IV. Environmental Impact Analysis

A.2 Aesthetics/Visual Resources—Light, Glare, and Shading

1. Introduction

This section addresses the potential impacts that could result from the proposed project with regard to light, glare, and shading. The analysis of light impacts assesses the effects of project nighttime light from both point sources (i.e., illuminated signage, street light poles, vehicle headlights) and indirect sources (i.e., reflected light) on light-sensitive land uses, such as residences. These land uses are recognized as light sensitive because they are typically occupied by persons who have expectations for privacy during evening hours and who are subject to disturbance by bright light sources.

Glare is a primarily 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. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Glare generation is typically related to sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. The analysis of glare assesses potential impacts on glare-sensitive uses, such as residences and transportation corridors (i.e., roadways).

Shading is a common and expected occurrence in urban areas and is often considered a beneficial feature of the environment when it provides cover from excess sunlight and heat. However, shading can have an adverse impact if it substantially interferes with the enjoyment or performance of sun-related activities. While some incidental shading on shadow sensitive uses is commonly acceptable, shading that occurs over extended periods of time can be considered a detriment. As such, the analysis of project shading impacts assesses several shade-related factors, including local topography, the height and bulk of the proposed project’s structural elements, the sensitivity of surrounding uses, the season of the year, and the duration of shadow projection.
2. Environmental Setting

a. Existing Conditions

(1) Light and Glare

The project site is currently occupied by an apartment community that includes 256 buildings primarily comprised of residential buildings but also including ancillary structures for parking, laundry, and other related uses. The existing buildings are interspersed with lawn and landscaped areas surrounding a circuitous internal street network. The existing ambient lighting environment within the project site is characteristic of a residential community. Existing nighttime lighting sources include pole-mounted streetlights, exterior building lighting at building entrances, low-level security lighting around parking areas, vehicle headlights along internal roadways and parking areas, and interior light spillage from on-site buildings. Lighting is generally concentrated around buildings and roadways, while the open space and yard areas are not substantially lit. As a result, on-site light sources generally result in low to medium ambient nighttime light levels within the project site.

The project vicinity is highly urbanized and includes a varied mix of residential, commercial, institutional, recreational, and industrial uses. The areas north and east of the project site are predominantly residential with an ambient lighting environment similar to the project site and comprised of similar sources. To the south of the Project Site, light is generated by several institutional uses and associated park/recreational facilities, including the Dacotah Street Combination Children’s Center, Dena Elementary School, the Lou Costello Jr. Recreation Center, and a senior center to the southeast, and the Carmen Lomas Garza Primary Center, an associated park/recreation center, and a government service building to the southwest. Commercial and light industrial uses also generate light to the south of the project site along Olympic Boulevard. Light sources associated with these uses include building, signage, and security/parking lighting. More notably, overhead floodlights used to light the outdoor playfields within the Lou Costello Jr. Recreation Center are a primary light source in the vicinity when the playfields are in use. The commercial and industrial uses to the west of the project site along Soto Street also generate light from building, signage, and security/parking lighting. Overall, land uses to the south and west of the project site utilize light sources generally resulting in medium to high ambient nighttime light levels.

Pole-mounted streetlights, traffic signals, and vehicle headlights generate light along the roadways that abut the project site in all directions, particularly along 8th Street, Olympic Boulevard, Soto Street, and Grande Vista Avenue. Overhead lighting and vehicle headlights also generate light from the I-5 Freeway. However, due to the elevation of the
freeway and abutment walls along the roadway, headlights from vehicles traveling on the
freeway are not generally visible from the street level in the project area.

In the immediate project vicinity, the nearest off-site uses that are considered
sensitive relative to nighttime light and have views of the project site are the single-family
residences north of 8th Street and the multi-family residences east of Grande Vista
Avenue. To the extent they are occupied during the evening hours, the Dacotah Street
Combination Children’s Center, Dena Elementary School, and the Lou Costello Jr.
Recreation Center to the east of the project site, and the Carmen Lomas Garza Primary
Center and associated park/recreation center to the southwest, may also be considered
light-sensitive receptors.

Daytime glare is generally associated with reflected sunlight from buildings with
highly reflective surfaces. The existing buildings on the project site do not generate
substantial daytime glare since these structures do not feature reflective glass, shiny
surfaces, or metal or other reflective materials in the building façades. Some daytime glare
emanates from sunlight reflecting off vehicles parked in surface parking areas. These glare
sources are not considerable in the context of the urban environment.

In the immediate project vicinity, the nearest off-site uses that are considered
sensitive relative to daytime glare and have views of the project site include the single-
family residences north of 8th Street; the multi-family residences east of Grande Vista
Avenue; the Dacotah Street Combination Children’s Center, Dena Elementary School, and
the Lou Costello Jr. Recreation Center to the east of the project site; the Carmen Lomas
Garza Primary Center and associated park/recreation center to the southwest of the project
site; and motorists traveling along area streets.

(2) Shading

The existing buildings on the project site are low-rise (one to two stories). As such,
the existing on-site buildings do not cast extensive shadows or unique off-site shading
patterns. The vast majority of adjacent structures in the immediate vicinity are also low-
rise, with one notable exception being the nine-story Sears Building at the southwest
corner of Soto Street and Olympic Boulevard. Additionally, a five-story retirement home
and three-story residential building are also located across the street from the Sears
Building on the north side of Olympic Boulevard.

The locations of the shade sensitive uses considered in this analysis are depicted on
Figure IV.A-14 on page IV.A-83. They include the following:

- Sensitive Receptor 1: Residential neighborhoods north of 8th Street.
Source: Matrix Environmental, 2010; Google Earth, 2008.
• Sensitive Receptor 2: Outdoor recreation spaces associated with the Carmen Lomas Garza Primary Center.

• Sensitive Receptor 3: Outdoor recreation spaces associated with the Dacotah Street Combination Children’s Center and adjacent Dena Elementary School.

• Sensitive Receptor 4: Outdoor recreation spaces associated with the Lou Costello Jr. Recreation Center.

• Sensitive Receptor 5: Residential neighborhoods east the project site.

• Sensitive Receptor 6: The retirement home west of the project site at Olympic Boulevard and Boyle Avenue.

• Sensitive Receptor 7: The apartment complex west of the project site at Olympic Boulevard and Boyle Avenue.

b. Regulatory Framework

(1) Light and Glare

Lighting, such as streetlights and illuminated signs, is regulated by the Los Angeles Municipal Code (LAMC). Applicable regulations for the project site include the following:

• Chapter 1, Article 2, Sec. 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 1, Article 4.4, Sec. 14.4.4 E. No sign shall be arranged and illuminated in such a manner as to produce a light intensity greater than 3 foot-candles above ambient lighting, as measured at the property line of the nearest residentially zoned property.

• Chapter 1, Article 7, Sec. 17.08 C. Plans for street lighting shall be submitted to and approved by the Bureau of Street Lighting for subdivision maps.

• Chapter 9, Article 3, Div. 1, Sec. 93.0117(b). No exterior light may cause more than 2 foot-candles of lighting intensity or generate direct glare onto exterior glazed windows or glass doors on any property containing residential units; elevated habitable porch, deck, or balcony on any property containing residential units; or any ground surface intended for uses such as recreation, barbecue or lawn areas or any other property containing a residential unit or units.
(2) Shading

There are no City regulations regarding shading at the project site. Shading impacts are addressed through CEQA review, pursuant to guidance in the City of Los Angeles CEQA Thresholds Guide (2006).

3. Project Impacts

a. Methodology

(1) Light and Glare

The analysis of light and glare identifies the location of off-site light-sensitive land uses and describes the existing ambient lighting conditions in the project area. The analysis evaluates the project’s proposed light and glare sources and the extent to which project lighting, including illuminated signage, may spill off the project site onto off-site light-sensitive uses. The analysis also describes the affected street frontages, the direction in which light would be focused, and the extent to which the project would illuminate off-site sensitive land uses. In addition, the analysis considers the potential for sunlight to reflect off of building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles or other activities.

(2) Shading

The consequences of shadows on land uses can be positive, including cooling effects during warm weather; or negative, such as loss of warmth during cooler weather and natural light. Shadow effects are dependent on several factors, including local topography, the height and bulk of a project’s structural elements, sensitivity of surrounding uses, season, and duration of shadow projection. In determining the effects of shading, the locations of sensitive uses in the surrounding area are identified and shadows of the project are modeled using the proposed building height zones and the distance from these zones to the off-site sensitive uses. Proposed project shadows are depicted in Figures IV.A-15 through IV.A-22 on pages IV.A-95 through IV.A-102. To present a conservative analysis, shadows are cast for the entire area of each height zone built up to its maximum allowable height (refer to Figure II-9 in Section II, Project Description, for a map of the proposed height zones). It is important to note that this methodology overestimates project shadows. For example, the high-rise height zone in Block K (see Figure IV.A-3 in Section IV.A.1, Visual Quality/Views, for a map of the proposed Block areas) allows for one building with a maximum floor plate of 12,500 square feet to extend up to a maximum building height of 260 feet. However, the analyzed shadows in Figures IV.A-15 through IV.A-22 depict a maximum envelope of shading that would result if the entire approximately 54,000-square-foot high-rise height zone were built up to a height of 260 feet. This ensures that all
potential shading patterns that may occur from buildings within each height zone are fully analyzed.

Sensitive uses under the *City of L.A. CEQA Thresholds Guide (2006)* include all residential uses and routinely usable outdoor spaces associated with recreational or institutional uses (i.e., schools), commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce.

Shading impacts are evaluated in accordance with the *City of Los Angeles CEQA Thresholds Guide (2006)*. Accordingly, shadows have been modeled and plotted for representative hours during the spring and fall equinoxes and winter and summer solstices. To analyze the proposed project’s shading impacts, shadow lengths have been identified for the following time periods by season:

<table>
<thead>
<tr>
<th>Season</th>
<th>Date</th>
<th>Time of Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Solstice</td>
<td>December 21</td>
<td>9 A.M. PST to 3 P.M. PST</td>
</tr>
<tr>
<td>Spring Equinox</td>
<td>March 21</td>
<td>9 A.M. PDT to 5 P.M. PDT</td>
</tr>
<tr>
<td>Summer Solstice</td>
<td>June 21</td>
<td>9 A.M. PDT to 5 P.M. PDT</td>
</tr>
<tr>
<td>Fall Equinox</td>
<td>September 21</td>
<td>9 A.M. PDT to 5 P.M. PDT</td>
</tr>
</tbody>
</table>

*PST = Pacific Standard Time  
PDT = Pacific Daylight Savings Time*

The varying and seasonally adjusted daytime hours represent the period of the day during which the expectation of available sunlight exists. For the purpose of establishing the hours in which significant impacts occur, winter is described as occurring during Pacific Standard Time (PST), which occurs between the first Sunday of November through the second Sunday in March; and spring, summer, and fall are described as occurring during Pacific Daylight Time (PDT), which occurs between the second Sunday in March and the first Sunday of November.⁵

⁵ *Timeframes have been adjusted from those specified in the City of Los Angeles CEQA Thresholds Guide to account for the new Daylight Savings time period (second Sunday in March through the first Sunday in November), which went into effect in 2007 (per the Energy Policy Act of 2005) to reduce energy consumption. Prior to this change, the spring equinox occurred within Pacific Standard Time and was therefore subject to shading analysis between the hours of 9:00 A.M. and 3:00 P.M.*
b. Significance Thresholds

(1) Light and Glare

Appendix G of the CEQA Guidelines provides a set of sample questions that address impacts with regard to aesthetics, including light and glare. The question that pertains to light and glare is as follows:

Would the project:

- Create a new source of substantial light and glare which would adversely affect day or nighttime views in the area?

In the context of this question from Appendix G of the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following factors:

- The change in ambient nighttime 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.

Based on these criteria, the proposed project would have a significant impact on light aesthetics if project lighting would substantially alter the character of off-site areas surrounding the project site.

(2) Shading

The City of Los Angeles CEQA Thresholds Guide states that a proposed project would have a significant shading impact if:

- Shadow sensitive uses would be shaded by project-related structures for more than 3 hours between the hours of 9:00 A.M. and 3:00 P.M. Pacific Standard Time (between early November and early March), or more than 4 hours between the hours of 9:00 A.M. and 5:00 P.M. Pacific Daylight Time (between early March and early November).6

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6 Ibid.
c. Analysis of Project Impacts

(1) Project Design Features

(a) Signage and Lighting

Project lighting would be developed in accordance with the proposed Design Guidelines and Standards and would include low-level exterior lights adjacent to buildings and along pathways for security and wayfinding purposes, as well as street lamps along many of the on-site roadways. Low-level accent lighting to highlight architectural features, landscape elements, and certain signage would also be incorporated throughout the site. Light posts, in-ground path lighting, and lighted bollards would also be provided as needed within proposed park and open space areas. In addition, exterior lighting would be designed for low contrast/glare and/or use full-cutoff fixtures. This requirement does not preclude the use of up-lighting to accent architectural features and landscape-accent up-lighting. Exterior lighting would also be designed so that all site and building-mounted luminaries produce a maximum initial illuminance 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 project site.

As discussed in Section IV.A.1, Aesthetics/Visual Quality/Views, of this Draft EIR, project signage would be coordinated and controlled by a detailed sign code that will be part of the proposed Specific Plan included as Appendix B to this Draft EIR. The signage program would ensure that project signage is appropriate to the proposed uses and compatible with project architecture. Proposed signage could include a variety of building signs, wayfinding signs, parking entrance signs, and wall signs, and may include illuminated signage. Directional signage would be used to indicate key paths and destinations for pedestrians and vehicles. Additionally, lampposts may incorporate banners for neighborhood and City events. In general, new signage would be architecturally integrated into the design of the new buildings, establish appropriate identification for the retail uses, and promote the pedestrian-oriented, mixed-use nature of the site. The proposed signage program divides the project site into three Sign Districts and specifies which types of signage are allowed in each of the districts. See Figure IV.A-6 Section IV.A.1, Aesthetics/Visual Quality/Views, of this Draft EIR, for a map of the Sign Districts. Sign District A includes the areas of the project site along 8th Street. Due to the location of residential uses to the north of 8th Street, this would be the most restrictive Sign District in terms of the amount and intensity of permitted signage. Up to five off-site signs would be permitted in Sign District C only, which is located in the southern portion of the project site adjacent to Olympic Boulevard. The maximum area of off-site signs would also be restricted to 1,400 square feet (e.g., two 600-square-foot signs and three 65-square-foot signs). Electronic message display signs would be permitted within Block H only, to serve a civic building or function, and would be restricted in size to 10 square feet. Electronic
message display signs may include scrolling or still text or images only, and would not include flashing or blinking text or images. The following signage types would be prohibited throughout the project site: box signs, inflatable signs, monument signs, odor-producing or sound-emitting signs, revolving signs, and signs with flashing, mechanical, or strobe lights. In addition, the proposed Design Guidelines and Standards provide guidelines related to signage illumination. Specific signage illumination guidelines include:

- Reduce the level of brightness of signage lighting on mixed-use developments that include a residential component by limiting externally illumination to shielded or full-cutoff fixtures such as goose neck fixtures and recessed under canopy lighting.

- Place exterior sign lighting above the sign and in a manner that it does not obscure the text and graphics. Use only as many fixtures as are needed to adequately light the sign.

- Direct exterior lights onto signs so as not to create off-site glare.

- Signs may be illuminated by either internal or external means.

- Methods of signage illumination may include, but not be limited to: electric lamps; fiber optic; incandescent lamps; cathode ray tubes exposed directly to view; shielded spot lights and wall wash fixtures.

- All Illuminated Signs shall be designed, located or screened so as to limit direct light sources onto any residential units that are located outside of or within the project site. Neon lights are only permitted in Sign District C and must be attached directly to the building.

Please refer to Section IV.A.1, Aesthetics/Visual Quality/Views, of this Draft EIR, for additional information on signage guidelines for the proposed project.

The project would integrate a mix of high-quality and durable building materials in accordance with the proposed Design Guidelines and Standards. Glass used in building façades would be non-reflective or treated with a non-reflective coating in order to minimize glare. These materials would reduce potential glare from reflected sunlight. While some street parking would be provided, the majority of the parking supply would be provided off-street, either in subterranean garages or in aboveground garages. Where aboveground parking is provided, the structure would be “wrapped,” or screened by building edges that contain occupiable space such as office lobbies, retail storefronts, and other uses, and/or design elements such as landscaping, green screens, or cladding, such that the new parking areas would not generally be visible from the main street rights-of-way. Most of the parking structure driveways and loading areas would be located along alleys on the side or rear of the buildings to minimize visual and physical disruptions to the pedestrian
environment. In general, open parking structure façades needed for ventilation would also be located along alleys.

(b) Building Heights and Massing

The majority of the new buildings would range in height from two to seven stories (approximately 24 feet to 74 feet). In addition, up to three buildings could be as tall as 18 stories (approximately 210 feet), and up to three buildings could be as tall as 24 stories (approximately 260 feet). The Specific Plan and associated zone change would establish new height restrictions throughout the project site. As illustrated in Figure II-9 in Section II, Project Description, of this Draft EIR, a transitional height zone extending a distance of 70 feet into the site interior would limit building heights to 35 feet along the north and northeastern site perimeters of the project site, closest to adjacent low density residential uses. The allowable height would step up to 64 feet moving toward the center of the site, transitioning to a 74-foot height limitation along the edges of the central park and along the Evergreen Street retail frontage. The creation of these transitional height zones would maintain low- and mid-rise buildings in the northern and northeastern areas of the site and concentrate the tallest structures furthest from nearby low-rise residences, resulting in a project design that promotes visual compatibility with off-site uses.

(2) Project Impacts

(a) Light and Glare

(i) Construction

Artificial Light

Lighting needed during project construction could generate light spillover to off-site sensitive land uses in the project vicinity, including the single-family residences north of 8th Street; the multi-family residences east of Grande Vista Avenue; the Dacotah Street Combination Children’s Center, Dena Elementary School, and the Lou Costello Jr. Recreation Center to the east of the project site; and the Carmen Lomas Garza Primary Center and associated park/recreation center to the southwest. However, construction activities would occur in accordance with the provisions of LAMC Section 41.40, which limits the hours of project construction to between 7:00 A.M. and 9:00 P.M. on weekdays and between 8:00 A.M. and 6:00 P.M. on Saturdays, with no construction permitted on Sundays. Therefore, construction lighting would be used primarily during daylight hours, and would only occur for the duration needed in the construction process. Any nighttime construction, as permitted by the LAMC, would be limited to the early evening hours. Furthermore, construction-related illumination would be used for safety and security purposes only, in compliance with LAMC light intensity requirements. Thus, with adherence to LAMC regulations, light resulting from construction activities would not
significantly impact off-site sensitive uses, substantially alter the character of off-site areas surrounding the construction area, or interfere with the performance of an off-site activity. Therefore, light impacts associated with construction would be less than significant.

**Glare**

Daytime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight could occur. However, any glare would be highly transitory and short-term, given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities within each development site. In addition, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. The potential for nighttime glare associated with construction activities is unlikely as most construction activities would occur during the day, and any nighttime construction work would be temporary. As such, the proposed project would not result in a significant impact related to construction glare.

**(ii) Operation**

**Artificial Light**

Lighting associated with the project would be typical of that associated with retail and residential development. New sources of artificial lighting from the project would include lighting from store-front windows, windows in the residential development, illuminated signage (including off-site signage), architectural lighting on buildings, security lighting, street and walkway lights, and automobile headlights from cars associated with project traffic. The project would increase site density and add taller buildings (up to 260 feet) and retail activities. Thus, lighting from the proposed project would increase light levels within the project site and the surrounding community.

The layout and scale of the proposed project would respect the neighborhood character of the single-family residences north of 8th Street and the multi-family residences east of Grande Vista Avenue. Building intensity would increase toward the center of the project site and away from the northern and eastern perimeters. Project uses fronting 8th Street would consist of residential buildings limited to three stories in height and open space areas. Retail uses and high-rise structures, which would generate higher lighting levels, would be distributed southward toward the center of the project site. Similarly, land uses along the project site's eastern boundary would consist of lower intensity uses. While retail uses and high-rise structures may be partially visible from adjacent residential areas including the residential neighborhoods north of 8th Street and the residential neighborhoods east of Grande Vista Avenue, such views would be limited due to the intervening, lower density development along the project site perimeters. Furthermore,
lighting associated with retail and high-rise uses would be directed towards the interior of the project site to minimize spillover onto adjacent uses. Additionally, a linear green space element along Glenn Avenue would provide a buffer between denser and more intensely lit uses in the project’s main mall and the residential uses, Dacotah Street Combination Children’s Center, Dena Elementary School, and the Lou Costello Jr. Recreation Center to the east. Off-site signage would only be allowed in Sign District C, which is located in the southern portion of the project site adjacent to Olympic Boulevard. Thus, it is not anticipated that off-site signage would be visible from any right-of-way outside of the project site other than Olympic Boulevard, a commercial corridor. Nonetheless, this requirement is included below as Mitigation Measure A.2-7 to further ensure its implementation. Furthermore, all project signage, including off-site signage, would be subject to the signage illumination guidelines in the proposed Design Guidelines and Standards which would ensure that each project sign uses only as many fixtures as are needed to adequately light the sign, and that all illuminated signs are designed, located, or screened so as to limit direct light sources onto any residential units that are located outside of or within the project site. Finally, aboveground parking structures would be screened by building edges that contain occupiable space such as office lobbies, retail storefronts, and other uses, and/or design elements such as landscaping, green screens, or cladding, such that the new parking areas would not generally be visible from the main street rights-of-way. Most of the parking structure driveways and loading areas would be located along alleys on the side or rear of the buildings to minimize visual and physical disruptions to the pedestrian environment, and would connect to the project’s internal circulation system which would be centrally located within the site. Thus, the orientation and design of the proposed parking and circulation areas would direct cars away from pedestrian and residential areas on- and off-site, reducing the potential for light spillover on sensitive uses.

As required by the Design Guidelines and Standards for the proposed project, new illumination sources would be required to be shielded and directed onto associated driveways and walkways, away from adjacent residential uses. New street lights in pedestrian-oriented commercial/retail areas would also be introduced and would consist of light standards that are internally compatible and coordinated with an overall street furniture and signage program. Street lights installed along the project site’s street frontages would be coordinated with the City of Los Angeles Bureau of Street Lighting to maintain appropriate and safe lighting levels on both sidewalks and roadways, while minimizing light and glare on adjacent properties.

Project lighting would also meet all applicable LAMC lighting standards. In particular, outdoor light standards used to illuminate parking areas would be designed to reflect the light away from any adjacent street or property. In addition, exterior lighting would be designed so as not to generate a light intensity greater than 2 foot-candles onto specified off-site habitable and/or recreational uses. Further, signage illumination would be
limited to a light intensity of 3 foot-candles above ambient lighting, as measured at the property line of the nearest residentially zoned property.

Light spillage from the windows of project buildings would also contribute to an increase in nighttime ambient lighting levels, but such an increase would not be substantial as the project area is already characterized by medium to high ambient nighttime artificial light levels associated with surrounding residential, commercial, institutional, recreational, and industrial uses, as well as traffic on adjacent streets. Overall, the proposed project’s lighting sources would not significantly increase nighttime lighting levels in the area. Therefore, the increase in ambient light would not substantially alter the character of the area and would not interfere with nearby sensitive uses. Operational impacts related to light would be less than significant. Although mitigation is not required to reduce a significant impact, Mitigation Measures A.2-1 through A.2-6 are recommended to reflect good planning and design practices currently promoted by the City and ensure that specific design features would be implemented to reduce potential light and glare impacts to a less than significant level. Additionally, as discussed above, Mitigation Measure A.2-7 is included to ensure that off-site signage is not visible from any right-of-way outside of the project site other than Olympic Boulevard.

**Glare**

Glare effects would not be expected to increase substantially under the proposed project. As described above, in accordance with the proposed Design Guidelines and Standards, the project would integrate a mix of high-quality and durable building materials and the use of highly reflective materials would be prohibited. Glass used in building façades would be non-reflective or treated with a non-reflective coating in order to minimize glare. Sunlight reflected from these surfaces would not be expected to generate substantial daylight glare during most of the year, as under existing conditions.

The use of glass or other polished surfaces could have the potential to produce glare, particularly when placed on upper story façades of high-rise buildings. During late afternoons in the winter months, portions of tall project structures could be visible from some eastbound roadways, concurrent with the sun lowering in the southwestern horizon. This configuration has the potential to cause glare from any shiny façade materials or windows on a building’s western façade. However, acute glare conditions that hazardously interfere with driving are rare, and as previously noted, exterior windows and glass used on building surfaces would be non-reflective or treated with a non-reflective coating. Furthermore, the amount of existing and proposed landscaping on-site, including streetscape along the project site’s eastern boundary, would obscure glare conditions affecting drivers on eastbound cross streets. Reflective glare would not be expected during winter morning hours or during the other seasons of the year due to the respective positions of the sun.
Project adherence to the proposed Design Guidelines and Standards would also ensure that new light sources would be shielded and directed onto driveways and walkways, away from adjacent residential uses, thus minimizing opportunities for nighttime glare to affect off-site properties. Additionally, while some street parking would be provided, the majority of the parking supply would be provided off-street, either in subterranean garages or in aboveground garages. Where aboveground parking is provided, the structure would be “wrapped,” or screened by building edges that contain occupiable space such as office lobbies, retail storefronts, and other uses, and/or design elements such as landscaping, green screens, or cladding, such that the new parking areas would not generally be visible from the main street rights-of-way. Most of the parking structure driveways and loading areas would be located along alleys on the side or rear of the buildings to minimize visual and physical disruptions to the pedestrian environment. In general, open parking structure façades needed for ventilation would also be located along alleys. As such, surface parking areas would be shielded from off-site sensitive uses by project buildings, landscaping, and/or design elements.

Overall, the proposed project would not cause glare that would substantially interfere with the performance of an off-site activity or sensitive uses. Therefore, glare impacts would be less than significant. As noted above, although mitigation is not required to reduce a significant impact, Mitigation Measures A.2-1 through A.2-6 are recommended to reflect good planning and design practices currently promoted by the City and ensure that specific design features would be implemented to reduce potential light and glare impacts to a less than significant level. Additionally, as discussed above, Mitigation Measure A.2-7 is included to ensure that off-site signage is not visible from any right-of-way outside of the project site other than Olympic Boulevard.

(b) Shading

As noted above, shade sensitive uses in the area of potential impact are numbered 1 through 7 in Figure IV.A-14 on page IV.A-83, while maximum shadows resulting from the proposed project are depicted in Figures IV.A-15 through IV.A-22 on pages IV.A-95 through IV.A-102. The following discussion evaluates the proposed project’s shading impacts by determining whether the proposed project would shade the identified sensitive receptors, and if so, if the duration of shading would exceed the thresholds set by the L.A. CEQA Thresholds Guide.

(i) Winter Solstice

As shown in Figures IV.A-15 and IV.A-16 on pages IV.A-95 and IV.A-96, the sensitive receptors would experience the following shading effects from the proposed project during the winter solstice:
Figure IV.A-15
Proposed Winter Shadows
Figure IV.A-16
Proposed Winter Shadows
(Continued)

Source: Google Earth Pro, 2010; Matrix Environmental, 2010

Boyle Heights Mixed-Use Community Project

LEGEND

A Block Name
Figure IV.A-17
Proposed Spring Shadows

Source: Google Earth Pro, 2010; Matrix Environmental, 2010
Figure IV.A-18
Proposed Spring Shadows
(Continued)

Source: Google Earth Pro, 2010; Matrix Environmental, 2010

LEGEND

A  Block Name
Figure IV.A-19

Proposed Summer Shadows

Legend

<table>
<thead>
<tr>
<th>Block Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
</tbody>
</table>

Source: Google Earth Pro, 2010; Matrix Environmental, 2010
Figure IV.A-20
Proposed Summer Shadows
(Continued)

Source: Google Earth Pro, 2010; Matrix Environmental, 2010

LEGEND

A  Block Name
Figure IV.A-21
Proposed Fall Shadows
Proposed Fall Shadows

Source: Google Earth Pro, 2010; Matrix Environmental, 2010
Sensitive Receptor 1

As shown in Figures IV.A-15 and IV.A-16, some residences within the residential neighborhood north of 8th Street represented by Receptor 1 would be shaded by the proposed project at various times during the winter solstice. At 11:00 A.M., shadows from the proposed high-rise zone in Block K would extend to the northern edge of 8th Street, but would not extend beyond the right-of-way. At 12:00 P.M., the project shadow would extend just north of 8th Street onto a commercial use—the Morena Mini Market and Taqueria at 2719 East 8th Street—and a surface parking lot fronting 8th Street between Fickett Street and Mott Street. At this time, the project shadow would not extend beyond the commercial use and surface parking lot onto any adjacent residential properties. By 1:00 P.M., three residential properties near the corner of 8th Street and Mott Street would be partially shaded by the proposed project. Between 1:00 P.M. and 3:00 P.M., the project shadow would move eastward shading additional residences within the two blocks east of Mott Street. As project buildings within the high-rise zone in Block K would not begin to shade any shade-sensitive residential uses until after 12:00 P.M., no sensitive uses within this area of impact would be shaded for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. PST. To the east, the high-rise zone in Block I would shade some residences north of 8th Street between 2:00 P.M. and 3:00 P.M., while the high-rise zone in Block C would shade some residences north of 8th Street between 1:00 P.M. and 3:00 P.M. Shadows from buildings within all other Blocks would not extend beyond the 8th Street right-of-way during the study hours. Therefore, no residential property north of 8th Street would be shaded by the proposed project for more than three hours during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST, and impacts to the areas represented by this receptor would be less than significant.

Sensitive Receptor 2

As shown in Figure IV.A-15, the Carmen Lomas Garza Primary Center would be partially shaded at 9:00 A.M. by the high-rise height zone in Block M. By 12:00 P.M., the project would only shade a small corner segment of the surface parking lot of the Carmen Lomas Garza Primary Center, and no routinely used outdoor spaces, including recreational areas, would be shaded. Therefore, no shade-sensitive area within represented by Receptor 2 would be shaded by the proposed project for more than three hours during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST, and impacts to this receptor would be less than significant.

Sensitive Receptor 3

The Dacotah Street Combination Children’s Center and Dena Elementary School would not be shaded by the proposed project during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST. Therefore, no shading impact would occur to this receptor.
Sensitive Receptor 4

The Lou Costello Jr. Recreation Center would not be shaded by the proposed project during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 5

As shown in Figures IV.A-15 and IV.A-16, the residential neighborhoods east the project site would not be shaded by the proposed project during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 6

The retirement home west of the project site would not be shaded by the proposed project during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 7

The apartment complex west of the project site would not be shaded by the proposed project during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST. Therefore, no shading impact would occur to this receptor.

(ii) Spring Equinox

As shown in Figures IV.A-17 and IV.A-18 on pages IV.A-97 and IV.A-98, the sensitive receptors would experience the following shading effects from the proposed project during the spring equinox:

Sensitive Receptor 1

The proposed project would fully or partially shade a few residences along the 8th Street frontage within the two blocks between Mott Street and Marietta Street. However, shading would not begin until after 3:00 P.M. Therefore, no residential property north of 8th Street would be shaded by the proposed project for more than four hours during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.
**Sensitive Receptor 2**

The Carmen Lomas Garza Primary Center would be partially shaded at 9:00 A.M. by the high-rise height zone in Block M. At 11:00 A.M., the project would partially shade a smaller area within the property. By 1:00, project shadows would be fully removed from the property. Therefore, no shade-sensitive area within the Carmen Lomas Garza Primary Center property would be shaded by the proposed project for more than four hours during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

**Sensitive Receptor 3**

Project buildings in Block A would partially shade a small portion of the Dacotah Street Combination Children’s Center and Dena Elementary School. However, shading would not begin until after 3:00 P.M. Therefore, the Dacotah Street Combination Children’s Center and Dena Elementary School would not be shaded by the proposed project for more than four hours during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

**Sensitive Receptor 4**

Project buildings in Block A would partially shade a small portion of the Lou Costello Jr. Recreation Center. However, shading would not begin until after 3:00 P.M. Therefore, the Lou Costello Jr. Recreation Center would not be shaded by the proposed project for more than four hours during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

**Sensitive Receptor 5**

The residential neighborhoods east the project site would not be shaded by the proposed project during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

**Sensitive Receptor 6**

The retirement home west of the project site would not be shaded by the proposed project during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.
Sensitive Receptor 7

The apartment complex west of the project site would not be shaded by the proposed project during the spring equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

(iii) Summer Solstice

As shown in Figures IV.A-19 and IV.A-20 on pages IV.A-99 and IV.A-100, the sensitive receptors would experience the following shading effects from the proposed project during the summer solstice:

Sensitive Receptor 1

The residential neighborhoods north of 8th Street would not be shaded by the proposed project during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 2

The Carmen Lomas Garza Primary Center would be partially shaded at 9:00 A.M. by the high-rise height zone in Block M. At 11:00 A.M., the project the project would only shade a small corner segment of the surface parking lot of the Carmen Lomas Garza Primary Center, and no routinely used outdoor spaces, including recreational areas, would be shaded. By 1:00, project shadows would be fully removed from the property. Therefore, no shade-sensitive area within the Carmen Lomas Garza Primary Center property would be shaded by the proposed project for more than four hours during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

Sensitive Receptor 3

Project buildings in Block A would partially shade a very small portion of the Dacotah Street Combination Children’s Center and Dena Elementary School along the western perimeter of the receptor. However, shading would not begin until after 3:00 P.M. Therefore, the Dacotah Street Combination Children’s Center and Dena Elementary School would not be shaded by the proposed project for more than four hours during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.
Sensitive Receptor 4

Project buildings in Block A would partially shade a very small portion of the Lou Costello Jr. Recreation Center along the western perimeter of the receptor. However, shading would not begin until after 3:00 P.M. Therefore, the Lou Costello Jr. Recreation Center would not be shaded by the proposed project for more than four hours during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

Sensitive Receptor 5

The residential neighborhoods east the project site would not be shaded by the proposed project during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 6

The retirement home west of the project site would not be shaded by the proposed project during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 7

The apartment complex west of the project site would not be shaded by the proposed project during the summer solstice between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

(iv) Fall Equinox

As shown in Figures IV.A-21 and IV.A-22 on pages IV.A-101 and IV.A-102, the sensitive receptors would experience the following shading effects from the proposed project during the summer solstice:

Sensitive Receptor 1

The proposed project would fully or partially shade a few residences along the 8th Street frontage within the two blocks between Mott Street and Marietta Street. However, shading would not begin until after 3:00 P.M. Therefore, no residential property north of 8th Street would be shaded by the proposed project for more than four hours during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.
Sensitive Receptor 2

The Carmen Lomas Garza Primary Center would be partially shaded at 9:00 A.M. by the high-rise height zone in Block M. At 11:00 A.M., the project would partially shade a smaller area within the property. By 1:00, project shadows would be fully removed from the property. Therefore, no shade-sensitive area within the Carmen Lomas Garza Primary Center property would be shaded by the proposed project for more than four hours during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

Sensitive Receptor 3

Project buildings in Block A would partially shade a small portion of the Dacotah Street Combination Children’s Center and Dena Elementary School. However, shading would not begin until after 3:00 P.M. Therefore, the Dacotah Street Combination Children’s Center and Dena Elementary School would not be shaded by the proposed project for more than four hours during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

Sensitive Receptor 4

Project buildings in Block A would partially shade a small portion of the Lou Costello Jr. Recreation Center. However, shading would not begin until after 3:00 P.M. Therefore, the Lou Costello Jr. Recreation Center would not be shaded by the proposed project for more than four hours during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT, and impacts to this receptor would be less than significant.

Sensitive Receptor 5

The residential neighborhoods east the project site would not be shaded by the proposed project during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

Sensitive Receptor 6

The retirement home west of the project site would not be shaded by the proposed project during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.
Sensitive Receptor 7

The apartment complex west of the project site would not be shaded by the proposed project during the fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, no shading impact would occur to this receptor.

(v) Project Shading Impacts—Conclusion

While the proposed project would shade some of the sensitive receptors at various times throughout the year, the proposed project would not shade any of the sensitive receptors for more than three hours during the winter solstice between the hours of 9:00 A.M. and 3:00 P.M. PST, or for more than four hours during the spring equinox, summer solstice, or fall equinox between the hours of 9:00 A.M. and 5:00 P.M. PDT. Therefore, the proposed project’s shading impacts would be less than significant.

4. Cumulative Impacts

Cumulative growth in the greater project area through 2030 includes specific known development projects as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this Draft EIR. Some of this growth is anticipated to occur on or around properties in the project area, and would introduce new or expanded sources of artificial light and thus could contribute to increased nighttime light levels as experienced by off-site sensitive uses. As previously described, the area around the project site is a highly urbanized environment with urban lighting characteristics, exhibiting medium to high ambient nighttime light levels. As such, the additional artificial light sources introduced by the nearby related projects (Related Project #s 10, 4, and 18), as well as other ambient growth, would not significantly alter the existing lighting environment currently experienced in the area. Additionally, cumulative lighting would not be expected to interfere with the performance of off-site activities given the high ambient light levels already present. Further, project adherence to applicable guidelines regarding lighting, discussed above, would control the project’s potential artificial light sources to a sufficient degree so as not to be considered cumulatively considerable. Therefore, development of the proposed project would result in less than significant cumulative lighting impacts.

With regard to glare, only related development immediately adjacent to proposed project structures would have the potential to create glare that could collectively pose impacts affecting a given off-site use, property, or activity. Only one related project is located at a sufficient distance to create cumulative effects: Related Project #10 located at the Sears Building site at the intersection of Olympic Boulevard and Soto Street. This proposal is for a mixed-use project that includes approximately 728 condominium units, 36 apartment units, 572,620 square feet of shopping center uses, and 165,300 square feet of office space. This type of use would be consistent with other development in the area and
common for a high-density urban environment. Furthermore, it is anticipated that this project and other future development projects would be subject to discretionary review to ensure that significant sources of glare are not introduced. As such, cumulative glare impacts would be less than significant.

Similarly, only Related Project #10 is located close enough to the project site to have the potential to result in cumulative shading impacts. This related project would have the potential to shade Sensitive Receptors 6 and 7, which are located immediately north of the related project site. The remaining sensitive receptors are located at longer distances from the related project site and would not have the potential to be shaded by uses on that site. As analyzed above, the proposed project would not shade Sensitive Receptors 6 and 7 at any time of the year. Therefore, cumulative shading impacts would be less than significant.

5. Project Design Features and Mitigation Measures

a. Project Design Features

The proposed Specific Plan and Design Guidelines and Standards include project design features that govern the respective portions of the project site and provide regulations with respect to light, glare, and shading.

Project Design Feature A.2-1: Project lighting shall be developed in accordance with the proposed Design Guidelines and Standards and shall include low-level exterior lights adjacent to buildings and along pathways for security and wayfinding purposes, as well as street lamps along many of the on-site roadways. Low-level accent lighting to highlight architectural features, landscape elements, and certain signage shall also be incorporated throughout the site. Light posts, in-ground path lighting, and lighted bollards shall also be provided as needed within proposed park and open space areas.

Project Design Feature A.2-2: Glass used in building façades shall be non-reflective or treated with a non-reflective coating in order to minimize glare.

Project Design Feature A.2-3: Exterior lighting shall be designed for low contrast/glare and/or use full-cutoff fixtures. This requirement does not preclude the use of up-lighting to accent architectural features and landscape-accent up-lighting.

Project Design Feature A.2-4: Exterior lighting shall be designed so that all site and building-mounted luminaries produce a maximum initial illuminance 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 project site.
**b. Mitigation Measures**

With the implementation of the project’s design features in accordance with the proposed Design Guidelines and Standards, as well as existing LAMC signage and lighting regulations, no significant light and glare impacts have been identified. However, the following mitigation measures are recommended to reflect good planning and design practices currently promoted by the City and ensure that specific design features would be implemented to reduce potential impacts to a less than significant level.

**Mitigation Measure A.2-1:** All new street and pedestrian lighting within the public right-of-way shall be approved by the Bureau of Street Lighting and shall be tested in accordance with the requirements of the Bureau of Street Lighting.

**Mitigation Measure A.2-2:** All new street and pedestrian lighting shall be shielded and directed away from any light-sensitive off-site uses.

**Mitigation Measure A.2-3:** All exterior windows and glass used on building surfaces shall be non-reflective or treated with a non-reflective coating.

**Mitigation Measure A.2-4:** Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.

**Mitigation Measure A.2-5:** Prior to the issuance of a building permit, architectural plans showing building surface materials shall be submitted to the Planning Department for review to ensure that specific surfacing materials and trim shall not cause roadway glare. The use of highly reflective materials shall be prohibited.

**Mitigation Measure A.2-6:** Prior to the issuance of a building permit, architectural plans showing screening treatments for all structured parking areas shall be submitted to the Planning Department for review to ensure that light and glare from parked vehicles would not be adversely intrusive upon adjacent or surrounding uses.

**Mitigation Measure A.2-7:** Off-site signage shall be restricted to Sign District C, in accordance with the Specific Plan, and shall not be visible from any right-of-way outside of the project site other than Olympic Boulevard.

### 6. Level of Significance After Mitigation

Project impacts associated with light and glare would be less than significant during construction and operation. Although mitigation is not required to reduce a less than significant impact, Mitigation Measures A.2-1 through A.2-6 are recommended to reflect good planning and design practices currently promoted by the City and ensure that specific
design features would be implemented to reduce potential light and glare impacts to a less than significant level. Project shading impacts would be less than significant, and no mitigation measures related to shading are recommended.