restrictions for signs would keep the illumination to a minimum while maintaining functional viewing. The layout of the scoreboards for the Project is strategic so that no scoreboard directly faces an adjacent sensitive receptor. This layout of the scoreboards creates very long distances to any directly facing receptor and steep oblique viewing angles to closer receptors adjacent to the fields. Due to either the long distance or steep viewing angle, the illumination effects of these signs would be nearly nonexistent at the sensitive receptors resulting in no exceedance of LAMC Section 91.6205 M requirement, which limits light intensity from signage to no more than 3 foot candles above ambient lighting at residential property boundaries.

The Project would comply with all applicable lighting regulations and guidelines. The Project would create a fraction of a foot candle of illumination at any adjacent residential property and would not exceed RIO District Ordinance standards applicable to the Zev Greenway and Los Angeles River areas. **Therefore, with adherence to Title 24** 

standards and LAMC regulations, Project operation would not create a new source of substantial light that would adversely affect daytime or nighttime views in the area. Impacts related to operational lighting would be less than significant.

#### (b) Glare Impacts

#### (i) Construction

Construction activities are anticipated to take place during daylight hours, and construction-related nighttime lighting would be used at the construction site only for safety and security purposes. Reflected sunlight from construction equipment or vehicles could also be a source of daytime glare. Because of the dense landscaping along the edge of the Project Site, any security lighting or reflected sunlight would be shielded by intervening vegetation and would not cause significant glare effects that would affect daytime views in the area. Construction security lighting would be shielded, directed downward, and as required by City regulations, placed in such a manner so as to avoid undue glare trespass onto adjacent uses. During construction, existing tennis court and other building lighting would be removed, so that any existing glare from tennis court lights, flood lights, parking lot lights, and other existing sources would not occur. As such, construction activities would not create a new source of substantial glare that would adversely affect daytime or nighttime views in the area. Therefore, Project impacts related to construction glare would be less than significant.

#### (ii) Operation

Daytime glare would not substantially increase from existing conditions. The Project does not feature tall reflective buildings, open parking lots, or other reflective features that would result in off-site glare from reflected sunlight that could, otherwise, affect the use of adjacent roadways and land uses. As such, glare impacts relative to reflected sunlight would not be anticipated and, as such, are not further evaluated herein.

Operation of the Project would require the development of a lighting program that would potentially increase nighttime glare (or luminance) over existing conditions. Musco Lighting provided a second calculation set that evaluated the glare produced by the fixtures at any given point on and off the Project Site, including at the sensitive receptors. Figure 9 (Off-Site Luminance) in the Lighting Report (see Appendix B of this Draft EIR) illustrates the 13 receptor sites and the calculated values in candela across the Project Site and surrounding vicinity. Each point on this grid reflects the max candela value for the fixture with the highest potential for glare at any given pole on the Project Site. This represents what a user might perceive as the brightness, or point intensity, of a lighting fixture when directly viewed from a distance and coincides with the methods of evaluation used to survey existing facilities. Following methods prescribed by The Illuminating Engineering Society, the Musco Lighting values for candela can be adjusted to candela per square meter as would be perceived by each receptor location. As shown in Table 3 of the Lighting Report, the Project would result in reductions in glare at most of the offsite residences. For example, the values at 4068 Whitsett Avenue would be reduced from 3,500 cd/m<sup>2</sup> under existing conditions to approximately 5.8 cd/m<sup>2</sup> following Project construction. In other words, the new lighting system should generally produce substantially less candela, or glare, than the existing lighting. Modeled candela per square meter calculations for one receptor (4202 Bellaire Avenue) increase slightly as compared to existing conditions, though the increase is approximately equivalent to the brightness of a single candle flame in front of the property. Further, as previously stated, the modeled measurements do not take into consideration substantial intervening Project landscaping, which would result in a greater reduction in glare at all receptors.

The effects of the Project on off-site luminance are summarized in **Table IV.A-2**, Summary of Calculated Off-Site Luminance, below.

TABLE IV.A-2
SUMMARY OF CALCULATED OFF-SITE LUMINANCE<sup>a</sup>

		Glare Intensity (cd/m²)		
Receptorb	Location	Existing	Project <sup>c</sup>	
1	4155 Bellaire Avenue	550	3.3	
2	4202 Bellaire Avenue.	0	7.7	
3	4202 Beeman Avenue	230	7.4	
4	12501-12509 Valley Spring Lane	720	0.1	
5	4122 Whitsett Avenue	1,500	5.0	
6	4068 Whitsett Avenue	3,500	5.8	
7	4203 Babcock Ave.	900	1.1	
8	4202 Babcock Ave.	3,200	0.5	
9	4110 Whitsett Ave.	2,500	5.4	
10	4108 Whitsett Ave.	2,350	5.2	
11	4104 Whitsett Ave.	2,400	5.8	
12	4100 Whitsett Ave.	3,700	2.5	
DIO	RIO at property line	4,375	13.6	
RIO	RIO at 15-feet beyond property	4,375	4.0	

#### NOTES:

SOURCE: StudioK1, Lighting Technical Report, Table 3, October 2021.

The Project would comply with all applicable lighting regulations, and, based on the Lighting Report, the Harvard-Westlake River Park lighting design, which includes such

<sup>&</sup>lt;sup>a</sup> Luminance is the amount of light passing through an object, emits from, or reflects off an object. It is expressed in candela per square meter (e.g., The amount of light that passes through the street light.) It is often referred to as glare.

<sup>&</sup>lt;sup>b</sup> Views at Receptor Locations 1 to 6 are obstructed/limited by landscaping between receptor and Project Site.

<sup>&</sup>lt;sup>c</sup> Calculated values do not account for landscaping (existing or proposed).

features as highly specialized optics and physical glare control, would ensure that the lighting of the Project would adhere to all applicable regulations and guidelines. At most locations, the Project would create a fraction of the glare than the existing lighting fixtures for the Weddington Golf & Tennis facility and a minimal increase in glare at one location.

Therefore, the Project would not create a new source of substantial glare that would adversely affect day or nighttime views in the area. As such, impacts related to operational glare would be less than significant.

#### (2) Mitigation Measures

Impacts regarding light and glare were determined to be less than significant. Therefore, no mitigation measures are required.

#### (3) Level of Significance after Mitigation

Impacts regarding light and glare were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

# e) Cumulative Impacts

#### (1) Impact Analysis

Chapter III, *Environmental Setting*, of this Draft EIR, lists five related projects that are planned or are under construction within the Project area. All of the related projects are located within a 0.5-mile section of Ventura Boulevard, between 12544 and 12833 Ventura Boulevard. All of the related projects sites are zoned C-1.5 (Limited Commercial) and are currently developed with commercial uses. The related projects would be commercial or mixed-use (commercial with apartments) and would be located within a high ambient lighting area. The related projects would be consistent with existing ambient conditions, including illuminated signage along Ventura Boulevard and, as with the Project, would be required to comply with LAMC Section 91.6205 M that requires that no sign shall be illuminated in such a manner as to produce a light intensity of greater than three-foot candles above ambient lighting, as measured at the property line of the nearest residentially zoned property. The related projects would also be spread over several blocks and would not form a high intensity, combined light source. These projects are all located to the south of the Los Angeles River and, because of the distance from the Project Site, would not combine with the Project to create a high intensity light source.

Therefore, the Project's contribution to cumulative impacts would not be cumulatively considerable. As such, cumulative impacts with respect to the generation of light and glare levels which would adversely affect day or nighttime views in the area would be less than significant.

# (2) Mitigation Measures

Cumulative impacts regarding light and glare were determined to be less than significant. Therefore, no mitigation measures are required.

### (3) Level of Significance after Mitigation

Cumulative impacts regarding light and glare were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.