5.1 AESTHETICS

5.1.1 INTRODUCTION

This section describes the existing regulatory and environmental settings and analyzes the Project's potential to result in a substantial adverse effect on a scenic vista; to substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway; to substantially degrade the site's existing visual character or quality of public views and surroundings in a non-urbanized and/or urbanized area; and to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Where significant impacts remain despite compliance with the existing regulatory framework, feasible mitigation measures are recommended to avoid or reduce the Project's potentially significant environmental impacts.

Proposed General Plan

Proposed General Plan-related information in this section is based on the methodology and information discussed in **Section 5.1.3: Methodology for Evaluating Impacts** and **Section 5.1.4: Environmental Setting**, respectively.

Barstow International Gateway Project (BIG)

BIG-related information in this section is based in part on the following studies:

- *Barstow International Gateway Methodology for Evaluating Aesthetic Impacts*; see **Appendix 5.1 BIG-1: Methodology for Evaluating Aesthetic Impacts**
- *Barstow International Gateway Glare Study*; see **Appendix 5.1 BIG-2: Solar Farm Glare Study**

Summary of Findings – Proposed General Plan

This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would potentially be altered by the implementation of the proposed General Plan. The proposed General Plan would increase development in the City and its Sphere of Influence (SOI), which would modify the existing visual quality of the proposed General Plan area (i.e., the City and its SOI). Future development and redevelopment under the proposed General Plan would require consistency with the existing design standards of the Code of the City of Barstow (Barstow Code) and would be subject to review by the appropriate commissions, committees, or City Council.

Despite compliance with the Barstow Code, compared to existing conditions, the amount of light that would be associated with the proposed General Plan land uses would substantially alter nighttime views. Therefore, light and glare impacts would be significant and unavoidable.

Summary of Findings – Barstow International Gateway:

The BIG project would bring noticeable changes to the environment, affecting aesthetics. It would transform the visual character in rural western Barstow by introducing facilities such as an intermodal center, block swap yard, and transload warehouse center, which would replace parts of the existing desert landscape. These new structures would alter the visual appearance of the area, both during construction and once BIG is operational. Additionally, necessary nighttime lighting for operations would introduce new light sources, affecting the view during both day and night. While efforts would be made to minimize these impacts through measures like shielding and strategic lighting orientation, some alterations to the visual character and light environment are expected. Although there are no scenic vistas in the project area, historic resources like Route 66 would be affected, and while mitigation efforts would be in place, some changes would be unavoidable. Overall, the BIG project would bring a new look and feel to western Barstow and its surroundings. Even with implementing various design elements and mitigation measures, BIG would result in significant unavoidable impacts with respect to aesthetics and light and glare.

5.1.2 REGULATORY SETTING

5.1.2.1 Federal

Federal Highways Administration National Scenic Byways Program

Under the National Scenic Byways Program, the Federal Highway Administration (FHWA) can designate a road as a National Scenic Byway or an All-American Road. To be designated as a National Scenic Byway, a byway must meet the criteria for at least one of the following six "intrinsic qualities": archeological, cultural, historic, natural, recreational, or scenic. The features contributing to the distinctive characteristics of the byway's intrinsic quality must be recognized throughout the region and are considered regionally significant. To be designated as an All-American Road, a byway must meet criteria for at least two intrinsic qualities that are nationally significant and have one-of-a-kind features that do not exist elsewhere. The road or highway must also be considered a "destination unto itself." That is, the road must provide an exceptional traveling experience so recognized by travelers that they would make a drive along the highway a primary reason for their trip. To be considered for designation, a road must first be designated as a State Scenic Byway, an Indian tribe scenic byway, or if on federal land, a federal land management agency byway.

On February 24, 2021, the Bureau of Land Management designated Historic Route 66 (also known as National Trails Highway/Main Street) as a National Scenic Byway from the City of Needles to the City of Barstow (BML, 2024).

The Route 66 National Scenic Byway extends from the California border east of Needles, generally following Interstate 40 (I-40), U.S. Route 95, Goffs Road, and Route 66 to Barstow. See also the *California Historic Route 66 Needles to Barstow Corridor Management Plan* (May 2015)section below.

California Historic Route 66 Needles to Barstow Corridor Management Plan (May 2015)

The Bureau of Land Management (BLM) published the *California Historic Route 66 Needles to Barstow Corridor Management Plan* (Route 66 Corridor Management Plan) in 2015 to nominate the route for

National Scenic Byway or All-American Road designation as determined by the FHWA (BLM, 2015). The corridor was established as a National Scenic Byway on February 24, 2021 (BLM, 2024).

The Route 66 Corridor Management Plan "is part of an ongoing regional and national effort to keep America's Route 66, the 2,448-mile ribbon of highway that was once an inspiring symbol of adventure and freedom, from vanishing into the past. The California section from Needles to Barstow through the Mojave Desert is one of the most unique sections of the route with 128 timber trestle bridges and associated drainage features and its distinctive landscape context, which has changed very little since the establishment of Route 66 in 1926." The Route 66 Corridor Management Plan served as the basis for nominating the route for National Scenic Byway designation.

The Route 66 Corridor Management Plan notes that the BNSF mainline is an integral part of Route 66 history (having been the predecessor of the motor route) and therefore is not considered to be an intrusion on the scenic qualities, but a significant cultural feature (BLM, 2015).

5.1.2.2 State

State Scenic Highways Program

Pursuant to Streets and Highways Code §§ 260 through 263, the State of California Department of Transportation (Caltrans) manages the State Scenic Highway Program. The State Scenic Highways Program lists highways that are either eligible for designation as a scenic highway or already designated as a scenic highway. A highway may be designated as scenic on the basis of the amount of natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent that development intrudes upon the traveler's enjoyment of the view.

The State Scenic Highways Program is governed by the statutes found in the California Streets and Highways Code § 260. Pursuant to California Streets and Highway Code § 261, local government agencies are required to implement actions to protect the scenic characteristics of a scenic corridor. California Streets and Highway Code § 263 gives State legislature authority to identify highways as eligible for designation as a scenic highway. The government entity with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earth moving activities along the affected segment or corridor ("Corridor Protection Program"). Caltrans determines if the appropriate highway segment would meet established criteria for the roadway or segment to be designated as scenic.

Caltrans designates Route 66 as a "Federal Byway" under the State Scenic Highways Program (Caltrans, 2025a). Caltrans describes the route's location as "Interstate 40, U.S. Route 95, Goffs Road, and National Trails Highway." Route 66 runs through the length of the City, along Main Street.

Additionally, Caltrans identifies State Route 58 (SR-58), SR-247, I-15, and I-40 as eligible State highways (Caltrans, 2025a). An eligible State highway becomes officially designated through a process that the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a State Scenic Highway by the Caltrans Director.

5.1.2.3 Local

County of San Bernardino Countywide Plan

The County adopted the Countywide Plan (CWP) in October 2020 (San Bernardino, 2020a). The CWP Policy Plan contains the long-term goals and policies to guide County decisions, investments, and improvements toward achieving the Countywide Vision in unincorporated areas of the County. **Table 5.1-1: Countywide Plan Policy Plan – Relevant Aesthetics Goals and Policies** includes the aesthetics-related goals and policies relevant to the Project. For applicability of the CWP goals and policies to the Project, see **Section 5.0: Environmental Analysis**.

Table 5.1-1: Countywide Plan Policy Plan – Relevant Aesthetics Goals and Policies

Goal or Policy	
LAND USE ELEMENT	
Goal LU-2	**Land Use Mix and Compatibility.** An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment.
Policy LU-2.1	**Compatibility with existing uses.** We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.
Policy LU-2.2	**Compatibility with planned uses.** We require that new residential development is located, scaled, buffered, and designed to minimize negative impacts both on and from adjacent areas designated for nonresidential land uses.
Policy LU-2.3	**Compatibility with natural environment.** We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.
Policy LU-2.4	**Land Use Map consistency.** We consider proposed development that is consistent with the Land Use Map (i.e., it does not require a change in Land Use Category), to be generally compatible and consistent with surrounding land uses and a community's identity. Additional site, building, and landscape design treatment, per other policies in the Policy Plan and development standards in the Development Code, may be required to maximize compatibility with surrounding land uses and community identity.
Policy LU-2.5	**Hillside preservation.** We require that new development in sloping hillside areas preserve the natural character of the surrounding environment and does not further exacerbate natural hazards or erosion.
Goal LU 4	**Community Design**. Preservation and enhancement of unique community identities and their relationship with the natural environment.
Policy LU-4.1	**Context-sensitive design in the Mountain/Desert regions.** We require new development to employ site and building design techniques and use building materials that reflect the natural mountain or desert environment and preserve scenic resources.
Policy LU-4.3	**Native or drought-tolerant landscaping.** We require new development, when outside of high and very high hazard severity zones, to install and maintain drought-tolerant landscaping and encourage the use of native species.
Policy LU-4.5	**Community identity.** We require that new development be consistent with and reinforce the physical and historical character and identity of our incorporated communities, as described

Table 5.1-1: Countywide Plan Policy Plan – Relevant Aesthetics Goals and Policies	
Goal or Policy	
	in Table LU-3 and in the values section of Community Action Guides. In addition, we consider the aspirations section of Community Action Guides in our review of new development.
Policy LU-4.6	**Adaptive reuse.** We encourage the rehabilitation, adaptive reuse, and revitalization of existing structures to preserve and celebrate the unique sense of place, identity, and history of our communities.
Policy LU-4.7	**Dark skies**. We minimize light pollution and glare to preserve views of the night sky, particularly in the Mountain and Desert regions where dark skies are fundamentally connected to community identities and local economies. We also promote the preservation of dark skies to assist the military in testing, training, and operations.
Policy LU-4.10	**Entry monumentation, signage, and public art.** We encourage the installation of durable signage, entry monumentation, and/or works of public art in commercial areas of unincorporated Community Planning Areas as a means of reinforcing a community's character, culture, heritage, or other unique features.
NATURAL RESOURCES ELEMENT	
Goal NR 4	**Scenic Resources.** Scenic resources that highlight the natural environment and reinforce the identity of local communities and the county.
Policy NR-4.1	**Preservation of scenic resources**. We consider the location and scale of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.
Policy NR-4.2	**Coordination with agencies.** We coordinate with adjacent federal, state, local, and tribal agencies to protect scenic resources that extend beyond the County's land use authority and are important to countywide residents, businesses, and tourists.
Policy NR-4.3	**Off-site signage.** We prohibit new off-site signage and encourage the removal of existing off-site signage along or within view of County Scenic Routes and State Scenic Highways.
Source: County of San Bernardino. 2020. *Countywide Policy Plan*. https://countywideplan.sbcounty.gov/policy-plan/.	

The CWP Policy Plan includes the following Policy Maps that address aesthetics:

- Policy Map LU-1 (A-E) Land Use Maps: These maps depict the land use designations in the County.
- Policy Map NR-3 Scenic Routes and Highways (San Bernardino, 2020b): This map depicts the County's scenic routes and State Scenic Highways.

See **Section 5.1.4: Environmental Analysis** for further discussion concerning the above conditions and their potential presence in the study area.

Codified Ordinances of the County of San Bernardino

The Codified Ordinances of the County of San Bernardino (County Code) regulations addressing aesthetics and visual resources are provided below.

County Code Title 8: Development Code. The Development Code includes various regulations (e.g., general development and use standards; fences, hedges, and walls; light trespass; landscaping, signage) intended to minimize aesthetic and light and glare impacts associated with new development projects.

County Code Chapter 81.01: Purpose and Effect of Development Code. The purpose of the Development Code is to implement the San Bernardino General Plan by classifying and regulating the uses of land and

structures within unincorporated San Bernardino County; preserving and protecting the County's important agricultural, cultural, natural, open space, and scenic resources; and by protecting and promoting the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County.

County Code Chapter 83.02: General Development and Use Standards. The purpose of this chapter is to ensure that all development produces an environment of stable and desirable character that is harmonious with existing and future development, and protects the use and enjoyment of neighboring properties, consistent with the Countywide Plan.

County Code Chapter 83.07: Light Trespass. This chapter sets forth standards that prohibit light pollution and light trespass. It includes definitions and outdoor lighting regulations by region, focusing on prevention of light trespass onto neighboring properties and protection of dark night skies in the Mountain and Desert Regions. The following County Code §§ 83.07.060 (a) through (h) are required for the Desert Region:

- **(a): Shielding Required**. All outdoor light fixtures shall be fully shielded, installed and maintained in such a manner that the shielding does not permit light trespass in excess of amounts set forth in subdivision (f).
- **(b): Light Pollution Standards**. Light pollution and trespass shall be minimized through the use of directional lighting, fixture location, height and the use of shielding and/or motion sensors and timers in such a manner that the light source does not permit light trespass in excess of amounts set forth in subdivision (f).
- **(c): Automated Controls.** Automated control systems, such as motion sensors and timers, shall be used to meet curfew requirements set forth in subdivision (d). Photocells or photo controls shall be used to extinguish all outdoor lighting automatically when sufficient daylight is available. Automated controls should be fully programmable and supported by battery or similar backup.
- **(d): Dark Sky Curfew.** All outdoor lighting shall be extinguished by 11:00 PM, close of business, or when people are no longer present in exterior areas, whichever is later, except for the following:
  (1) Lighting used for entry and exit points of a structure, parking areas, driveways and driveway ingress/egress points; or
  (2) Lighting activated by a motion sensor that extinguishes no later than five minutes after activation.
- **(e): Lighting Color**. The correlated color temperature of all outdoor lighting shall be 3,000 Kelvin or less except for seasonal lighting.
- **(f): Allowable Light Trespass.** Outdoor lighting shall not cause light trespass exceeding one-tenths foot-candles measured with a light meter oriented vertically or horizontally either at the property line of the adjacent property or measured from some other point on the property where light trespass may be reasonably determined to occur due to differences in property or improvement elevations.

- **(g): Blinking, Flashing, or High Intensity Lighting.** Permanently installed lighting that blinks, flashes or is of high intensity or brightness that causes a light trespass is prohibited.
- **(h): Residential String Lights.** Notwithstanding anything to the contrary, string lights may be allowed in outside dining areas, entertainment areas or used as landscape lighting in connection with a residential dwelling or use provided that all of the following conditions are met:
  (1) The correlated color temperature of the light sources does not exceed 3,000 Kelvin; and
  (2) The emission of no individual lamp in the string exceeds forty initial lumens, and the aggregate total of lumen output of such string lights used as outdoor light fixtures does not exceed 4,000 lumens.

For applicability of the above County Code standards to the Project, see **Section 5.0**.

City of Barstow 2015-2020 General Plan

The City adopted the City of Barstow 2015-2020 General Plan (2015 General Plan) in February 2015. The 2015 General Plan is the overarching guide for implementation of the Barstow Code, which defines development regulations and establishes zoning districts throughout the City.

Table 5.1-2: 2015 General Plan Relevant Goals and Policies - Aesthetics includes the aesthetics-related goals and policies relevant to the Project. For applicability of the 2015 General Plan goals and policies to the Project, see **Section 5.0**.

Table 5.1-2: 2015 General Plan Relevant Goals and Policies - Aesthetics

Goal or Policy	
LAND USE ELEMENT	
Goal 2	**Land Use Goals, Policies and Strategies.** The City seeks to ensure an aesthetically pleasing appearance to the community that will maintain and enhance property values throughout the planning area.
Policy 2.A	Pursue landscape and streetscape enhancements, particularly at key gateways to the community and in the vicinity of significant historical, commercial, and public use areas.
Policy 2.B	Aggressively enforce Municipal Code provisions and Use Permit Conditions pertaining to maintenance of private property and the abatement of public nuisances.
Policy 2.C	The City shall encourage quality design in all development projects and shall encourage the enhancement of existing developed properties.
Goal 3	**Land Use Goals, Policies and Strategies.** Improve the downtown core as a viable and attractive destination for tourists.
Policy 3.B	Enhance the visibility and notoriety of Barstow's Route 66 Main Street as the longest remaining active Main Street along the entirety of the Route 66 Business Corridor.

Source: City of Barstow. 2015. *City of Barstow 2015-2020 General Plan.* https://www.barstowca.org/home/showpublisheddocument/5359/636607004808630000.

Code of the City of Barstow

The Code of the City of Barstow (Barstow Code) regulations addressing aesthetics are provided below (Barstow, 2025). For applicability of the Barstow Code standards to the Project, see **Section 5.0**.

Barstow Code Title 19: Development Standards. This chapter includes various regulations (e.g., development standards; outdoor lighting, fences, hedges, and walls; clear-sight/sight-distance triangle; signage) intended to minimize aesthetic and light and glare impacts associated with new development projects, as identified below.

Barstow Code Chapter 19.06: Development Standards. This chapter provides development standards that ensure an environment of stable and desirable character that is harmonious and compatible between existing and future development. Sections within this chapter detail requirements pertaining to maximum lighting, screening and buffering, setbacks, and allowed projections/structures within setbacks.

Barstow Code § 19.06.010: Outdoor Lighting. This section encourages outdoor lighting practices and systems that minimize light pollution, glare, and light trespass; conserve energy and resources while maintaining nighttime safety, visibility, utility and productivity; and curtail the degradation of the nighttime visual environment. Barstow Code § 19.06.010 provides standards for outdoor lighting that are intended to eliminate problems of glare, minimize light trespass, and help reduce the energy and financial costs of outdoor lighting by establishing regulations that limit the area that certain kinds of outdoor-lighting fixtures can illuminate and by limiting the total allowable illumination of lots in the City. Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare specifies the following:

(1) All outdoor lighting shall be designed to minimize the trespass of light onto adjacent properties, walkways, residential buildings, hospitals and other uses that may be sensitive to light. In addition, all lighting shall not emit any direct light above a horizontal plane through the lowest direct-light-emitting part of the luminaire.

(2) No lighting shall be aimed, directed, or focused such as to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways.

Barstow Code § 19.06.030: Fences, Hedges, and Walls. This section discusses requirements for fences, hedges, and walls, including maximum height limit, walls required between different land uses, special wall/fencing for different uses, and prohibited fence materials. It establishes requirements for fences, hedges, and walls to ensure there is no unnecessary view blockage, provide adequate buffering between different land uses, and provide screening of outdoor uses and equipment.

Barstow Code § 19.06.060: Signs. This section is intended to provide adequate visual identification of activities through commercial and non-commercial speech display while regulating the design, quality of materials, location, number, size, and maintenance of all signs and sign structures. This section establishes regulations for signs and other exterior advertising formats helping to improve the City appearance.

Barstow Code Chapter 19.08: Design Guidelines. The purpose of these design guidelines is to complement the development for the various types of development found in this zoning code with respect to the design of a given project. In addition, the purpose of these guidelines is to assist the developer in understanding the City's goals and objectives for high quality residential, commercial and industrial development, as described in the 2015 General Plan.

Route 66 Business Corridor/Downtown Business and Cultural District Specific Plan

In 2015, the City initiated development of the *Route 66 Business Corridor/Downtown Business and Cultural District Specific Plan* to reenergize Route 66 (also known as Main Street), in Barstow between SR-58 and I-40 (Barstow, 2016). The Specific Plan identifies wayfinding and branding, land use, and urban design guidelines for the corridor, with specific focus on increasing tourism in the original Downtown area between Otis Avenue and 7th Avenue.

The design guidelines included in the Specific Plan establish a framework for dialogue among property owners and developers, City staff, Barstow residents, and other stakeholders collectively seeking a way to implement the vision for Main Street (also referred to as National Trails Highway or Route 66). Design guidelines ensure that future buildings and public spaces are well conceived and designed to work together as part of a collective whole. The ultimate goal is to create a well-defined, functional, sustainable, beautiful and coherent Route 66 Business Corridor and Downtown Business and Cultural District that promote a strong local economy.

Spanish Trail Specific Plan

The Spanish Trail Specific Plan is intended to draw upon the cultural and historical of Barstow as a key stopping point along the trade route traversing the southwestern United States from Santa Fe, New Mexico to Los Angeles by creating a mixed-use commercial center that will serve both local residents as well as travelers along the historic corridor that is now manifested by the confluence of I-15 and I-40 (Barstow, 2013). While acknowledging and paying homage to the City's storied past, the Specific Plan looks toward the future by broadening the range of commercial, retail, entertainment, residential, open space, and cultural/historical resources available to the residents of and visitors to Barstow. The Spanish Trail Specific Plan includes design guidelines specific to the commercial component, which include guidelines governing site access and traffic flow, parking, lighting, utilities, grading and drainage, buildings (e.g., design, height, treatment, screen walls/screening, materials and colors, trash enclosures), signage, and landscaping.

Barstow Beautiful – City of Barstow Design Guidelines

The intent of the Barstow Beautiful – City of Barstow Design Guidelines (Barstow Design Guidelines) is to provide general guidelines for the City and for private developers to reference during future public and private projects (Barstow, 2012). The Barstow Design Guidelines identifies the following goals:

- Create a welcoming entrance into the City which includes features large enough to be viewed from a passing vehicle.
- Develop the City core area by celebrating its historical character, promoting business and enhancing the pedestrian experience.
- Showcase the important places by highlighting their individual character while still maintaining a consistent standard.
- Support common areas by providing elements which enhance the user experience.
- Improve neighborhood connections through public right-of-way enhancements.

5.1.3 METHODOLOGY FOR EVALUATING IMPACTS

This section defines the study area (i.e., affected environment) and summarizes the methodology used to analyze potential impacts concerning aesthetics.

5.1.3.1 Definition of Study Area

The study area is the geographic boundary in which the environmental investigations were conducted specific to each resource topic.

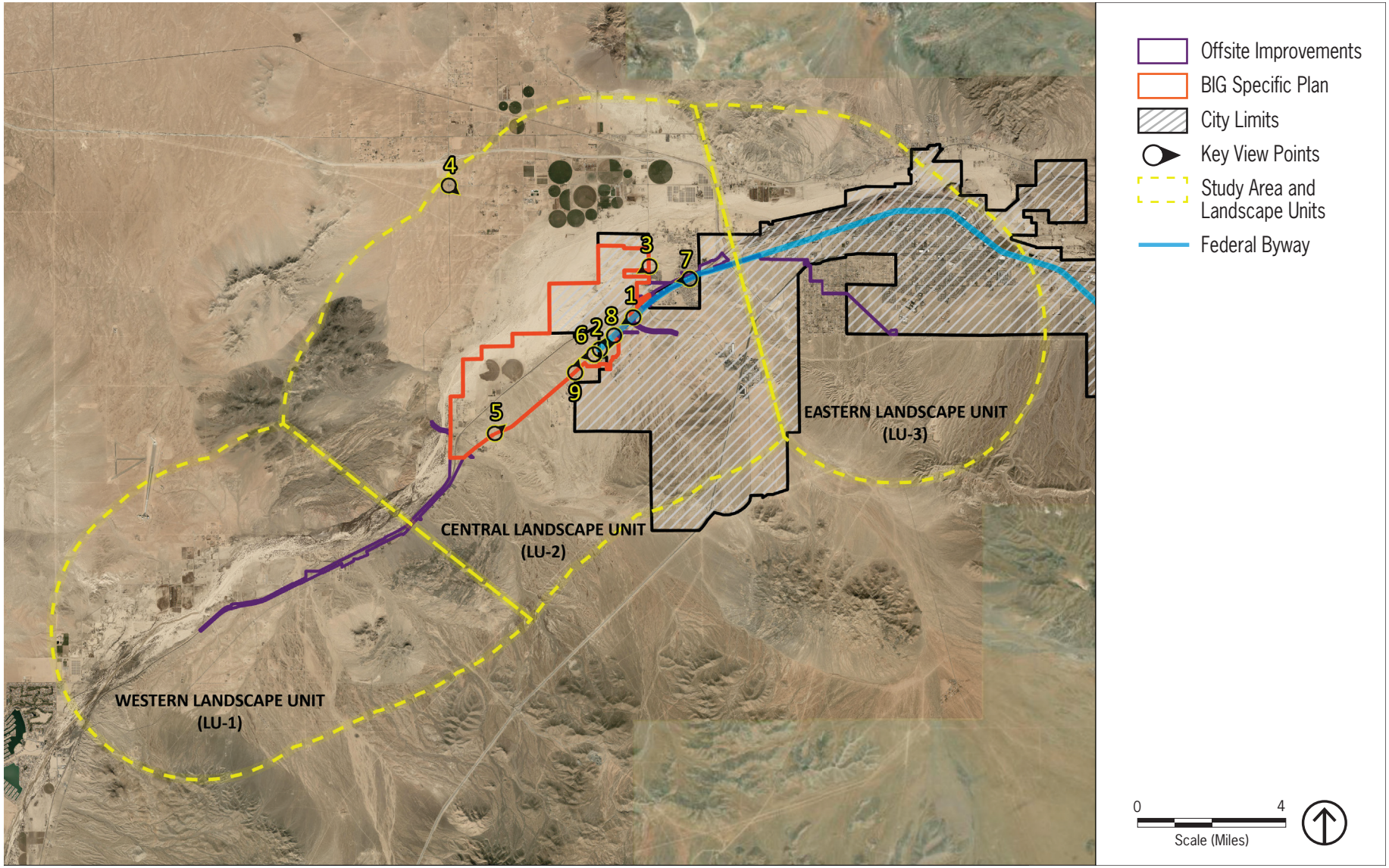
Proposed General Plan

The study area for the proposed General Plan is the City of Barstow and its SOI; see **Figure 3-1: Regional Vicinity Map** and **Figure 3-2: Local Vicinity Map** in **Section 3:0: Project Description**. The General Plan study area is comprised of two distinct land types: the built environment of the City, and the relatively open area of the land surrounding the City. The built environment of the City includes buildings, roadways, parks, streetlights, and other infrastructure. The areas outside the built environment may contain homes, outbuildings, agricultural or industrial uses. In general, the built environment is more intense with more buildings per acre, and with a higher floor area ratio.

Barstow International Gateway

The BIG aesthetics study area is the area in which all environmental investigations specific to aesthetics are conducted to determine the resource characteristics and BIG's potential impacts.

In defining the BIG aesthetics study area, the area was determined by the extent that BIG would likely be visible. For example, most BIG off-site improvements would be at- or below-grade (e.g., Lenwood Channel) or would involve modifications to an existing facility (e.g., Tortilla Substation), and thus, would not result in a discernable visible change. The BIG aesthetics study area takes into account the visual effects of BIG improvements and operations in relation to existing visual character, scenic resources, and viewer types. The study areas used to assess BIG's impacts concerning aesthetics is the BIG Specific Plan Area and off-site improvement areas plus a fixed 3.0-mile buffer to account for the visibility of BIG's footprint components from adjacent vantage points, and to consider the area's landforms (topography), land cover (vegetation and structures), and atmospheric conditions (dust, fog, precipitation) that can affect visibility. The BIG aesthetics study area is comprised of three landscape units defined as the Western Landscape Unit (LU-1), Central Landscape Unit (LU-2), and Eastern Landscape Unit (LU-3) as shown in **Figure 5.1-1: Aesthetics Study Area and Key Viewpoint Location Map – BIG**.



Sources:
County of San Bernardino, Y2023_PUA_Cache [aerial imagery], 2023.; County of San Bernardino, Cities and Towns [Data set], 2022.; County of San Bernardino, City Spheres of Influence [Data set], 2022.; Caltrans, California State Scenic Highways [Data set], 2019.; Kimley-Horn, 2025.; U.S. Department of Transportation Federal Highway Administration, National Scenic Byways & All-American Roads, Route 66, 2025.

Figure 5.1-1
Aesthetics Study Area and Key Viewpoint Location Map - BIG

5.1.3.2 Terminology and Concepts

The terminology and concepts utilized to discuss the proposed General Plan's aesthetic effects are described below.

The terminology and concepts utilized to discuss BIG's aesthetic effects are based on the FHWA's 2015 Guidelines for the Visual Impact Assessment of Highway Projects (FHWA, 2015). Refer to **Appendix 5.1 BIG-1** for detailed discussions concerning the terminology, concepts, and methodology used in evaluating BIG's potential aesthetic impacts.

Visual Resource. A visual resource is a site, object, or landscape feature that contributes to the visual character of the surrounding area or is important because of its visual characteristics or scenic qualities. Visual character is an impartial description of the defining features, landscape pattern, and distinctive qualities of the landscape. According to the FHWA Guidelines, visual resources, and the environments they dominate can be divided into three categories (i.e., natural, cultural, and project). Although these divisions are artificial, dividing the existing environment into natural, cultural, and project environments to determine their visual character ensures a thorough inventory of BIG aesthetics study area's visual character.

- Natural Visual Resources include land, water, vegetation, animals, and atmospheric conditions that compose the natural environment.
- Cultural Visual Resources include buildings, infrastructure, structures, and artifacts and art that compose the cultural environment.
- Project Visual Resources include geometrics, grading, constructed elements, vegetation cover, and visual elements resulting from the project.

Scenic Vista. An area that is designated, signposted, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Scenic vistas usually provide expansive, elevated views.

Scenic Highway. Any stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency.

Landscape Units. Defined areas within the study area that have similar visual features and homogeneous visual character and, frequently, a single viewshed. An "outdoor room." Typically, the spatial unit used for assessing visual impacts.

Viewshed. A project's viewshed is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations. "Viewshed" is used to describe the area surrounding a project site where a person located on adjacent roadways and sidewalks or driving a vehicle can view the project site.

Visual Quality. Visual quality is what viewers like and dislike about visual resources that compose the visual character of a particular scene. Different viewers may evaluate specific visual resources differently based on their interests in natural harmony, cultural order, and project coherence. Visual quality is rated

as low, moderate-low, moderate, moderate-high, or high sensitivity. To determine overall visual quality, the natural harmony, cultural order, and project coherence are also rated, and the ratings of these three factors determine the overall visual quality. The FHWA Guidelines recognize three types of visual perception corresponding to each of the three types of visual resources:

- **Natural Harmony.** Viewing the natural environment's visual resources can create a sense of natural harmony. People interpret the natural environment's visual resources as harmonious or inharmonious. The perception of natural harmony can be determined by viewing the character of the natural environment's visual resources through the lens of viewer preferences. Viewers have a concept of what constitutes natural harmony. The greater the degree to which the BIG aesthetics study area's natural visual resources meet the viewer's preferred concept of natural harmony, the higher value the viewer places on those visual resources.
- **Cultural Order.** Viewing the cultural environment's visual resources can create a sense of cultural order. People interpret the cultural environment's visual resources as being orderly or disorderly. Similar to the evaluation of natural harmony, the perception of cultural order can be determined by viewing the character of the cultural environment's visual resources through the lens of viewer preferences. Viewers have a concept of what constitutes cultural order. The greater the degree that BIG aesthetics study area's visual resources meet the viewer's preferred concept of cultural order, the higher value the viewer places on those visual resources.
- **Project Coherence.** Viewing the project environment's visual resources can create a sense of project coherence. People interpret the project environment's visual resources as being either coherent or incoherent. Similar to the evaluation of natural harmony and cultural order, the perception of project coherence can be determined by viewing the character of the project environment's visual resources through the lens of the viewer preferences. Viewers have a concept of what constitutes project cohesion. The greater the degree that the project environment's visual resources meet the viewer's preferred concept of project coherence, the higher value the viewer places on those visual resources.

Visual Character. Visual character is the description of the visible attributes of a scene or object, typically using artistic terms such as form, line, color, and texture. Visual character is influenced by many different landscape attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.

Viewers. The population affected by the project is referred to as viewers. FHWA Guidelines divide viewer groups into two distinct entities: neighbors (static viewers – from properties with views of the project, of the project) and travelers (dynamic viewers – from the road, of the project).

Viewer Sensitivity. Viewer sensitivity is the anticipated reaction from viewers based on their perception of change in visual resources. Viewer sensitivity is determined by establishing viewer preference, as well as viewer exposure and awareness to a project. The following definitions apply to viewer exposure:

- **Proximity.** Proximity is the distance from the viewing object. The farther away a scene or object is from a viewer (*background views*), the less exposure that viewer has. Conversely, the closer the viewer is to an object or scene (*foreground views*), the more exposure the viewer has.

- **Extent.** Extent refers to the number of people that will be viewing the scene or object. The greater this number, the higher the overall viewer exposure.
- **Duration.** Duration measures how long the scene or object is visible to viewers. With respect to a moving observation point (e.g., a vehicle on a scenic highway), the narrower the view and the faster one travels, the shorter the duration.

Viewer Awareness. The following definitions apply to viewer awareness:

- **Attention.** Attention correlates with routine. The more routine the scene is to a viewer, the less sensitive the viewer becomes. By contrast, the more unique a scene is to a viewer, the more sensitive the viewer will be to the scene.
- **Focus.** Focus refers to the ability to comprehend details. If a view has no specific visual element or point on which the viewer is focused, the viewer will be less sensitive to that scene's details.
- **Protection.** Protection is provided by restrictions that authorities and the community place on changes to a particular view or object being viewed. This protection can be legal or social.

Light Exposure. Light exposure is evaluated based on light trespass and glare. These two technical terms are defined by the Illuminating Engineering Society of North America as follows:

- **Light Trespass.** Light trespass is the light that falls on a property but originates on an adjacent property.
- **Glare.** Glare occurs when either the luminance is too high or the range of brightness in a visual field is too large. A bright light source, such as a flood light or streetlight, viewed against a dark sky may be uncomfortable to look at, and may create a temporary sensation of blindness, which is referred to as disability glare.
- **Contrast.** Contrast is the term which describes the extent of glare at an observer position for a view. Contrast is determined by the variation of luminance within the field of view.

5.1.3.3 Methodology

Proposed General Plan

A qualitative assessment of visual impacts was prepared by describing the existing visual character and then evaluating the nature and magnitude of changes to the visual character that could occur as a result of the proposed General Plan. The analysis focused on the nature and magnitude of these changes, including the visual compatibility of anticipated future land uses with existing and adjacent uses. Due to the programmatic nature of the proposed General Plan and the absence of detailed future development proposals, the assessment remains qualitative and general in scope. The evaluation recognizes that most visual changes within the City and SOI are expected to be incremental and would be subject to existing policies, design standards, and ordinances in effect at the time of project-specific review.

State mapping systems and the City's existing General Plan were used to identify the visual resources within the City and SOI. Scenic highways within the proposed General Plan area were identified using the Caltrans' State Scenic Highway System Map.

Evaluation of potential aesthetic impacts resulting from the implementation of the proposed General Plan was based on a review of the 2015 General Plan, Barstow Code, CWP, County Code, and both aerial photographs and field review of land within and around the City.

Barstow International Gateway

Aesthetic effects are measured qualitatively by considering the change in visual resources from the existing conditions, the capacity of the visual environment to absorb BIG improvements, the viewer sensitivity (viewer exposure and viewer awareness) to such change, and the change in overall visual. Refer to **Appendix 5.1 BIG-1** for detailed discussions concerning the methodology used in evaluating BIG's potential aesthetic impacts.

Scenic Vistas, Scenic Resources Within a State Designated Scenic Highway, and Light and Glare

Aesthetic impacts within BIG are evaluated against the significance criteria/thresholds in **Section 5.1.5** as the basis for determining the impact's level of significance concerning aesthetics. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the BIG's potentially significant environmental impacts.

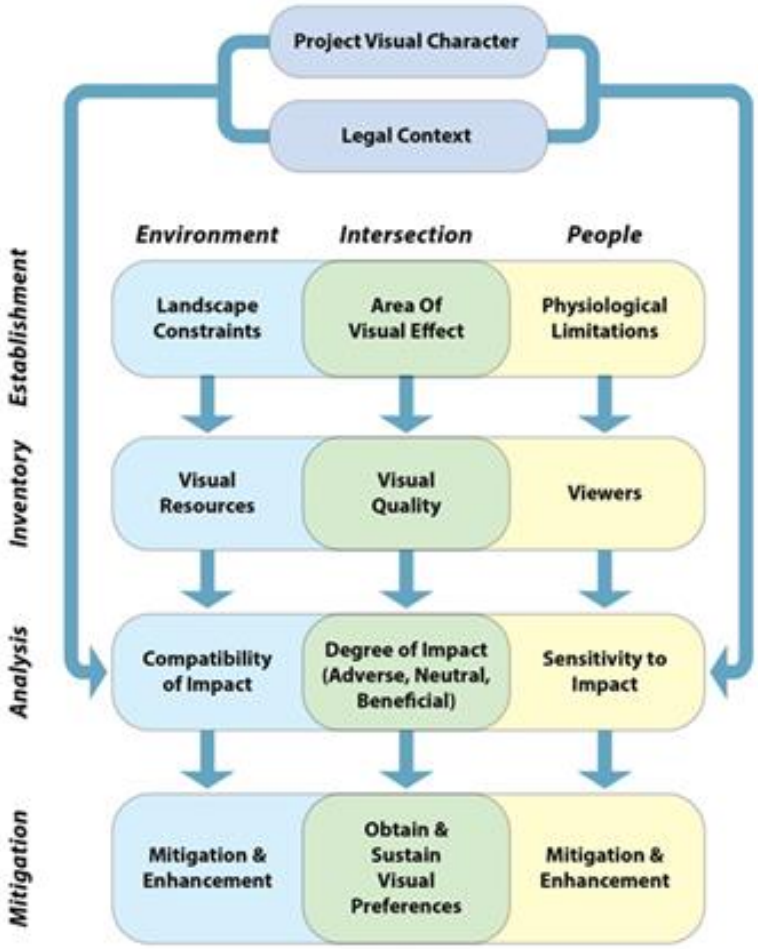
This analysis of aesthetic impacts examines the temporary (i.e., construction) and permanent (i.e., operational) effects. For each criterion, the analyses are generally divided into two main categories: (1) construction impacts and (2) operations impacts. Each criterion is discussed in the context of the BIG aesthetics study area and the surrounding characteristics and geography. The impact conclusions consider the potential for changes in environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

The baseline conditions and impact analyses are from review of BIG plans, maps, and drawings; analysis of aerial and ground-level photographs and visual simulations; and review of various data available in public records, including regional and local planning documents. Detailed information is presented on visual quality or character changes as a result of BIG and its potential result in a substantial adverse effect on a scenic vista; substantially damage scenic resources (e.g., trees, rock outcroppings, and historic buildings within a State Scenic Highway); and/or potential to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. The determination that a project component would or would not result in "substantial" adverse aesthetic impacts considers the site's existing aesthetic resources and the severity of BIG's visual impact (e.g., the nature and duration of the impact) during construction and operation.

Visual Character of Public Views

The assessment of BIG's visual character and aesthetic effects are based on the FHWA Guidelines. As noted above, visual character is the description of the visible attributes of a scene or object. The FHWA Guidelines include four phases: Establishment, Inventory, Analysis, and Mitigation. **Figure 5.1-2: FHWA Visual Impact Assessment Process Flow Diagram – BIG** shows the visual effects assessment process and the intersection of the physical environment with people's perceptions of that environment, as presented in the FHWA Guidelines. This methodology qualitatively measures aesthetic effects by considering changes to visual resources, the capacity of the visual environment to absorb BIG (i.e., compatibility), the viewer sensitivity (i.e., viewer exposure and viewer awareness) to such change, and the change in overall visual character.

Figure 5.1-2: FHWA Visual Impact Assessment Process Flow Diagram – BIG



Source: FHWA Flow Diagrams, FHWA 2015.

For BIG, visual changes (**Impact 5.1-3: BIG**) and the sensitivity of people who view the affected landscape determine the level and degree of BIG's impact. For BIG, the level of impact was determined by evaluating visual character changes, as represented by the visual simulations at the key viewpoints, according to the following:

- If visual character would change from one qualitative category to another (for example, from low sensitivity to moderate or higher sensitivity) in an area with viewers of high or moderate-high sensitivity, the visual character change would be considered a significant impact.
- If visual character would change from one qualitative category to another in an area with viewers of moderate, moderate-low, or low sensitivity, the visual character change would be considered a less than significant impact.
- If visual character would not change from one category to another, there would be no impact.

Visual Quality of Public Views

As previously noted, BIG's visual quality aesthetic effects are based on the FHWA Guidelines. Visual quality is what viewers like and dislike about visual resources that compose the visual character of a particular scene, such as BIG. Different viewers may evaluate specific visual resources differently based on their interests in natural harmony, cultural order, and project coherence. As discussed in **Appendix 5.1 BIG-1**, visual quality is rated as low, moderate-low, moderate, moderate-high, or high sensitivity. To determine overall visual quality, the natural harmony, cultural order, and project coherence are also rated, and the ratings of these three factors determine the overall visual quality. For BIG, viewer sensitivity, exposure, and awareness were evaluated in terms of low, moderate-low, moderate, moderate-high, or high.

Low viewer sensitivity was determined to exist when there were few viewers who experience a defined view or when potential views of BIG would be screened or filtered by intervening terrain, structures, or landscaping (low viewer exposure). Low viewer sensitivity was determined to also occur where viewers would not be particularly concerned about the quality of views because of their activity type (low viewer awareness), such as a commuter on the freeway. Moderate viewer sensitivity was determined to occur where views of BIG would be distant enough such that BIG would not dominate the view (moderate viewer exposure), or where viewer activity would not focus on visual quality and expectations would be moderate, such as office workers or shoppers (moderate viewer awareness). High viewer sensitivity was determined to occur where BIG would be highly prominent, open to public views, and seen by relatively high numbers of viewers (high viewer exposure) and where viewer concern and expectations of visual quality would also be high, as in a rural park where scenery is a primary focus, or in a residential neighborhood (high viewer awareness).

5.1.4 ENVIRONMENTAL SETTING

Proposed General Plan

Visual Character and Scenic Vistas

The City and its SOI is characterized by its desert and mountain landscapes; however, it is continuing to urbanize. The City is predominantly characterized by its lower-density residential uses with nonresidential uses such as military, commercial, office, industrial, and education/institutional uses located throughout the central portion of the City; most of the nonresidential uses are concentrated along Main Street. Minimal development exists in western and eastern Barstow, with the exception of the Marine Corps Logistics Base in the eastern part of the City. While the City does have some buildings that are more than five stories, most of the development in the City is two to three stories in height. The existing residential and commercial uses in the City are low- to medium-rise structures with a maximum height of 4 stories (45 feet), respectively, while the maximum height of industrial uses in the City is 55 feet.

Development in the City and SOI to the north is constrained by biologically-sensitive lands such as the desert tortoise critical habitat; see **Figure 5.4-2: Federally Designated Critical Habitat**. Development in the City to the east is limited by the presence of the Marine Corps Logistics Base south of the Mojave River and the absence of infrastructure north of the Mojave River.

There are various aesthetic/scenic resources in the City. For example, in May 2014, the City Council designated Main Street from I-40 to SR-58 as the "Route 66 Business Corridor" and Main Street from Otis Avenue to 7th Avenue as the "Downtown Business and Cultural District." Route 66 traverses the length of Barstow and is a major transportation hub in San Bernardino County and the Mojave Desert. Several plans, such as the *Spanish Trail Specific Plan*, *California Historic 66 Needles to Barstow Corridor Management Plan*, and the R*oute 66 Business Corridor/Downtown Business and Cultural District Specific Plan* aim to preserve and enhance Route 66 as a vital aesthetic feature within the City. Other aesthetic features include parks, as well as view corridors of the desert such as the Mojave River corridor which link the central portion of the City and SOI and contribute to community identity.

While the 2015 General Plan states that the Open Space/Conservation land use designation applies to lands with high environmental resource value (including scenic vistas), no scenic vistas are explicitly identified in the 2015 General Plan. **Figure 5.1-3: General Plan Area Visual Character and Scenic Resources – Proposed General Plan** shows the existing visual character and scenic resources in the General Plan area.



Source:
Kimley-Horn, 2025

Figure 5.1-3
General Plan Area Visual Character and Scenic Resources - Proposed General Plan

There are no officially designated State Scenic Highways in the City or its SOI; the nearest officially designated State Scenic Highway is SR-2, approximately 40 miles southwest of the City's SOI (Caltrans, 2025a). However, State Route 247 (SR-247), SR-58, I-40, and I-15 are designated as Eligible State Scenic Highways (Caltrans, 2025a). Route 66 is designated a National Scenic Byway[1] (Caltrans, 2025a; FHWA, 2022). Although portions of I-40 overlap with Route 66, the official National Scenic Byway designation from Barstow to Needles applies to Route 66, not to I-40. Portions of Route 66, SR-247, SR-58, SR-15, and I-40 are designated as County Scenic Routes. **Figure 5.1-4: Scenic Routes and Byways – Proposed General Plan** shows the existing eligible State Scenic Highways, designated National Scenic Byways, and County Scenic Routes within the proposed General Plan area.

Light and Glare

The City and its SOI are relatively suburban and rural, respectively, and do not experience high levels of nighttime illumination. Within the built environment of the City, lighting from existing development already affects the night sky, including older lighting fixtures that predate the City's lighting ordinance, and from streetlights, security lighting, and reflection of light from the built environment. Sources of light and glare in the proposed General Plan area includes building (interior and exterior), security, sign illumination, and parking and recreational facility lighting. Other sources of nighttime light and glare include streetlights and vehicular traffic along surrounding roadways. Given that the proposed General Plan area is surrounded by undeveloped land and natural open space, there are limited sources of light. While the effect of lighting on the sky diminishes away from the town center, the lights of the City are visible for many miles before entering the built environment.

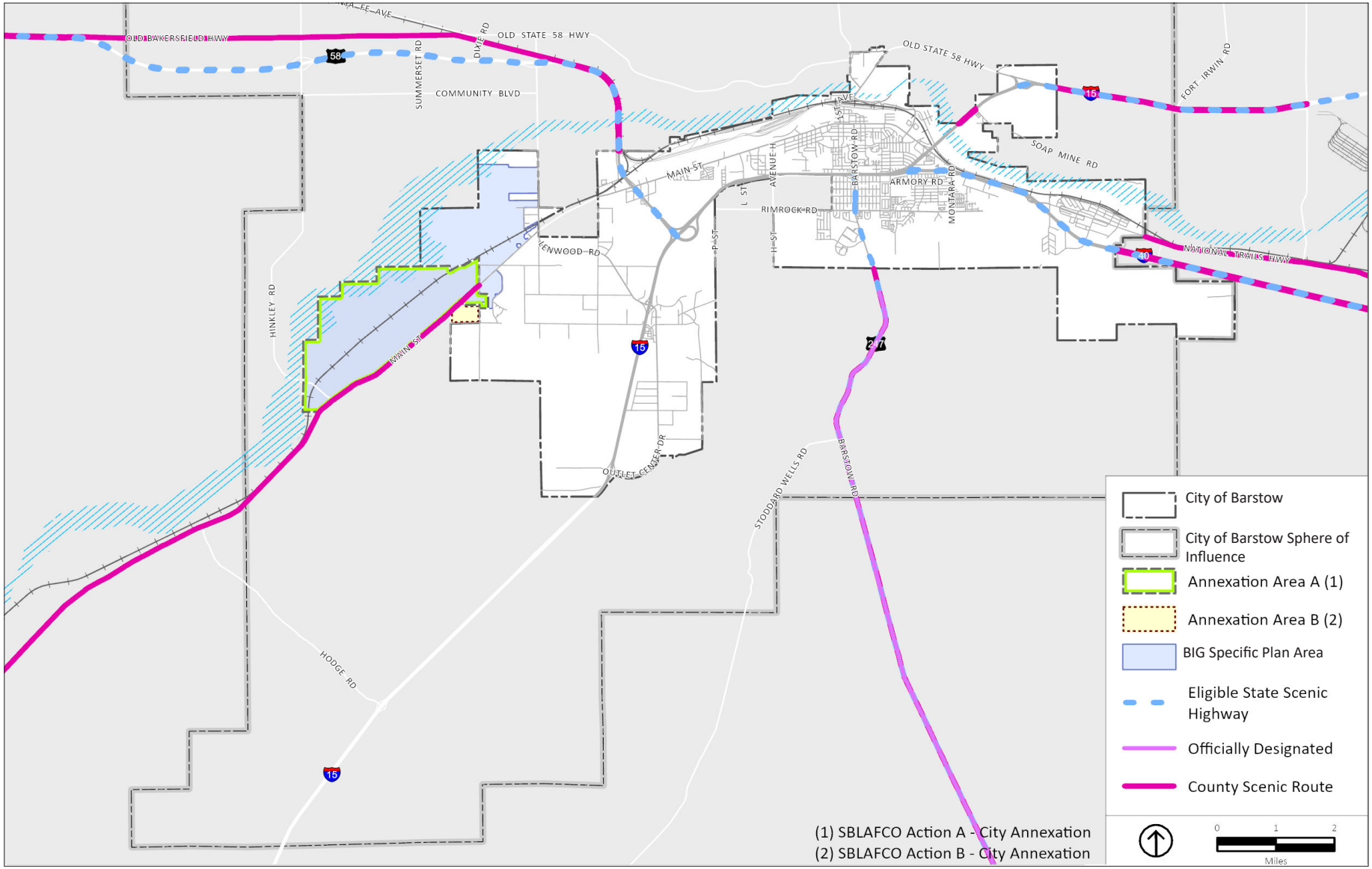
Barstow International Gateway

Visual Character

The BIG aesthetics study area is surrounded by primarily vacant undeveloped land with sparse rural residential and commercial uses to the south, east, and west. Surrounding uses include:

- **North**—Vacant undeveloped land, including the Mojave River is to the north. There are residential and commercial uses north of the existing BNSF tracks.
- **South**—Primarily vacant undeveloped land is to the south. Some low-density residential uses are south of Main Street and west of Lenwood Road. Low- and medium-density residential uses are east of Lenwood Road.
- **East**—Residential and commercial uses are to the east, north and south of the existing tracks, including along Main Street. SR-58 and the existing Barstow classification yard are also to the east.
- **West**—Vacant undeveloped land, including the Mojave River is to the west.

[1] The National Scenic Byways Program is a voluntary, community-based program administered through the Federal Highway Administration (FHWA) to recognize, protect, and promote America's most outstanding roads. Through their state departments of transportation, communities can apply for designation as a State or National Scenic Byway (Scenic America 2023).



Source:
Kimley-Horn, 2025.

Figure 5.1-4
Scenic Routes and Byways - Proposed General Plan

Prominent visual resources within the BIG aesthetics study area include the natural desert terrain of the Mojave Desert, the Mojave River, and existing development and vegetation which can be viewed from Main Street. This segment of Main Street is identified as a "Designated Scenic Resource," for its National Scenic Byway designation under the National Scenic Byways Program and Route 66 Byway designation under the State Scenic Highways Program. Some BIG off-site improvements include or are adjacent to a designated portion of Main Street. The proposed solar farm area would be south of the intersection of Main Street at Country Club Drive.

The BIG Specific Plan area is generally flat and gradually slopes north to the Mojave River. BIG's off-site improvement areas are generally within existing BNSF rail and City/County street rights-of-way, except for an existing stormwater channel (i.e., Lenwood Channel) and an existing Southern California Edison (SCE) substation (Tortilla Substation). The BIG Specific Plan area is primarily vacant undeveloped land, which is traversed by an existing BNSF mainline, and which contains scattered residential, commercial, and industrial land uses. This area is mostly devoid of tall vegetation and trees, with structures and other elements of the built environment scattered throughout.

Light and Glare

Light and glare within BIG's footprint are typical of that found in rural environments. Sources of light and glare are minimal and include sparse commercial and residential development located north of Main Street and rural residential communities located south of Main Street, as well as scattered rural residential uses, and vehicle headlights and streetlights that are present throughout the area. Main Street separates BIG and rural development to the south, and Main Street itself is a source of light/glare from the automobiles and associated headlights/taillights. Light and glare from Main Street already influence the environment for viewers south of Main Street.

5.1.5 IMPACT THRESHOLDS AND SIGNIFICANCE CRITERIA

State CEQA Guidelines **Appendix G: Environmental Checklist Form** includes questions concerning aesthetics. The issues presented in the Environmental Checklist Form have been used to formulate thresholds of significance in this section. Accordingly, the Project would have a significant effect concerning aesthetics if it would:

- **Impact 5.1-1**: Have a substantial adverse effect on a scenic vista.
- **Impact 5.1-2**: Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- **Impact 5.1-3**: 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.
- **Impact 5.1-4**: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

For BIG, visual changes (**Impact 5.1-3: BIG**) and the sensitivity of people who view the affected landscape determine the level and degree of BIG's impact. For BIG, the level of impact was determined by evaluating visual character changes, as represented by the visual simulations at the key viewpoints, according to the following:

- If visual character would change from one qualitative category to another (for example, from low sensitivity to moderate or higher sensitivity) in an area with viewers of low or moderate-low sensitivity, the visual character change would be considered a significant impact.
- If visual character would change from one qualitative category to another in an area with viewers of moderate, moderate-low, or low sensitivity, the visual character change would be considered a less than significant impact.
- If visual character would not change from one category to another, there would be no impact.

5.1.6 PROJECT IMPACTS AND MITIGATION MEASURES

Applicable Proposed General Plan Policies

The proposed General Plan goals and policies relevant to aesthetics are listed below.

Land Use Element

- **Policy LU-1.1 Land use compatibility**. Require that new development be located, buffered, and designed to avoid or reduce (to an acceptable level), negative impacts on existing conforming uses and adjacent neighborhoods. Require that new residential development be located, buffered, and designed so as to not hinder the economic viability and continuity of areas planned for nonresidential uses. [EJ-P/AQ]
- **Policy LU-1.2 Land Use Map consistency.** Proposed development that is consistent with the Land Use Map (i.e., it does not require a change in Land Use Designation), to be generally compatible and consistent with surrounding land uses. Additional site, building, and landscape design treatment, per other policies in the General Plan and development standards in the Barstow Code, may be required to further enhance compatibility with surrounding land uses.
- **Policy LU-1.3 Military coordination on land use and operations**. Coordinate with Marine Corps Logistics Base Barstow to ensure compatible land uses in areas where military operations could affect public health and safety, or where civilian activities could have an impact on current or future military operations.
- **Policy LU-1.4 Nonresidential west of 15/58.** Plan and prioritize undeveloped areas west of Highway 58 and Interstate 15 for non-residential uses to promote land use compatibility, protect and enhance residential neighborhoods, and maintain the viability of commercial and industrial businesses for the community's present and future economic viability. [EJ-P/AQ]
- **Policy LU-1.5 Industrial amendments.** Prohibit amendments to the Land Use Map for Industrial within Central Barstow, which is where the vast majority of Barstow residents live, shop, recreate, worship, and go to school. Permit amendments to the Land Use Map for General Industrial within

500 feet of the Lenwood community only when associated with a specific plan that includes appropriate buffering. [EJ-P/AQ]

- **Policy LU-1.6 Sphere of influence**. Coordinate with the County to ensure that any future development that is approved by the County in the City's sphere of influence (SOI) is compatible with existing development in Barstow's incorporated boundaries, planned land uses as identified in the City's General Plan, adopted pre-zoning and specific plans that are within the City's SOI, and planned roadway, utility, and other infrastructure.
- **Policy LU-2.1 Balanced mix of land uses**. Plan for and maintain a balanced mix of high quality land uses to ensure a range of residential options, fiscal sustainability, and convenient access to shops, restaurants, services, and well-paid jobs.
- **Policy LU-4.1 Design and maintenance**. Enhance the sense of identity and increase the feeling of pride among residents, business owners, employees, and visitors by encouraging excellent physical design and continual property maintenance and improvements.

Open Space and Conservation Element

- **Policy OSC-2.2 Residential clustering**. Encourage new residential development to cluster housing units in order to reduce the consumption of undeveloped land, maximize open space, preserve natural and scenic resources, conform to natural topography/grade, and/or reduce exposure of structures to natural hazards.
- **Policy OSC-7.1 Enhanced public realm**. Develop and maintain enhanced xeriscaping, landscaping, streetscapes, and signage at city gateways, along key corridors, and in and around historical assets, landmarks, public open spaces, and community gathering areas.
- **Policy OSC-7.6 Screening**. Require new industrial and commercial development to screen truck loading, outdoor storage, and large expanses of parking from public view and adjacent properties designated for residential use through site design, attractive and resilient landscaping, and/or well-designed physical barriers along property boundaries. Encourage and facilitate the installation of similar screening for existing industrial and commercial uses. Allow new development regulated by a specific plan to create customized screening standards and strategies appropriate for the existing and planned context.

Impact 5.1-1 Would the Project have a substantial adverse effect on a scenic vista?

Proposed General Plan

Construction and Operations

As previously described, a scenic vista is an area that is designated, signposted, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Scenic vistas usually provide expansive, elevated views. Neither the CWP nor the 2015 General Plan designate any scenic vistas in or near the proposed General Plan area. Because there

are no scenic vistas in the proposed General Plan area, the proposed General Plan would not have an adverse effect on a scenic vista. Therefore, no impact would occur, and no mitigation is required.

Impact 5.1-1: General Plan: Level of Significance Before Mitigation: No Impact.

Impact 5.1-1: General Plan: Mitigation Measures: No mitigation required.

Impact 5.1-1: General Plan: Level of Significance After Mitigation: No impact would occur.

Barstow International Gateway

Construction and Operations

As previously noted, a scenic vista is an area that is designated, signposted, and accessible to the public for the express purposes of viewing and sightseeing. Neither the CWP nor the proposed General Plan designate any scenic vistas that involve or are near the BIG Aesthetics study area, including the three identified landscape units. Because there are no scenic vistas in the BIG Aesthetics study area, BIG would not have an adverse effect on a scenic vista. Therefore, no impact would occur, and no mitigation is required.

Impact 5.1-1: BIG: Level of Significance Before Mitigation: No Impact.

Impact 5.1-1: BIG: Mitigation Measures: No mitigation required.

Impact 5.1-1: BIG: Level of Significance After Mitigation: No impact would occur.

Impact 5.1-2	***Would the Project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

Proposed General Plan

There are no officially designated State Scenic Highways in the City or SOI; the nearest officially designated State Scenic Highway is SR-2, approximately 40 miles southwest of the SOI. However, SR-247, SR-58, I-40, and I-15 are designated as Eligible State Scenic Highways. If a highway is listed as eligible for official designation, it is also part of the Scenic Highway System, and care must be taken to preserve its eligible status (Caltrans, 2025b). Route 66 is designated as a National Scenic Byway (FHWA, 2022). Although portions of I-40 overlap with Route 66, the official National Scenic Byway designation from Barstow to Needles applies to Route 66, not to I-40. Portions of Route 66, SR-247, SR-58, SR-15, and SR-40 are designated as County Scenic Routes. Eligible State Scenic Highways, designated National Scenic Byways, and County Scenic Routes within the proposed General Plan area; see **Figure 5.1-4: Scenic Routes and Byways – Proposed General Plan**).

The California segment of Route 66 from Needles to Barstow, through the Mojave Desert, is denoted as a notable section of Route 66 due to its inclusion of unique roadway features, identified historical sites, attractions, and views that provide a setting for the travel experience. Route 66 that traverses the

proposed General Plan area is listed on the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) and, therefore, is considered a "historical resource" under CEQA and "historic property" under the National Historic Preservation Act (NHPA) (see **Section 5.5: Cultural Resources** for further discussion regarding Route 66). However, the integrity of the alignment that traverses the proposed General Plan area varies, and some segments are considered lacking. For example, some areas along Route 66 have been redeveloped/upgraded and no longer convey Route 66's original historic significance. Similarly, some areas have no associated contributing elements that would make those portions significant. Instead, they are bordered by vacant lands lacking any historical signage or Main Street elements that make the road significant. In addition, there are segments within the greater Route 66 alignment that are bordered by modern development and/or have been realigned or otherwise changed and, as such, lack integrity sufficient to convey the resource's significance.

The proposed General Plan would allow for development of currently undeveloped parcels, underutilized parcels, and redevelopment of parcels, as well as the redesignation of parcels within the City, including along the proposed General Plan area's eligible State Scenic Highways, designated National Scenic Byway (i.e., Route 66), and County Scenic Routes. Scenic resources such as trees, rock outcroppings, and historic buildings may be present along these routes where future development under the proposed General Plan would occur. However, implementation of the General Plan does not propose changes to the roadway network associated with the eligible and designated roadways. For example, the proposed General Plan does not identify the redesignation of roadways, which could require the widening of roadways, resulting in the loss of trees, rock outcroppings, and/or historic buildings.

While new development, redevelopment, and redesignation of land within the City under the proposed General Plan could occur along the proposed General Plan area's eligible State Scenic Highways, designated National Scenic Byway (i.e., Route 66), and County Scenic Routes, future development would be required to comply with Barstow Code design guidelines and development standards, such as height and setback requirements, which are intended to preclude scenic quality/aesthetics impacts along the routes and the eligibility status of a scenic highway. Additionally, the City has specific plans which provide standards for future development. Future development along Route 66 in the City would be required to comply with the *Route 66 Business Corridor/Downtown Business and Cultural District Specific Plan*, which identifies goals, policies, and strategies to protect scenic resources along Route 66. For example, Policy 2.D of the Specific Plan calls for building upon the area's historical and authentic architecture and signage, and Policy 3.B implements and enforces land use signage and site design guidelines described in Specific Plan Chapter 5 (Barstow, 2016).

The Route 66 Corridor Management Plan established policy and programmatic actions for sustaining the Route 66 corridor as a National Scenic Byway; two policies have been established to protect scenic resources along the corridor. One policy involves seeking funding for property owners to preserve and adaptively reuse historic properties. The second policy is to develop a program and seek external funding to provide technical assistance and small grants to property owners in support of preservation planning, preservation treatment, property clean up and beautification, and where appropriate, interpretive waysides (BLM, 2015). As mentioned in the Route 66 Corridor Management Plan, the City is responsible for maintaining the road and right-of-way and guiding land use within its incorporated boundary.

Therefore, future development under the proposed General Plan would need to adhere to Route 66 Corridor Management Plan policies to effectively avoid or lessen impacts to scenic resources along Route 66.

The proposed General Plan includes policies to protect scenic resources, such as Policy OSC-7.1, which calls for enhanced xeriscaping, landscaping, streetscapes, and signage at City gateways, key corridors, and in and around historical assets, landmarks, public open spaces, and community gathering areas to be developed and maintained. Policy OSC-7.3 calls for promoting imaginative and distinctive features that project a positive image and community character at City gateways. Given that Route 66 is a gateway to the City at its eastern and western boundaries, policies that promote preservation and enhancement at gateways would preserve and enhance Route 66. Adherence to the proposed policies maintains the scenic value of Route 66 and reinforces the aesthetic role of the route as a scenic highway of the City.

With the implementation of existing local regulations, as well as the proposed General Plan policies, such as Policy OSC-7.1 and Policy OSC-7.3, the proposed General Plan would result in less than significant impacts to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings along the proposed General Plan area's eligible State Scenic Highways, designated National Scenic Byway (i.e., Route 66), and County Scenic Routes.

Impact 5.1-2: General Plan: Level of Significance Before Mitigation: Less than Significant Impact.

Impact 5.1-2: General Plan: Mitigation Measures: No mitigation required.

Impact 5.1-2: General Plan: Level of Significance After Mitigation: No significant impact would occur.

Barstow International Gateway

Construction and Operations

Approximately 9.75 miles of Route 66 within the BIG aesthetics study area is listed on the NRHP and CRHR and, therefore, is considered a "historical resource" under CEQA and "historic property" under NHPA. However, there are segments within the Route 66 alignment that are bordered by modern development and/or have been realigned or otherwise changed and, as such, lack integrity sufficient to convey the resource's significance. While the segment of Route 66 that resides within the BIG aesthetics study area has retained its original alignment location, the portion within the easternmost part of the BIG aesthetics study area has been heavily modified. While the central and westernmost portions of the segment within the BIG aesthetics study area have retained much of its locational integrity, it has undergone physical upgrades over time and is not particularly recognizable as Route 66 due to lack of period-significant businesses, landmarks, or signage/monumentation that connect the segment to the important events in history that make Route 66 significant. As such, BIG would not cause an adverse effect/impact to the significance of Route 66. Additionally, there are no notable trees or rock outcroppings within or near the BIG Specific Plan area. Therefore, BIG would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway, and a less than significant impact would occur.

Impact 5.1-2: BIG: Level of Significance Before Mitigation: Less than Significant Impact.

Impact 5.1-2: BIG Mitigation Measures: No mitigation required.

Impact 5.1-2: BIG Level of Significance After Mitigation: No significant impact would occur.

Impact 5.1-3	***Would the Project, 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 a 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?***

Proposed General Plan

Construction and Operations

Public Resources Code Section 21071 defines "urbanized area" for an incorporated city (such as Barstow) as a city that either has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. Barstow has a population of 24,867 persons and the proposed General Plan projects 43,618 persons in 2048; see **Table 3-5** in **Section 3.0: Project Description**. There are no incorporated cities contiguous to Barstow; therefore, the City is in a non-urbanized area; see **Figure 3-1: Regional Vicinity Map**. Implementation of the proposed General Plan would not result in Barstow changing from a non-urbanized area to an urbanized area. Therefore, the significance criteria applicable to the proposed General Plan would be whether the Project would "substantially degrade the existing visual character or quality of public views of the site and its surroundings."

The visual character of Barstow includes the desert and mountain landscapes, as well as rural and suburban neighborhoods. Future development in accordance with the proposed General Plan would allow for new development of currently undeveloped parcels, intensification of already developed areas, and changes in land uses within the proposed General Plan area.

While implementation of the proposed General Plan would increase the potential for development throughout the proposed General Plan area, with the exception of BIG, the visual appearance and character of much of the proposed General Plan area are not anticipated to change substantially compared to existing development. However, areas designated for substantial new development, such as the BIG Specific Plan area, would experience notable changes in visual character and intensity, introducing more industrialized forms of development (see discussion below regarding BIG impacts). As set forth in **Section 3.0: Project Description**, and as applicable to the topic of Aesthetics, the proposed changes to the General Plan Land Use Element are intended to:

- Focus future community development (e.g., housing, commercial, or civic) within Central Barstow to maximize the efficiency of new and updated public services and facilities;
- Discourage new housing west of I-15 and discourage new industrial uses in Central Barstow to avoid future land use compatibility conflicts;

- Encourage a wider range of housing densities east of I-15, including introducing a new High Density Residential designation that allows up to 30 units per acre; and
- Create a Business Park designation to accommodate future job growth with low-impact industrial and office land uses

During the 25-year planning horizon of the proposed General Plan, inclusive of BIG, the proposed General Plan area could potentially result in a growth of 6,608 dwelling units and 15,341,198 square feet of nonresidential uses. The proposed General Plan would allow for more different types of development than the 2015 General Plan. Changes to the potential development pattern include increasing density and intensity that would likely place buildings closer together and allow more housing per acre than currently exists in the City. This would change the existing setting of the proposed General Plan area making parts of the City more "urban." Therefore, future development under the proposed General Plan would introduce more urban structures and infrastructure, resulting in a permanent change to the visual character of the General Plan area and its surroundings. However, the proposed General Plan's goal is to retain the City's current character while allowing for beneficial growth and development to occur in the appropriate areas. Implementation of the proposed General Plan goals and policies are aimed at enhancing vitality, context, form, and function, as well as seeking to establish and/or retain the proposed General Plan area's sense of place.

Implementation of the proposed General Plan policies would preserve the existing visual character and quality of public views of the City and its surroundings. For example, Policy LU-4.1 calls for enhancing a sense of identity and pride; Policy OSC-7.6 would require industrial and commercial development to screen certain uses from public view and adjacent properties designated for residential use through site design, attractive and resilient landscaping, and/or well-designed physical barriers along property boundaries; and, Policy OSC-2.2 encourages clustering of residential uses to preserve natural and scenic resources, maximize open space, and conform development to natural topography/grade. While land use policies are generally focused on functional land use integration, these use policies also contribute to maintaining and enhancing the visual and aesthetic quality of the community. Incorporating and enforcing land use policies to address aesthetic impacts helps to create a more cohesive and visually consistent environment.

In addition, future development under the proposed General Plan would be required to comply with existing City regulations that maintain the City's character, such as the City's Development Standards and Design Guidelines found in Barstow Code Chapter 19.08 – Design Guidelines, Section 19.06.030 – Fences. Hedges, and Walls, and Section 19.06. 060 – Signs. Moreover, future development projects would be subject to review by the appropriate staff, commissions, committees, or the City Council. As mentioned in Barstow Code Section 19.08.030, Applicability, design review is required for all new residential, commercial, and industrial projects that require permits; some guidelines may not be relevant depending on the project's size or scale. The City's Community Development Department would determine the applicability of specific provisions, and some projects such as minor alterations to a land use, signage, or building facade alterations may, at the discretion of the Community Development Department, be reviewed and approved administratively for consistency with the design guidelines.

While all future projects would be subject to development review, compliance with applicable Barstow Code Design Guidelines and specific plan guidance, and consistency with General Plan policies, such as Policy LU-1.1 which would require new development to be compatible with existing development, and Policy LU-2.1 which promotes planning for and maintaining a balanced mix of high-quality land uses, which in turn would minimize aesthetic-related impacts, these regulations tend to affect single development or smaller scale projects than the City as a whole. The regulations are intended to result in development that is similar to the existing setting, while also resulting in a more efficient use of land. By creating a more compact development pattern, the City would use less land to accommodate the same amount of development resulting in less conversion of open space and potentially less lighting.

While it is recognized that the intent of the City's review process, design guidelines, and the proposed General Plan policies would be to reduce or preclude potential aesthetic impacts from the implementation of future land uses associated with the proposed General Plan, at a programmatic level there is the potential for projects, including infrastructure improvements to have significant changes to the visual character of the proposed General Plan area. In the following analysis for the site-specific development of BIG, which is a part of the Project, it is noted that BIG and other reasonably foreseeable future development under the proposed General Plan would introduce more urban structures and infrastructure, resulting in a permanent change to the visual character of the site and its surroundings. As such, BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the visual change in the character of the proposed General Plan area is a significant and unavoidable impact.

Impact 5.1-3: General Plan: Level of Significance Before Mitigation: Potentially Significant Impact.

Impact 5.1-3: General Plan: Mitigation Measures: See **MM BIG AES-1** below.

Impact 5.1-3: General Plan: Level of Significance After Mitigation: Significant and Unavoidable Impact.

Barstow International Gateway

BIG is surrounded by primarily vacant undeveloped land with sparse rural residential uses in the surrounding areas. Therefore, given the rural setting, BIG would be considered to have a significant effect on the environment if it would 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 a publicly accessible vantage point). BIG is not in an urbanized area, and therefore, BIG's impacts under this threshold would be examined exclusively under the portion of this threshold that applies to "non-urbanized areas."

The BIG Specific Plan would include a rail yard with an intermodal facility, a block swap yard, and ancillary rail areas, and a solar farm that would include solar panels, a battery electric storage system (BESS) and an electrical substation.

These improvements would adhere to the Specific Plan's development regulations found in BIG Specific Plan Chapter 3: Development Regulations and design guidelines found in BIG Specific Plan Chapter 4: Design Guidelines, which are designed to minimize potential visual impacts. These regulations/guidelines address building height restrictions, lighting standards, screening, and improved landscaping.

BIG Specific Plan Chapter 3: Development Regulations includes the following regulations that minimize visual impacts:

Rail Yard Overlay and Private Solar Power Utility

- Walls and fencing shall be provided to safeguard the general public and prevent trespassers from entering BNSF-owned property, right-of-way, and accessing the track or other ancillary rail structures.
- All fencing shall be designed to secure the property and prevent public access. Chain link fence is predominately used within these uses; however, additional fence types may be used in locations where trespassers may cut a chain link fence, or where there is greater interface with the public. Fencing is not intended to screen Rail Yard Overlay and Private Solar Power Utility uses from the public.

Transload Warehouse Center

- Building heights may exceed the maximum with the appropriate site conditions as approved by the Community Development Director or their designee;
- To enhance visual interest for travelers along Hinkley Road and Lenwood Road, building planes visible from public rights-of-way shall be articulated by variations in exterior design treatments such as material changes, horizontal projections and recesses, scoring and similar features. Such design treatments shall be incorporated every 100 feet or where practical as it aligns with panel construction;
- A buffer from loading docks shall be implemented where Transload Warehouse Center operations occur adjacent to existing residential uses. Buffer design shall include one or a combination of the following: fencing, walls, berms and/or slopes;
- Equipment, trailers, and loading docks that are visible from public right- of-way shall be screened with one or a combination of walls or fences that have a minimum height of eight feet to the extent practical.

Section 3.5 of the BIG Specific Plan provides additional information on wall and fencing standards, as well as lighting and signage requirements.

Implementation of these regulations would minimize potential visual impacts.

BIG Specific Plan Chapter 4: Design Guidelines includes the following general guidelines that minimize visual impacts:

- The BIG Specific Plan will limit landscaping to xeriscape, including rock mulch, decomposed granite, Class II base, ballast, concrete, and wood treatments to create elements of design in streetscape parkways and BIG entry. Any plants incorporated will be native or drought-tolerant species in an attempt to avoid water usage and concern of introduction of an invasive species.
- Views of rail operations areas from the public right-of-way on Main Street will be screened with fencing as described in the Development Regulations to the extent practical.

- Screen fencing should not be located in the line of sight for drivers entering or leaving service areas.
- Trash enclosures should be screened by a solid wall a minimum of six feet in height with a solid latching gate with landscaped buffers and located so that doors do not interfere with landscaping and pedestrian and vehicular circulation. The enclosure's color should complement adjacent buildings and xeriscaping.
- Walls and fencing should be provided along the BIG Specific Plan area's perimeter and on all sides of the Rail Yard Overlay and Private Utility inclusive of chain link fencing with barbed wire for security, as warranted. Within the TWC, walls, and fencing should be determined by the individual user following site design features.
- Lighting will utilize high-efficiency technologies, dark-sky cutoffs, strategic orientation to limit light trespassing into adjacent properties and open space areas, and appropriate shielding or recesses to limit glare and reflections.

Implementation of these regulations would minimize potential visual impacts.

Construction

Substantial construction activity would be required for BIG over approximately 34 months to develop a rail yard with an intermodal facility and block swap yard, a transload warehouse center, and off-site rail improvements (east and west leads) and non-rail improvements (i.e., solar farm, stormwater drainage, utility, and circulation and roadway). Consequently, visual disturbances associated with BIG construction would occur for the duration of construction, and be more noticeable to travelers, including along Main Street, Lenwood Road, and Hinkley Road. The presence of construction materials, equipment, on-site workers, and other associated improvements would temporarily degrade the existing visual character of public views of BIG's footprint, as experienced from these roadways.

As evaluated in further detail below under operations, the presence of BIG would degrade the existing visual character of public views of BIG's footprint as experienced from these roadways (see **Figure 5.1-5: Existing View of Mojave Desert from Main Street (facing west)** through **Figure 5.1-18: Visual Simulation 7: BIG Operations from Main Street (facing west)**). Existing conditions would be visually impacted upon by heavy equipment, staging, and fencing during BIG construction. BIG construction equipment visible at key viewpoints depicted in visual simulations (VS) VS-1 through VS-7 would cause a potentially significant change to the existing environment by obstructing the existing environment. Construction would occur over approximately 34 months and would cease upon completion of BIG. To lessen the adverse effects on the degradation of visual character, BIG would implement **MM BIG AES-1**. This mitigation measure requires that contractors develop a Construction Lighting and Screening Plan to ensure visual screening would be erected during construction, as appropriate to minimize visual intrusions (and ensure safety and security). However, even with **MM BIG AES-1** incorporated, construction activities associated with the implementation of BIG would substantially alter the visual character of public views of the existing environment.

Operations

A rail yard, transload warehouse center, and solar farm would operate within the BIG Specific Plan, altering the existing visual character of public views of the site and its surroundings. The northern boundary of BIG (between the transload warehouse center and the Mojave River) would include approximately 680 acres that would remain ungraded ("Mojave River buffer"), of which a portion would be placed under a conservation easement. This designated area would create a buffer between BIG Specific Plan area development and the Mojave River, which runs along the northern edge of BIG. No buildings would be permitted within this buffer area although drainage, utilities, and roadways would be permitted as needed. Access to this area would be limited to maintenance.

Additionally, as discussed in **Section 5.11: Land Use and Planning**, BIG proposes off-site rail improvements and off-site non-rail improvements. BIG's off-site non-rail improvements would not impact known visual resources, as none are present within their respective footprints or nearby. Additionally, these off-site improvements would be below ground. Therefore, BIG's off-site improvements would not substantially alter views of scenic resources. A less than significant impact would occur for off-site improvements.

The impact on visual character of public views as experienced at each visual simulation is summarized below. Concerning BIG's off-site rail and its non-rail improvements (with the exception of the solar farm), visual simulations were not prepared. It was determined that there would be limited potential for visual change as these improvements would located underground or be at-grade improvements. The discussion under each visual simulation analyzes BIG operational impacts on natural harmony, cultural order, and project coherence. At each visual simulation location, changes in natural harmony, cultural order, or project coherence and viewer sensitivity may result in a degradation to the existing visual character of public views of BIG's footprint and its surroundings from Main Street, Lenwood Road, and Hinkley Road. If the visual character of a location represented in the visual simulation changes, an overall change in visual character for the entire BIG footprint would be expected.

Visual Simulation 1 – Rail Yard Operations from Main Street Facing West

As depicted in **Figure 5.1-5: Existing View of Mojave Desert from Main Street (facing west)**, the existing visual character and quality of VS-1 is primarily vacant land with scattered residential and commercial uses visible from neighbors (neighbor viewers) and persons in vehicles (traveler viewer). VS-1 is in the approximately 3.0-mile easterly extent of BIG's footprint frontage along Main Street where it is designated as a National Scenic Byway.

As depicted in **Figure 5.1-6: Visual Simulation 1: Rail Yard Operations from Main Street (facing west)**, BIG would alter the existing visual environment as seen from Main Street facing west toward BIG's footprint by building a rail yard parallel and adjacent to Main Street and a transload warehouse center. The rail yard and transload warehouse center would be visible from Main Street and would include other built elements required for BIG operations including track lighting. Additionally, off-site rail improvements would include lead track extensions and off-site non-rail improvements would include roadway improvements. The introduction of the rail yard and transload warehouse center into a primarily vacant area with scattered residential and commercial neighbors have the potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings.



Source: Kimley-Horn, 2025.

Figure 5.1-5
Existing View of Mojave Desert from Main Street (Facing West)



Source: Kimley-Horn, 2025.

Figure 5.1-6
Visual Simulation 1: Rail Yard Operations from Main Street (Facing West)

Most viewers represented by VS-1 are the sparse residential and commercial neighbors bordering Main Street and motorists on Main Street. For VS-1, the existing natural harmony is high and existing cultural order is low. Existing neighbor and traveler viewer groups have a moderate viewer sensitivity. Viewer sensitivity for neighbors is moderate, as the proximity to the Mojave Desert views as experienced by the neighbor viewer groups is high; the extent, or number of viewers, is moderate; duration, or length of visibility is high; attention or change in scene is low; focus, or visual elements on which to focus is low; and protection is high.

The motoring traveler viewer groups on this segment of Main Street are generally assumed to have moderate levels of sensitivity due to the National Scenic Byway designation of Main Street/Route 66. Although traveler viewer groups are focused on driving and therefore have a lower viewer sensitivity compared to neighbor viewer groups, travelers along this segment of the roadway have scenic views of the Mojave Desert that would be altered by BIG. Viewer sensitivity for travelers is moderate, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility, is moderate-high; attention or change in scene, is low; focus, or visual elements to focus on, is moderate-low; and protection is high.

With the introduction of BIG at VS-1, the visual character impact for views from neighboring areas would increase from moderate to moderate-high. The change from existing panoramic views of the Mojave Desert to BIG components would cause proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be moderate; duration, or length of visibility, would be high; attention or change in scene would be high; focus, or visual elements to focus on would be high; and protection would be high. Viewer sensitivity for travelers would increase from moderate to high. Existing views of the Mojave Desert changing from panoramic views to BIG components would result in a moderate proximity of the views to the traveler viewer groups; the extent, or number of viewers, would be moderate-high; duration, or length of visibility, would be moderate-high; attention, or change in scene, would be moderate-high; focus, or visual elements to focus on would be moderate; and protection would be high.

Additionally, natural harmony would decrease from high to low due to the replacement of natural landscape with the introduction of BIG. Cultural order would increase from low to moderate with BIG facilities appearing uniform and adding built resources to the area. Project coherence would alter the existing environment. The introduction of a rail yard and transload warehouse center would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment. Therefore, as a visual change of one or more environmental categories would occur and the changes would be viewed by viewers with moderate-high viewer sensitivity, the change would be a significant impact.

Visual Simulation 2 – Intermodal Facility Operations From Main Street Facing East

As depicted in **Figure 5.1-7: Existing View of Mojave Desert from Main Street (facing east)**, the existing visual character and quality of VS-2 is primarily vacant land with scattered neighbor and traveler viewer groups. VS-2 is in the approximately 3.0 mile easterly extent of Main Street that is designated as a National Scenic Byway.

As depicted in **Figure 5.1-8: Visual Simulation 2: Intermodal Facility Operations from Main Street (facing east)**, BIG would alter the existing visual environment as seen from Main Street facing east by introducing the rail yard. The introduction of the rail yard would alter the existing visual character or quality of public views of the site and its surroundings. The majority of viewers represented by VS-2 are the sparse residential and commercial neighbors adjacent to and parallel with Main Street, as well as motorists traveling on Main Street (traveler viewers).

For VS-2, existing natural harmony is high and existing cultural order is low. Existing neighbor and traveler viewer groups have moderate-low viewer sensitivity as the proximity of the Mojave Desert views to the neighbor viewer groups is moderate; the extent, or number of viewers, is moderate-low; duration, or length of visibility, is moderate; attention or change in scene is low; focus, or visual elements to focus on is moderate-low; and protection is high. The commuting, touring, shipping, and motoring traveler viewer groups on this segment of Main Street are generally assumed to have scenic views of the Mojave Desert that would be altered by BIG. Viewer sensitivity for travelers is moderate, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility, is moderate-high; attention or change in scene is low; focus, or visual elements to focus on is moderate-low; and protection is high.

Viewer sensitivity for neighbors would increase from moderate-low to moderate. The change from existing panoramic views of the Mojave Desert to the intermodal facility buildings would cause proximity of the views to the neighbor viewer groups to be moderate-high; the extent, or number of viewers, would be moderate; duration, or length of visibility would be moderate; attention or change in scene would be moderate-high; focus, or visual elements to focus on would be moderate; and protection is high. Viewer sensitivity for travelers would remain unchanged from moderate. Existing views of the Mojave Desert changing from panoramic views to the intermodal facility buildings would cause proximity of the views to the traveler viewer groups to be moderate; the extent, or number of viewers, would be moderate-low; duration, or length of visibility would be moderate-low; attention or change in scene would be moderate; focus, or visual elements to focus on would be moderate; and protection would be high.

Additionally, natural harmony would decrease from high to moderate-low through the replacement of natural landscape with the rail yard operations. Cultural order would increase from low to moderate-low with rail yard operations appearing uniform and adding built resources to the area. Project coherence would alter the existing environment, becoming incompatible with the introduction of the rail yard operations and it would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment. Due to a visual change of one environmental category that would occur in an area with people who currently have moderate viewer sensitivity to high viewer sensitivity in the future with BIG, the visual quality impact would be considered to be a significant impact.



Source: Kimley-Horn, 2025.

Figure 5.1-7
Existing View of Mojave Desert from Main Street (Facing East)



Source: Kimley-Horn, 2025.

Figure 5.1-8
Visual Simulation 2: Intermodal Facility Operations from Main Street (Facing East)

Visual Simulation 3 – Transload Warehousing Center From Lenwood Road Facing Southwest toward Mountains

As depicted in **Figure 5.1-9: Existing View of Mojave Desert from Lenwood Road (facing southwest toward mountains)**, the existing visual character and quality of VS-3 is partially developed with existing commercial and residential development, which is along Lenwood Road.

As depicted in **Figure 5.1-10: Visual Simulation 3: Transload Warehousing Center from Lenwood Road (facing southwest toward mountains)**, BIG would alter the existing visual environment as seen from Lenwood Road facing southwest toward distant mountains by introducing a transload warehouse center into an area that is partially developed with commercial and residential uses. The majority of viewers represented by VS-3 are the residential, commercial, and agricultural neighbors adjacent and parallel to Lenwood Road and travelers on Lenwood Road.

The existing natural harmony is moderate and existing cultural order is moderate-low. Existing neighbor and traveler viewer groups have moderate viewer sensitivity, as the proximity of the Mojave Desert views to the neighbor viewer groups is moderate-high; the extent, or number of viewers, is moderate; duration, or length of visibility, is high; attention, or change in scene, is moderate; focus, or visual elements to focus on is moderate-high; and protection is low. The traveler viewer groups on this segment of Lenwood Road are generally assumed to have low levels of sensitivity due to the speeds that they are traveling. Additionally, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-low; duration, or length of visibility, is low; attention, or change in scene, is low; focus, or visual elements to focus on, is low; and protection is low.

With the introduction of the transload warehouse center, viewer sensitivity for neighbors would increase from moderate-high to high. Existing views of the Mojave Desert changing from panoramic views to the transload warehouse center would cause proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be high; duration, or length of visibility, would be high; attention, or change in scene, would be high; focus, or visual elements to focus on, would be high; and protection would be low. Viewer sensitivity for travelers would increase from low to moderate-low. Existing views of the developed surrounding environment and partial views of Mojave Desert would change to views of the transload warehouse center that would cause proximity of the views to the traveler viewer groups to be moderate; the extent, or number of viewers, would be moderate-low; duration, or length of visibility, would be moderate-low; attention, or change in scene, would be moderate-low; focus, or visual elements to focus on, would be moderate-low; and protection would be low. Travelers on Lenwood Road are focused on driving and therefore would have a lower viewer sensitivity to the surrounding built-out environment.



Source: Kimley-Horn, 2025.

Figure 5.1-9
Existing View of Mojave Desert from Lenwood Road (Facing Southwest Towards Mountains)



Source: Kimley-Horn, 2025.

Figure 5.1-10
Visual Simulation 3: Transload Warehousing Center from Lenwood Road (Facing Southwest Toward Mountains)

Natural harmony would decrease from moderate to moderate-low due to the replacement of partial natural landscape views with the transload warehouse center. Cultural order would increase from moderate-low to moderate with the addition of the transload warehouse center appearing uniform and adding built resources to the surrounding built-out environment. BIG coherence would alter the existing environment; however, it would be compatible with the surrounding commercial development, and it would be coherent with the compositional harmony of the built environment. Therefore, due to a visual change of two environmental categories or more that would occur and the changes viewed by people who currently have high viewer sensitivity, the change would be a significant impact.

Visual Simulation 4 – BIG Operations From Hinkley Road at Community Boulevard Facing South-Southeast toward BIG

As depicted in **Figure 5.1-11: Existing View of Mojave Desert from Hinkley Road at Community Boulevard (facing south-southeast toward BIG)**, the existing visual character and quality of VS-4 is predominantly undeveloped open space. VS-4 is located outside of the BIG footprint. Land uses near this viewpoint are limited to scattered single-family residences with associated outbuildings and limited agricultural operations further to the east.

As depicted in **Figure 5.1-12: Visual Simulation 4: BIG Operations from Hinkley Road at Community Boulevard (facing south-southeast toward BIG)**, there are no views of BIG from this viewpoint. BIG would not alter the existing visual environment as seen from Hinkley Road facing south-southeast toward BIG due to the minimal visibility from this roadway and the distance to the proposed BIG operations. The introduction of BIG would not alter the existing visual character or quality of public views of the site or its surroundings. The majority of viewers represented by VS-4 are the residential uses adjacent and parallel to Hinkley Road and Community Boulevard and commuting, touring, shipping, and motoring travelers on Hinkley Road. For VS-4, the existing natural harmony is moderate-low and existing cultural order is moderate-low.

Existing neighbor and traveler viewer groups have low viewer sensitivity. Viewer sensitivity for neighbors is moderate-low, as the proximity of the Mojave Desert views to the neighbor viewer groups is moderate-high; the extent, or number of viewers, is moderate-high; duration, or length of visibility is moderate; attention, or change in scene, is low; focus, or visual elements to focus on, is low; and protection is low.

Motorists on this segment of Hinkley Road are generally assumed to have low levels of sensitivity due to the speeds that they are traveling. Viewer sensitivity for travelers is low, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-low; duration, or length of visibility, is low; attention or change in scene is low; focus, or visual elements to focus on, is low; and protection is low.

With the introduction of BIG at VS-4, viewer sensitivity for neighbors and travelers would remain unchanged due to the distance of BIG views from Hinkley Road. From this location, natural harmony, cultural order, and project coherence would remain unchanged. Therefore, visual quality would remain unchanged. Viewer exposure would remain unchanged. Based on the significance criteria set forth in this EIR, no visual change would occur and there would be no impact to visual quality.



Source: Kimley-Horn, 2025.

Figure 5.1-11
Existing View of Mojave Desert from Hinkley Road at Community Boulevard (Facing South Southeast Towards BIG)



Source: Kimley-Horn, 2025.

Figure 5.1-12

Visual Simulation 4: BIG Operations from Hinkley Road at Community Boulevard (Facing South-Southeast Toward BIG)

Visual Simulation 5 – Mojave Desert From Facing North-Northeast toward BIG

As depicted in **Figure 5.1-13: Existing View of Mojave Desert from Main Street (facing north-northeast toward BIG)**

, the existing visual character and quality of VS-5 is primarily vacant land with sparse residential, commercial, and agriculture neighbors and traveler viewer groups; VS-5 is on the southern extent of BIG's footprint on Main Street. As depicted in **Figure 5.1-14: Visual Simulation 5: Mojave Desert from Main Street (facing north-northeast toward BIG)**, BIG would alter the existing visual environment as seen from Main Street facing north-northeast toward BIG by constructing the rail yard adjacent to Main Street. The rail yard and transload warehouse center would be visible and would include other built elements required for operation of BIG including lighting and fencing. The introduction of the rail yard and transload warehouse center would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The existing natural harmony is high and existing cultural order is low. Existing neighbor and traveler viewer groups have moderate viewer sensitivity. Viewer sensitivity for neighbors is moderate, as the proximity of the Mojave Desert views to the neighbor viewer groups is high; the extent, or number of viewers is moderate; duration, or length of visibility, is high; attention or change in scene is low; focus, or visual elements to focus on, is low; and protection is low.

The traveler viewer groups on this segment of Main Street are generally assumed to have low levels of sensitivity due to the speeds that they are traveling. Motorists are focused on driving and therefore have a lower viewer sensitivity compared to neighbor viewer groups. Viewer sensitivity for travelers is moderate-low, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate; duration, or length of visibility, is moderate; attention, or change in scene, is low; focus, or visual elements to focus on, is low; and protection is low.

With the introduction of BIG at VS-5, viewer sensitivity for neighbors would increase from moderate to high. Existing views would change from a panoramic view of the Mojave Desert to views of a rail yard in the foreground and a transload warehouse center in the background. This would cause proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be high; duration, or length of visibility, would be high; attention, or change in scene, is high; focus, or visual elements to focus on, would be high; and protection is low. Viewer sensitivity for travelers would increase from moderate-low to moderate. The change from existing panoramic views of the Mojave Desert to the rail yard and transload warehouse center would cause proximity of the views to the traveler viewer groups to be moderate-high; the extent, or number of viewers would be moderate; duration, or length of visibility would be moderate-high; attention or change in scene is moderate; focus, or visual elements to focus on is moderate; and protection is low.



Source: Kimley-Horn, 2025.

Figure 5.1-13
Existing View of Mojave Desert from Main Street (Facing North-Northeast Towards BIG)



Source: Kimley-Horn, 2025.

Figure 5.1-14
Visual Simulation 5: Mojave Desert from Main Street (Facing North-Northeast Towards BIG)

Natural harmony would decrease from high to low through the replacement of natural landscape with a rail yard and transload warehouse center. Cultural order would increase from low to high with BIG infrastructure appearing uniform and adding built resources to the area. BIG coherence would increase by altering the existing environment; the rail yard and transload warehouse center are incompatible with the existing environment and would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment. Therefore, as a visual change of one or more categories would occur in an area that would change from an existing moderate viewer sensitivity level to a high viewer sensitivity level with incorporation of BIG, the visual quality impact is significant.

Visual Simulation 6 – BIG Operations from Main Street Facing West toward Mountains

As depicted in **Figure 5.1-15: Existing View of Mojave Desert from Main Street (facing west toward mountains)**, the existing visual character and quality of VS-6 is primarily vacant land with sparse residential and commercial neighbors and traveler viewer groups. As depicted in **Figure 5.1-16: Visual Simulation 6: BIG Operations from Main Street (facing west toward mountains)**, VS-6 is on Main Street. BIG would alter the existing visual environment as seen from Main Street facing west toward the distant mountains by constructing a transload warehouse center and rail yard adjacent to Main Street. The transload warehouse center and rail yard would be visible and would include other built elements required for operation of BIG including lighting and fencing. Because the existing visual character and quality of VS-6 is primarily vacant land with sparse residential and commercial neighbors near Main Street and the traveler viewer groups, the introduction of the transload warehouse center and rail yard would substantially degrade the existing visual character or quality of public views of the site and its surroundings. The existing natural harmony is high and existing cultural order is low.

The neighbor viewer groups are anticipated to have a moderate viewer sensitivity, as the proximity of the Mojave Desert views to the neighbor viewer groups is high; the extent, or number of viewers is moderate; duration, or length of visibility is high; attention or change in scene is low; focus, or visual elements to focus on is low; and protection is low. The traveler viewer groups on this segment of Main Street are generally assumed to have low levels of sensitivity due to the speed that they are traveling. Viewer sensitivity for motorists is low, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility, is moderate-high; attention or change in scene is low; focus, or visual elements to focus on, is moderate-low; and protection is low.

Viewer sensitivity for neighbors would increase from moderate to moderate-high. Existing views would change from panoramic views of the Mojave Desert to views of the transload warehouse center and rail yard, which would cause the proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be moderate; duration, or length of visibility would be high; attention or change in scene would be high; focus, or visual elements to focus on would be high; and protection is low. Viewer sensitivity for travelers would increase from low to moderate-low.



Source: Kimley-Horn, 2025.

Figure 5.1-15
Existing View of Mojave Desert from Main Street (Facing West Towards Mountains)



Source: Kimley-Horn, 2025.

Figure 5.1-16
Visual Simulation 6: BIG Operations from Main Street (Facing West Toward Mountains)

Existing views of the Mojave Desert changing from panoramic views to views of the transload warehouse center and rail yard would cause proximity of the views to the traveler viewer groups to be moderate-high; the extent, or number of viewers, would be moderate-high; duration, or length of visibility would be moderate-high; attention or change in scene would be moderate; focus, or visual elements to focus on would be moderate; and protection would be low.

Natural harmony would decrease from high to moderate-low through the replacement of natural landscape with the transload warehouse center and rail yard. Cultural order would increase from low to moderate with BIG infrastructure appearing neat and uniform and adding built resources to the area. BIG coherence would alter the existing environment, becoming incompatible with the introduction of the transload warehouse center, rail yard, and associated structures; it would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment. Therefore, as visual change of one or more categories would occur in an area that would change from moderate-high viewer sensitivity to high viewer sensitivity with incorporation of BIG, the visual quality impact is significant.

Visual Simulation 7 – BIG Operations From Main Street Facing West

As depicted in **Figure 5.1-17: Existing View of Warehouses from Main Street (facing west)**, the existing visual character and quality of VS-7 is predominantly developed land with surrounding commercial, industrial, and residential. VS-7 is in the approximately 3.0-mile easterly extent of Main Street which is designated as a National Scenic Byway. As depicted in **Figure 5.1-18: Visual Simulation 7: BIG Operations from Main Street (facing west)**, BIG would alter the existing visual environment as seen from Main Street facing west by building a rail yard parallel to Main Street as well as a transload warehouse center. The rail yard and transload warehouse center would be visible from Main Street and would include other built elements required for operation of BIG including track lighting.

Most viewers represented by VS-7 are the residential and commercial neighbors near Main Street and commuting, touring, shipping, and motoring travelers on Main Street. For VS-7, existing natural harmony is low and existing cultural order is high. Existing neighbor viewer groups are anticipated to have a high viewer sensitivity, as the proximity of the existing developed views to the neighbor viewer groups is high; the extent, or number of viewers is high; duration, or length of visibility, is high; attention or change in scene is high; focus, or visual elements to focus on, is high; and protection is high. The traveler viewer groups on this segment of Main Street are generally assumed to have moderate levels of sensitivity due to the National Scenic Byway designation of Route 66. Although traveler viewer groups are focused on driving and therefore have a lower viewer sensitivity compared to neighbor viewer groups, travelers along this segment have scenic views of the existing development and Mojave Desert that would be altered by the rail yard and transload warehouse center. Viewer sensitivity for travelers is moderate, as the proximity of the commercial and industrial development and Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility is moderate-high; attention or change in scene is low; focus, or visual elements to focus on is moderate-low; and protection is high.



Source: Kimley-Horn, 2025.

Figure 5.1-17
Existing View of Warehouses from Main Street (Facing West)



Source: Kimley-Horn, 2025.

Figure 5.1-18
Visual Simulation 7: BIG Operations from Main Street (Facing West)

With the introduction of BIG at VS-7, viewer sensitivity for neighbors would decrease from high to moderate-high, as the introduction of the rail yard and transload warehouse center would remove existing commercial infrastructure to create an opening view for distant mountain ranges beyond the rail yard. Existing views of the commercial and industrial development would be replaced with views of the rail yard and transload warehouse center with the addition of views of distant mountain ranges, which would cause proximity of the views to the neighbor viewer groups to be moderate-high; the extent, or number of viewers, would be moderate-high; duration, or length of visibility, would be high; attention, or change in scene, would be high; focus, or visual elements to focus on, would be high; and protection would be high. Viewer sensitivity for travelers would remain unchanged.

Natural harmony would increase from low to moderate-low through the replacement of existing commercial development with the rail yard and transload warehouse center that would create an opening view for distant mountain ranges. Cultural order would decrease from high to moderate-high with the rail yard and transload warehouse center adding to the built resources in the area. BIG coherence would increase by altering the existing environment. However, alterations to the existing environment would be compatible with the surrounding commercial development and would be coherent with the compositional harmony of the built environment. Therefore, as visual change of one category would occur in an area with person who have moderate-high to moderate viewer sensitivity, the visual quality impact is considered to be less than significant.

Visual Simulation 8 – Solar Farm at the Southwest Corner of Main Street at Country Club Drive Facing Southwest

As depicted in **Figure 5.1-19: Existing View of Mojave Desert at the Southwest Corner of Main Street at Country Club Drive (facing southwest)**

, the existing visual character and quality of VS-8 is primarily the Mojave Desert landscape. VS-8 is in the approximately 3.0-mile easterly extent of Main Street which is designated as a National Scenic Byway.

As depicted in **Figure 5.1-20: Visual Simulation 8: Solar Farm at the Southwest Corner of Main Street at Country Club Drive (facing southwest)**

, BIG would alter the existing visual environment as seen from the Main Street at Country Club Drive intersection facing southwest by replacing a vacant lot/desert vegetation with a solar farm. The solar farm's built elements (i.e., a BESS and a new electrical substation at the northwest corner) would be visible from Main Street. The introduction of the solar farm would substantially degrade the existing visual character or quality of public views of the site and its surroundings.



Source: Kimley-Horn, 2025.

Figure 5.1-19
Existing View of Mojave Desert at the Southwest Corner of Main Street at Country Club Drive (Facing Southwest)



Source: Kimley-Horn, 2025.

Figure 5.1-20
Visual Simulation 8: Solar Farm at the Southwest Corner of Main Street at Country Club Drive (Facing Southwest)

Most viewers represented by VS-8 are the sparse residential and commercial neighbors near Main Street and motorists on Main Street. The existing natural harmony is high and existing cultural order is low. The neighbor viewer groups are anticipated to have a moderate viewer sensitivity, as the proximity of the Mojave Desert views to the neighbor viewer groups is high; the extent, or number of viewers, is moderate; duration, or length of visibility is high; attention or change in scene is low; focus, or visual elements to focus on, is low; and protection is low. Motorists on this segment of Main Street are assumed to have low levels of sensitivity due to the speed that they are traveling. Viewer sensitivity for travelers is low, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility, is moderate-high; attention, or change in scene, is low; focus, or visual elements to focus on, is moderate-low; and protection is low.

With the introduction of BIG at VS-8, viewer sensitivity for neighbors would increase from moderate to moderate-high. Existing views would change from panoramic views of the Mojave Desert to views of the solar farm, which would cause the proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be moderate; duration, or length of visibility, would be high; attention, or change in scene, would be high; focus, or visual elements to focus on, would be high; and protection would be low. Viewer sensitivity for travelers would increase from low to moderate-low. Existing views of the Mojave Desert would change from panoramic views to views of the solar farm associated with proximity of the views to the traveler viewer groups would be moderate-high; the extent, or number of viewers, would be moderate-high; duration, or length of visibility, would be moderate-high; attention or change in scene would be moderate; focus, or visual elements to focus on, would be moderate; and protection would be low.

Natural harmony would decrease from high to low through the replacement of desert vegetation with the solar farm. Cultural order would increase from low to moderate with BIG infrastructure appearing uniform and adding built resources to the area. BIG coherence would alter the existing environment, becoming incompatible with the solar farm and associated structures, and it would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment. As a visual change of one or more categories would occur in an area that would change from an existing moderate-high viewer sensitivity level to a high viewer sensitivity level with incorporation of BIG, the visual quality impact is considered to be significant.

Visual Simulation 9 – BIG Operations at the Southwest Corner of Main Street at Amarylis Avenue Facing Northwest

As depicted in **Figure 5.1-21: Existing View of Mojave Desert at the Southwest Corner of Main Street at Amarylis Avenue (facing northwest)**, the existing visual character and quality of VS-9 is primarily Mojave Desert landscape. VS-9 is in the approximately 3.0-mile easterly extent of Main Street which is designated as a National Scenic Byway.

As depicted in **Figure 5.1-22: Visual Simulation 9: BIG Operations at the Southwest Corner of Main Street at Amarylis Avenue (facing northwest)** BIG would alter the existing visual environment as seen from the Main Street at Amarylis Avenue intersection facing northwest by replacing desert vegetation with the transload warehouse center. The transload warehouse center would be visible from Main Street. The

introduction of the transload warehouse center would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Most viewers represented by VS-9 are the sparse residential and commercial neighbors surrounding Main Street and commuting, touring, shipping, and motoring travelers on Main Street. For VS-9, the existing natural harmony is high and existing cultural order is low. The neighbor viewer groups are anticipated to have a moderate viewer sensitivity, as the proximity of the Mojave Desert views to the neighbor viewer groups is high; the extent, or number of viewers, is moderate; duration, or length of visibility, is high; attention, or change in scene, is low; focus, or visual elements to focus on, is low; and protection is low. The traveler viewer groups on this segment of Main Street are generally assumed to have low levels of sensitivity due to the speed that they are traveling. Viewer sensitivity for travelers is low, as the proximity of the Mojave Desert views to the traveler viewer groups is moderate-low; the extent, or number of viewers, is moderate-high; duration, or length of visibility, is moderate-high; attention, or change in scene, is low; focus, or visual elements to focus on, is moderate-low; and protection is low.

BIG would cause viewer sensitivity for neighbors to increase from moderate to moderate-high. Existing views would change from panoramic views of the Mojave Desert to views of the solar farm, which would cause the proximity of the views to the neighbor viewer groups to be high; the extent, or number of viewers, would be moderate; duration, or length of visibility, would be high; attention, or change in scene, is high; focus, or visual elements to focus on, would be high; and protection would be low. Viewer sensitivity for travelers would increase from low to moderate-low. Existing views of the Mojave Desert changing from panoramic views to views of the solar farm would cause proximity of the views to the traveler viewer groups to be moderate-high; the extent, or number of viewers, would be moderate-high; duration, or length of visibility, would be moderate-high; attention, or change in scene, would be moderate; focus, or visual elements to focus on, would be moderate; and protection would be low.

Natural harmony would decrease from high to low through the replacement of desert vegetation with the solar farm. Cultural order would increase from low to moderate with BIG infrastructure appearing uniform and adding built resources to the area. BIG coherence would alter the existing environment, becoming incompatible with the solar farm and associated structures, and it would be incoherent with the existing Mojave Desert landscape and compositional harmony of the landscape and built environment.

As a visual change of one or more categories would occur in an area that would change from an existing moderate-high viewer sensitivity level to a high viewer sensitivity level with incorporation of BIG, the visual quality impact is considered to be significant.



Source: Kimley-Horn, 2025.

Figure 5.1-21
Existing View of Mojave Desert at the Southwest Corner of Main Street at Amarylis Avenue (Facing Northwest)



Source: Kimley-Horn, 2025.

Figure 5.1-22
Visual Simulation 9: BIG Operations at the Southwest Corner of Main Street at Amarylis Avenue (Facing Northwest)

Summary of Visual Effects

As shown in **Table 5.1-3: Summary of Visual Effects - BIG,** there would be significant change in visual quality at most viewpoints as depicted in the visual simulations. For greater detail and discussion on the above analysis, see **Appendix 5.1 BIG-1**.

Table 5.1-3: Summary of Visual Effects - BIG

VS	Visual Quality Rating: Existing	Visual Quality Rating: Proposed	Change in Viewer Sensitivity	Project Coherence	Level of Significance
1	Moderate	Moderate-Low	Decrease	Incompatible/Incoherent	Significant Impact
2	Moderate-Low	Moderate	Increase	Incompatible/Incoherent	Significant Impact
3	Moderate	Moderate-High	Increase	Compatible/Coherent	Significant Impact
4	Low	Moderate-Low	No Change	No Change	No Impact
5	Moderate	Moderate-High	Increase	Incompatible/Incoherent	Significant Impact
6	Moderate	Moderate-High	Increase	Incompatible/Incoherent	Significant Impact
7	Moderate-High	Moderate	Decrease	Compatible/Coherent	Less than Significant Impact
8	Moderate	Moderate-High	Increase	Incompatible/Incoherent	Significant Impact
9	Moderate	Moderate-High	Increase	Incompatible/Incoherent	Significant Impact

Note: VS= Visual Simulation

Source: FHWA. 2015. *Guidelines for the Visual Impact Assessment of Highway Project*; pp. 5-6 – 5-10.

When considering if an impact is significant in a rural environment, the visibility of BIG would depend on the visibility of BIG components taking into account the area's topography, vegetation and structures, and atmospheric conditions. Because of the topography and vegetation present within the BIG aesthetics study area, BIG infrastructure would not be visible from VS-4. However, for VS-1, VS-2, VS-3, VS-5, VS-6, VS-7, and VS-8, as shown in the photo-simulations, BIG infrastructure would be slightly-above or above grade and would consist of a rail yard with rail tracks, intermodal facility, and block swap yard, a solar farm, and a transload warehouse center. Decreases in visual quality shown in VS-1, VS-2, VS-3, VS-5, VS-6, and VS-8 would be substantial enough to change the overall visual quality of the existing environment resulting in a significant impact on the viewsheds identified. BIG would introduce more urban structures and infrastructure to the BIG aesthetics study area, resulting in a permanent change to the visual character of the site and its surroundings. As such, BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings resulting in a significant unavoidable impact.

Impact 5.1-3: BIG: Level of Significance Before Mitigation: Potentially Significant Impact.

Mitigation Measures

MM BIG AES-1 **Construction Lighting and Screening Plan.** Prior to any BIG Specific Plan area site clearance or grading activity, the implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP), which shall be submitted to the City of Barstow Planning Department for review and approval. The City shall review the CLSP to verify that it identifies for the construction phase, lighting practices and systems (e.g., shielded and directional lighting oriented toward work areas and to avoid light

trespass onto residential or other sensitive receptor properties) that minimize light pollution, glare, and light trespass, while maintaining nighttime safety, visibility, utility, and productivity pursuant to the following:

- Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare concerning trespass of light onto adjacent properties/light-sensitive uses. (e.g., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG footprint to limit light and glare, use of non-reflective glass, etc.), and prohibiting aiming, directing, and focusing to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways. Use of the minimum lighting levels approved by the Occupational Safety and Health Administration (OSHA) pursuant to 29 CFR 1926.56 for general construction (i.e., 5 foot-candles or 54 lux).
- Use remote monitoring systems or other methods to ensure security of the construction site outside of construction hours.

The CLSP shall also include specifications requiring that temporary construction fencing be installed along the BIG Specific Plan construction areas where adjacent to residences to screen views of construction activity and promote safety. Construction fencing shall be up to the height permitted by Barstow Code Section 19.18.060 (i.e., 8.0 feet) and include a privacy screen to provide as a safeguard from the surrounding environment, prevent trespassers from entering.

Impact 5.1-3: BIG: Level of Significance after Mitigation: Significant and Unavoidable Impact.

Impact 5.1-4	***Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?***

Proposed General Plan

Future development associated with the proposed General Plan would most often occur during daytime hours and would not require the use of lighting for construction activities. However, should nighttime construction activities be required (e.g., 24-hour foundation pours, etc.), the use of outdoor lighting would be required and could include exterior lighting to illuminate work areas. Additionally, security lighting would typically be provided for the duration of construction of a project. Nighttime construction lighting would be limited to the construction site but would be noticeable from adjacent areas given the predominantly rural nature of the City and its surroundings. For most development projects, upon completion of construction, the use of construction lighting would cease, and impacts would be less than significant given the temporary nature of construction lighting. However, BIG is a part of the Project. As addressed later in this section, due to the duration of construction including nighttime activities, BIG would result in significant and unavoidable impacts. As such, implementation of the proposed General Plan would result in significant and unavoidable lighting impacts during construction.

Operations

Sources of light and glare in the City include building lighting (interior and exterior), security lighting, sign illumination, and parking area lighting. These sources are mostly associated with residential, commercial, office, recreational, and industrial uses. Other sources of nighttime light and glare include streetlights, vehicular traffic along surrounding roadways, and ambient lighting from surrounding unincorporated communities.

Future development would occur in areas designated for development and would allow for development of currently undeveloped parcels and alterations, intensification, and redesignation of land uses. As addressed in **Section 3.0: Project Description**, in western Barstow, the proposed General Plan land use plan would redesignate the majority of the area west of I-15 and south of Main Street to Business Park and expand the existing General Industrial designation west of Lenwood Road to accommodate the BIG Specific Plan. Select properties west of the Lenwood Road and Outlet Center Drive on-/off-ramps are proposed to be redesignated to Industrial, an existing 2015 General Plan designation. Some residential areas would remain or continue to develop and improve as low-density residential with additional provisions to ensure adequate buffering from future industrial uses. In eastern Barstow, the proposed General Plan land use plan is intended to reinforce and build upon the existing residential neighborhoods/ community to focus most new housing and commercial, and civic uses south of Rimrock Road and east of I-15. The land use pattern for areas north of Rimrock Road and south of Main Street are proposed to remain largely consistent with the 2015 General Plan. The proposed General Plan land use plan also outlines potential annexation areas for future residential development. It proposes logistics/warehousing along the northeastern edge, separated from residential areas by open space.

Therefore, the proposed land use changes would increase nighttime light and potential glare in the City and SOI, inclusive of BIG. For example, conversion of underutilized or vacant areas into residential or commercial uses, or the intensification of uses/increasing density would introduce new and/or additional sources of light (building illumination, security lighting, parking lot lighting, street lighting, etc.). All projects would be required to comply with Barstow Code Section 19.06.010, Outdoor Lighting, which states that all outdoor lighting shall be designed to minimize the trespass of light and not emit any direct light above a horizontal plane through the lowest direct-light-emitting part of the luminaire. Additionally, Barstow Code Section 19.06.10 provides provisions for parking area lighting, such as fully shielding lights and arranging lighting so that there would be no more than two footcandles per square foot; ensuring that pedestrian walkways are illuminated between 0.5-1 footcandle for safety purposes, business entrances are illuminated between 0.5-2 footcandles; and ensuring that recreational facility lighting is fully shielded and that events are scheduled to end no later than 11 PM. Such regulations would reduce the impact of light and glare on residents and wildlife. However, while compliance with the Barstow Code and **MM BIG AES-1** would reduce outdoor lighting impacts by minimizing trespass of light and directing light below the horizontal plane, lighting would be visible in areas that are currently not lit, and there would be a significant increase in lighting when compared to existing conditions. Therefore, impacts would be considered significant.

Impact 5.1-4: General Plan: Level of Significance Before Mitigation: Potentially Significant Impact.

Impact 5.1-4: General Plan: Mitigation Measures: None feasible.

Shielding and full cut-off light fixtures (see Barstow Code Section 19.06.010) would help reduce light spill but reflected light would still substantially diminish visibility of the stars and nighttime views, especially in areas that are undeveloped or underdeveloped. The only methods of avoiding impacts to the night sky are to eliminate exterior lighting—such as parking lot, signage, and security lighting—or to avoid development at urban densities. However, eliminating exterior lighting is infeasible, as it would compromise safety by reducing visibility and hindering secure movement and urban operations during nighttime hours. Similarly, development at very low densities would reduce nighttime lighting impacts but would increase vehicle miles traveled, substantially raise the cost of infrastructure (e.g., roads, sewer, and water lines), and increase the cost of providing public services such as police and fire protection. Low and very low-density development would also contribute to sprawl and conflict with the City's objective of maintaining a compact urban form. Therefore, reducing development intensity is not a feasible mitigation measure. While compliance with the Barstow Code for Outdoor Lighting would reduce light trespass and glare, the amount of lighting necessary to support proposed development, particularly in higher-density areas, would still result in significant impacts on nighttime visibility. As a result, the proposed General Plan would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and this impact would remain significant and unavoidable.

Impact 5.1-4: General Plan: Level of Significance After Mitigation: Significant and Unavoidable Impact.

Barstow International Gateway

Construction

BIG construction activities would occur over approximately 34 months including nighttime activities, necessitating safety and security lighting. BIG construction sites would utilize lighting fixtures typical of construction sites such as light towers, night lights, and balloon lights. BIG construction sites would include the lighting necessary to ensure safety pursuant to OSHA minimum construction lighting requirements. In general, lighting exposure from BIG construction activities would be associated with the use of artificial light during the evening and nighttime hours from construction equipment, lighting fixtures, and security lighting, as well as car/truck headlights. Therefore, BIG construction activities would create new sources of substantial light and potential glare, which would adversely affect nighttime views in the area. BIG construction activities are analyzed below for their potential to generate light exposure (i.e., light trespass and glare/sky glow).

Some nearby land uses, such as residential uses, are considered light-sensitive because occupants have expectations of minimal lighting during nighttime hours and may be subject to disturbance by bright light sources. The light-sensitive receptors near BIG are the rural residential uses interspersed to the south, east, and west of BIG's footprint. The light-sensitive receptors nearest the BIG footprint are single-family residential uses approximately 120 feet southeast of BIG. Light exposure from construction activities can be a nuisance to adjacent residential areas, diminish the clear night sky's view and, if uncontrolled, can

cause disturbances. The degree of impacts from light exposure would vary widely depending on the amount of light generated, light sources heat, presence of barriers/obstructions, type/design of light source, and weather conditions. Given BIG construction would occur over approximately 34 months requiring nighttime construction activities, BIG construction activities would create a new source of substantial light and glare that would adversely affect nighttime views in the area. To reduce construction-related light exposure impacts, **MM BIG AES-1** requires the preparation and implementation of a Construction Lighting and Screening Plan (CLSP) that requires visual screening (i.e., temporary fencing). Additionally, the CLSP is required to identify and implement lighting treatments for all construction work areas (i.e., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG's footprint to limit light and glare, and use of non-reflective glass. The CLSP would also identify methods used to ensure construction lighting is directional (aimed toward work areas and away from nearby sensitive receptors) and limited to sufficient wattage for safety and security. Construction lighting would be temporary and cease upon BIG completion.

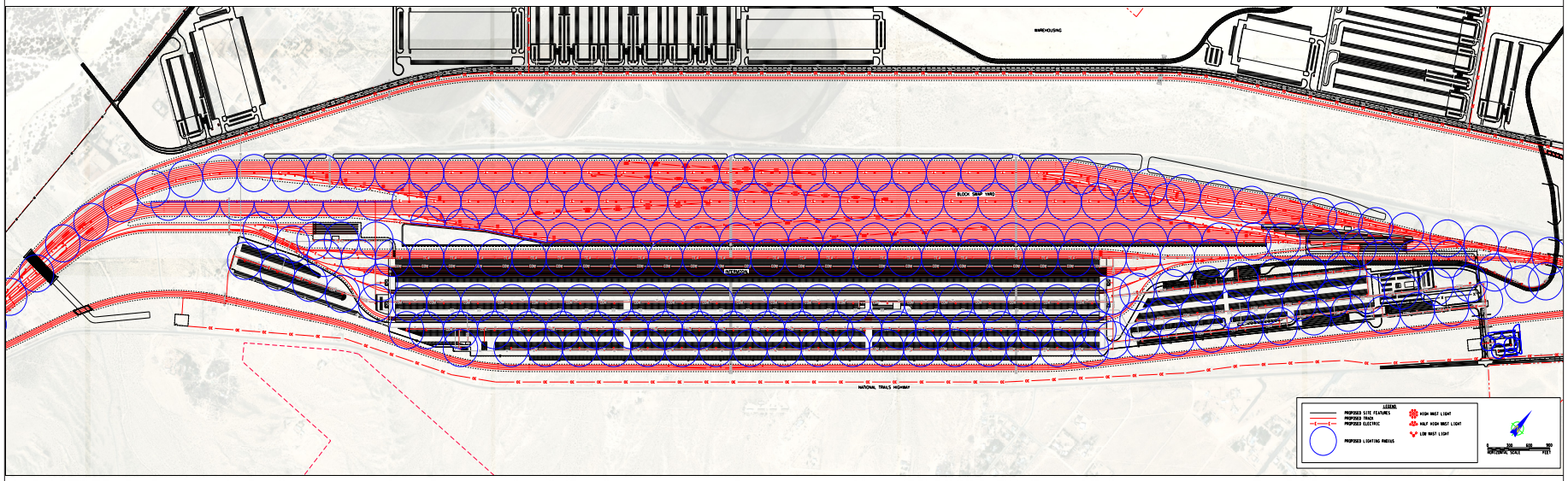
Given the non-urbanized nature of the area and the presence of light-sensitive receptors, BIG construction activities would nonetheless create a new source of substantial light and glare, which would adversely affect nighttime views in the area. Impacts would be significant and unavoidable.

Operations

The potential for BIG operations to create a new source of substantial light, which would adversely affect nighttime views in the area, is based on the Lighting Plan Analysis ("Lighting Plan") depicted on **Figure 5.1-23: Rail Yard Lighting Plan.** This figure depicts the intermodal rail facility and the block swap yard. Concerning operational light exposure (i.e., light trespass and glare/sky glow), the degree of impact would vary widely depending on the amount of light generated, light sources heat, presence of barriers/ obstructions, type/design of source, and weather conditions. This analysis focuses on potential light fixtures and light levels that would contribute to the potential for BIG operations to result in light trespass onto neighboring light-sensitive land uses, and to increase ambient nighttime light levels in BIG vicinity or include reflective surfaces resulting in glare.

A rural environment such as the BIG Specific Plan area's setting has low ambient nighttime light levels. BIG would introduce new light sources required for operations, maintenance, public safety, and security. BIG would generate lighting that could result in light exposure (i.e., light trespass and glare), including lighting from building interiors that would pass through windows and lighting from various exterior sources (e.g., rail yard lighting/light masts, equipment, street lighting, parking lot lighting, building illumination, security lighting, illuminated signs, landscape lighting, and automobile lighting (i.e., headlights). No lighting is proposed within BIG's off-site rail and non-rail improvements.

The solar farm proposed south of Main Street and the solar panels proposed on top of industrial and rail yard buildings could generate glare. BIG's design does not include buildings with large facades constructed of reflective surfaces (e.g., brightly colored building facades, metal surfaces, and reflective glass), which typically generate daytime glare.



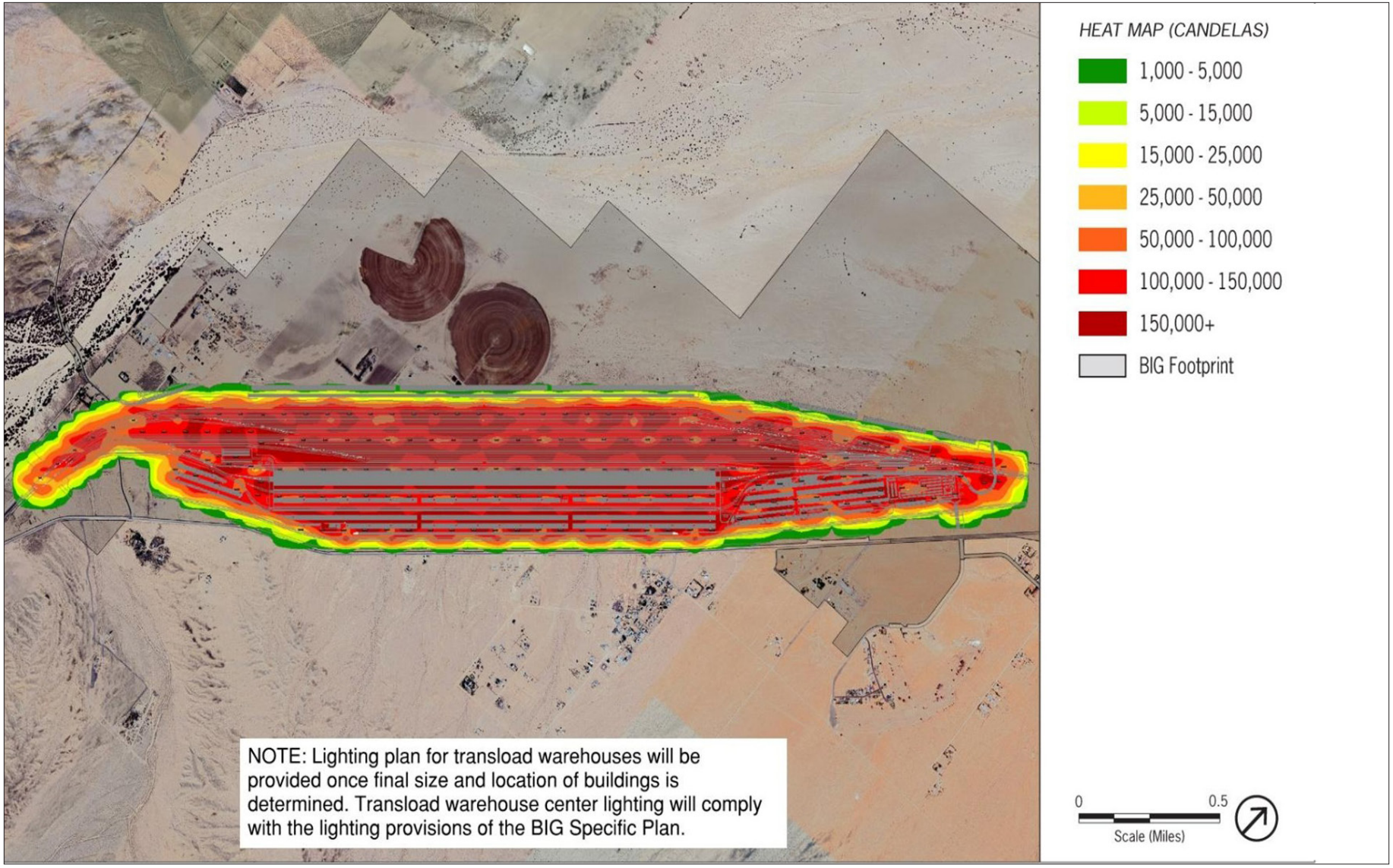
Source: *Kimley-Horn,* 2025.

Figure 5.1-23
Rail Yard Lighting Plan

Light Trespass

Lighting would be strategically placed to illuminate parking areas, docks/loading zones, and building entries. The locations of the proposed rail yard's lighting and the respective lighting levels from each lighting unit (i.e., luminaire) are illustrated on **Figure 5.1-23: Rail Yard Lighting Plan** and the lighting levels are depicted on **Figure 5.1-24: Light Spill Heat Map**. BIG's operational lighting would adhere to the BIG Specific Plan's lighting standards and guidelines detailed in BIG Specific Plan Chapter 3: Development Regulations and Chapter 4: Design Guidelines, which are designed to meet Barstow Code standards and minimize light trespass onto adjacent properties and light-sensitive land uses. BIG Specific Plan Chapter 3: Development Regulations states that lighting within the BIG Specific Plan area shall be provided to enhance the safety and security of BIG operations. Also, lighting must be fully shielded and placed such that it avoids light trespass onto adjacent properties located outside of BIG Specific Plan area. BIG Specific Plan Chapter 4: Design Guidelines includes the following design guidelines for lighting and security:

- Exterior lighting should be unobtrusive and not cause glare or spillover into neighboring properties. Lighting fixtures should be fully shielded to direct illumination downward to avoid light trespass.
- Adequate lighting should be provided throughout the site to create an inviting and non-threatening environment. Night lighting of public spaces should be kept to the minimum necessary for safety and security purposes while minimizing glare.
- The scale, materials, colors, and design detail of on-site light posts and fixtures should reflect the desired character of BIG Specific Plan area and the architectural style of the surrounding buildings.
    - Light posts should be appropriately scaled for pedestrians near sidewalks and other areas of pedestrian circulation.
    - Bollard lighting is encouraged to illuminate walkways without providing spillover.
- Lighting fixtures should be compatible with the architectural style and character of the building. The color, size, placement, and number of fixtures should enhance the overall design and character of the building and site. Lamps should provide sufficient illumination, which is no less than one-half footcandles and no more than two footcandles throughout the entire parking lot.
- Energy-efficient, low-voltage lighting is strongly encouraged. Decorative lighting should be low intensity. LED lighting is also allowed.
- If security lighting is required, fixtures should be hooded, recessed, and/or located in such a manner to only illuminate the intended area.
- Addresses should be visible from streets and illuminated at night.
- Parking areas. All lighting should be arranged so there will be no more than two candles per square foot.
- Pedestrian walkways/business entrances. Pedestrian walkways should be illuminated to no less than one-half and no more than one footcandle for safety purposes. Business entrances should be illuminated to no less than one-half and no more than two footcandle.



Sources: County of San Bernardino, 2023; City of Barstow, 2022. Musco 2024.

Figure 5.1-23
Rail Yard Lighting Plan

BIG's rail yard operational lighting levels would remain within BIG rail yard footprint (see **Figure 5.1-23: Rail Yard Lighting Plan**). Therefore, as demonstrated in the lighting plan, and through compliance with BIG Specific Plan lighting standards, BIG would not create a new source of substantial light trespass, which would adversely affect day or nighttime views in the area as it would not spill over onto adjacent properties or light-sensitive receptors.

Glare

Glare is related to the use of highly reflective surfaces including mirrored and tinted glass materials, and broad, flat surfaces that are painted with highly reflective colors. BIG would use a variety of non-reflective building materials, and although some new reflective improvements (i.e., solar panels, windows, and building front treatments) would be introduced, BIG would not be a source of substantial glare. As stated previously, a Glare Analysis was performed for BIG to identify any glare created by BIG's proposed solar farm arrays; see **Appendix 5.1 BIG-2**. After evaluating the line-of-sight from the satellite imagery and for the location of the sun from the perspective of the observer during instances of glare, the following conclusions were noted:

- For the 39 observation points assessed representing nearby sensitive receptors (residences), one instance of "yellow" glare was noted:
  - One instance of glare occurring for a residence identified as OP37 was determined to have minimal or no existing visual obstructions to reduce or mitigate the glare.
- For the 12 path receptor routes assessed, representing 11 nearby roadways and one nearby railway, one instance of "yellow" glare was noted:
  - One instance of glare occurring for southbound traffic on Country Club Drive was determined to have minimal or no existing visual obstructions to reduce or mitigate the glare.

A six-foot privacy fence is planned around the solar farm area (see **Figure 5.1-20: Visual Simulation 8: Solar Farm at the Southwest Corner of Main Street at Country Club Drive (facing southwest)**). This visual screening would further reduce or eliminate glare identified by acting as a visual obstruction. BIG's operational fencing would adhere to the BIG Specific Plan's height standards and guidelines detailed in BIG Specific Plan Chapter 3: Development Regulations and Chapter 4: Design Guidelines which are designed to minimize potential visual impacts. BIG Specific Plan Chapter 3: Development Regulations includes the following design guidelines for fencing:

- Rail Yard Overlay and Solar Farm Area
  - Walls and fencing shall be provided to safeguard the general public and prevent trespassers from entering BNSF-owned property, right-of-way, and accessing the track or other ancillary rail structures.
  - Required walls and fencing within the BIG Specific Plan area shall be provided in accordance with **Table 3-4, Fencing – Rail Yard Overlay and Private Utility**. Where possible, fencing shall be located outside the BNSF rail right-of-way and encompassing areas to limit trespassing for safety. Rail fencing includes two types of fencing:

Chain Link: Openings shall not exceed 2 inches.

Wrought Iron Picket Fence: Openings shall not exceed 3 inches and may be used in locations where trespassers may cut a chain link fence.

- Transload Warehouse Center
  - To the extent loading docks are visible from Lenwood Road, they shall be screened from public view to the extent feasible through the use of fencing, walls, berms, slopes or other means.
  - Walls and fences shall have a minimum height of 8 feet and a maximum height of 14 feet and shall screen all outdoor materials, equipment, tractor trailers, and loading doors from public view. See Section 3.5 for additional wall and fencing standards.
  - Fencing shall be provided to safeguard the general public and prevent trespassers from entering the TWC and allow end users (lessees) security into their facilities. Fence materials may consist of tubular steel fences, masonry blocks, or a combined low block wall/fence as described in BIG Specific Plan Chapter 4, Design Guidelines.
  - Walls or fencing may be provided at the perimeter of a portion or the whole site of the Transload Warehouse Center user area and warehouse staging area. The location and treatment shall be specified as part of the City's Site Plan Review, outlined in BIG Specific Plan Chapter 5.
- Rail Yard Overlay and Private Utility

BIG Specific Plan Chapter 4: Design Guidelines includes the following design guidelines for fencing:

- Walls and fencing shall be provided along the BIG Specific Plan area's perimeter and on all sides of the Rail Yard Overlay and Private Utility. Within the transload warehouse center, walls, and fencing shall be determined by the individual user following site design features. All walls and fences shall adhere to the following guidelines as depicted in BIG Specific Plan Figure 4-11, Concept Fencing, and BIG Specific Plan Figure 4-12, Fencing Plan.
  - Walls at loading areas shall be a minimum of 6 feet in height or as approved by the City as required to screen loading activities from off-site views from the adjacent public right-of-way.
  - Xeriscape landscaping shall be used in combination with walls and fences to visually soften blank surfaces and deter graffiti.
  - Chain link fencing with barbed wire shall be implemented throughout the BIG Specific Plan area.

Therefore, the solar farm would not create a new source of substantial glare that would adversely affect daytime views in the area. A less than significant impact would occur and no mitigation is required.

Other BIG light sources that could result in glare include rail yard buildings, light masts and equipment, transload warehouse center buildings, street and parking lot lighting, landscape lighting, illuminated signs, exterior lighting on lamps and buildings, solar farm, and automobile lighting (headlights). The proposed transload warehouse center would use various non-reflective building materials, as specified in BIG

Specific Plan Chapter 4: Design Guidelines. Additionally, potential glare that would occur during train operations would be intermittent and of brief duration and glare from passing trains would be temporary and directed along the guideway and would not cause glare impacts on nighttime views.

As previously addressed, lighting would be strategically placed and designed to avoid glare. Lighting would utilize high-efficiency technologies, dark-sky cutoffs, and strategic orientation to avoid glare into adjacent properties and open space areas, and appropriate shielding/recesses to minimize glare and reflections. BIG's operational lighting would adhere to the BIG Specific Plan's lighting standards and guidelines detailed in BIG Specific Plan Chapter 3: Development Regulations and Chapter 4: Design Guidelines which are designed to minimize potential glare impacts. BIG Specific Plan Chapter 3: Development Regulations states that lighting within the BIG Specific Plan area shall be focused, directed, and arranged to prevent glare on streets or adjoining property. BIG Specific Plan Chapter 3: Development Regulations and Chapter 4: Design Guidelines includes the following design guidelines for private utility and lighting and security:

- Rail Yard Overlay and Private Utility
  - Care shall be taken in lighting placement such that trains would not mistake the lights for train signals, nor shall they interfere with the train engineer's sight distance for existing signal aspects. The following standards shall be applied:
    - The minimum lighting design criteria shall be an average of one foot-candle per square foot within the Block Swap and intermodal facility areas within the Rail Yard Overlay. Two foot-candles per square foot or greater may be required at BNSF's discretion.
    - The illuminated area shall extend to the limits of the overhead structure width and the width of the railroad right-of-way. Fixtures shall be installed on the column walls or caps of the overhead structure without reducing the minimum horizontal and vertical clearances.
    - All new or modified overhead structures that cover 80 linear feet of track or more shall provide a lighting system to illuminate the track area.
    - All lights shall be directed downward.
- Transload Warehouse Center
  - To reinforce identity and unity, all exterior lighting shall be consistent in height, spacing, color, and type throughout and compatible throughout the Private Utility and Transload Warehouse Center area as described in BIG Specific Plan **Table 3-5** Lighting Requirements, including:
    - Location: Lighting shall be provided for all parking areas, truck courts, vehicular byways and be focused, directed, and arranged to prevent glare or light trespass on streets or adjoining property.
    - Pedestrian Lighting: All pedestrian walkways, building entries, and pathways shall be illuminated to provide pedestrian orientation and clearly identify a safe and secure route between parking areas and points of entry to the building.

- Service Area Lighting: Service area and security lighting shall be directed to those areas within the limits of the service area. Wall-mounted, security-type, service area lighting fixtures may be used only in screened service areas and only if direct light is kept within these areas. In all other areas, wall-mounted service lighting shall consist of cut-off type fixtures.
- Orientation: All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light trespass.
- Height: Pole-mounted or building-mounted lighting fixtures shall be no more than 50 feet in height to avoid light trespass beyond the parking lot or service area. An exception to this maximum height requirement can be approved or modified as part of the Site Development Permit.
- Shielding: Pole-mounted lights shall be shielded, and the light directed away from the public streets. Pole-mounted lights shall utilize cut-off fixtures and shall not be directed toward residences.
- Light Fixtures: Building entries shall be lit with soffit, bollard, step, or comparable lighting.

- The lighting design shall be approved by the City as part of the City's Design Review process.

BIG Specific Plan Chapter 4: Design Guidelines includes the following design guidelines for fencing:

- Lighting shall utilize high-efficiency technologies, dark-sky cutoffs, strategic orientation to avoid light trespass into adjacent properties and open space areas, and appropriate shielding or recesses to avoid glare and reflections. See BIG Specific Plan Figure 4-13, Rail Yard Lighting Plan, and BIG Specific Plan Figure 4-14, TWC Lighting Plan.
- Exterior lighting shall be unobtrusive and not cause glare or spillover into neighboring properties. Lighting fixtures shall be fully shielded to direct illumination downward to avoid light trespass.
- Adequate lighting shall be provided throughout the site to create an inviting and non-threatening environment. Night lighting of public spaces shall be kept to the minimum necessary for safety and security purposes while minimizing glare.
- The scale, materials, colors, and design detail of on-site light posts and fixtures shall reflect the desired character of BIG Specific Plan area and the architectural style of the surrounding buildings.
  - Light posts shall be appropriately scaled for pedestrians near sidewalks and other areas of pedestrian circulation.
  - Bollard lighting is encouraged to illuminate walkways without providing spillover.
  - Lighting fixtures shall be compatible with the architectural style and character of the building. The color, size, placement, and number of fixtures shall enhance the overall design and character of the building and site. Lamps shall provide sufficient illumination that is no less than one-half footcandles and no more than two footcandles throughout the entire parking lot.

- Energy-efficient, low-voltage lighting is strongly encouraged. Decorative lighting shall be low intensity. LED lighting is also allowed.
- If security lighting is required, fixtures shall be hooded, recessed, and/or located in such a manner to only illuminate the intended area.
- Addresses shall be visible from streets and illuminated at night.
- Parking areas. All lighting shall be arranged so there would be no more than two candles per square foot.
- Pedestrian walkways/business entrances. Pedestrian walkways shall be illuminated to no less than one-half and no more than one footcandle for safety purposes. Business entrances shall be illuminated to no less than one-half and no more than two footcandle.

Although BIG would follow the requirements listed above, BIG operations would cause substantial aesthetic degradation from introduction of glare to a minimally illuminated area. The substantial degradation from introduction of glare during BIG operations would conflict with nighttime views and be highly contrasting to the visual character of the surrounding environment. Glare disturbances affecting viewers, visual character, and visual quality would result from BIG operations and built features. BIG would minimize potential glare impacts through compliance with BIG Specific Plan lighting standards as summarized above. However, impacts would remain significant due to the introduction of glare in environment where none currently exists. Given the rural setting and the scale of BIG development, there are no feasible mitigation measures to mitigate glare impacts. Any development within the BIG Specific Plan area would create sources of new glare to an existing rural setting. BIG lighting is necessary for safety and security, thus, cannot be removed from BIG design.

Light Pollution and Sky Glow

Light pollution, also known as “sky glow,” is an adverse effect of man-made light. The term is often used to denote urban sky glow (brightening of the night sky due to man-made lighting) but also includes glare (intense and blinding light) and light trespass (light falling where it is not wanted or needed; also called spill light). In many cases, sky glow is visible from great distances, particularly in evenings when there is moisture in the air. Minute water droplets in the evening air reflect and scatter light into the atmosphere. The substantial degradation from introduction of light and glare during operation of BIG would conflict with, and be highly contrasting to, the visual character of the surrounding environment. As BIG would operate 24 hours a day, 7 days a week, 365 days a year, it would introduce a substantial amount of illumination/glow to an area with nearby sensitive receptors and a minimally illuminated environment. BIG would introduce new light pollution and glow impacts during nighttime hours.

As shown in **Figure 5.1-25: Existing Nighttime View from Main Street, Figure 5.1-26: Visual Simulation 10: Nighttime from Main Street, Figure 5.1-27: Existing Nighttime View from Main Street,** and **Figure 5.1-28: Visual Simulation 11: Nighttime from Main Street**, with the introduction of BIG, viewer sensitivity at VS-6 and VS-7 during nighttime BIG operations would be potentially significant as it would introduce a substantial amount of illumination/glare to an area that is minimally illuminated.

Conclusion

BIG operations would cause substantial aesthetic degradation from the introduction of lighting to a minimally illuminated area. The substantial degradation from introduction of light during BIG operations would conflict with, and be highly contrasting to, the visual character of the surrounding environment. BIG Specific Plan lighting standards and applicable mitigation measures during BIG construction would be implemented to minimize impacts relating to light trespass, glare, and light pollution and glow.

Nighttime lighting disturbances such as glare, light pollution, and glow affecting viewers, visual character, and visual quality would result from BIG operations and built features. Glare impacts would be reduced in these locations by utilizing lighting with high-efficiency technologies, dark-sky cutoffs, strategic orientation to avoid light trespass into adjacent properties and open space areas, and appropriate shielding or recesses to avoid glare and reflections. However, visual degradation caused by necessary nighttime and daytime lighting of features during BIG operations, including visually apparent barriers, signage, contrasting signal lighting, and the residual glare impacts would remain potentially significant. Similarly, as BIG would operate 24 hours a day, BIG would introduce new significant light pollution and glow impacts during nighttime hours.

Impact 5.1-4: BIG: Level of Significance Before Mitigation: Potentially Significant Impact.

Impact 5.1-4: BIG: Mitigation Measures: MM BIG AES-1 is applicable.

Impact 5.1-4: BIG: Level of Significance after Mitigation: Significant and Unavoidable Impact.



Source: Kimley-Horn, 2025.

Figure 5.1-25
Existing Nighttime View from Main Street



Source: Kimley-Horn, 2025.

Figure 5.1-26
Visual Simulation 10: Nighttime from Main Street



Source: Kimley-Horn, 2025.

Figure 5.1-27
Existing Nighttime View from Main Street



Source: Kimley-Horn, 2025.

Figure 5.1-28
Visual Simulation 11: Nighttime from Main Street

5.1.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Proposed General Plan

The proposed General Plan would result in the following significant and unavoidable impacts:

- At a programmatic level, there is the potential for future projects, including infrastructure improvements to have significant changes to the visual character of the proposed General Plan area. With respect to BIG, which is a part of the Project, it is noted that BIG and other reasonably foreseeable future development under the proposed General Plan would introduce more urban structures and infrastructure, resulting in a permanent change to the visual character of the City and its SOI and its surroundings. As such, BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the visual change in the character of the proposed General Plan area is a significant unavoidable impact.
- The proposed General Plan would result in a significant and unavoidable impact concerning light and glare. Despite compliance with the Barstow Code, compared to existing conditions, the amount of light that would be produced upon implementation of the proposed General Plan would substantially alter nighttime views. Therefore, impacts would be significant and unavoidable**.**

Barstow International Gateway

BIG would result in the following significant and unavoidable impacts:

- BIG would substantially alter the BIG footprint's character as depicted in VS-1 through VS-7, by replacing the desert landscape along Main Street with an intermodal facility and block swap yard. BIG would substantially degrade the site's visual character resulting in a significant unavoidable impact during both construction and operational phases.
- Because BIG would create a new source of substantial glare/light pollution that would adversely affect day or nighttime views in the area, a significant unavoidable impact would occur.

5.1.8 REFERENCES

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