

## **D.13 Visual Resources**

This section addresses the visual resources of the project area and the potential visual effects of the Proposed Project and its alternatives. Section D.13.1 provides a description of the existing visual setting. Applicable regulations, plans, and standards are provided in Section D.13.2. The Proposed Project's visual impacts are discussed in Section D.13.3 and visual impacts of the project's alternatives are described in Section D.13.4. Section D.13.5 contains information pertinent to mitigation monitoring, compliance, and reporting and Section D.13.6 lists the references cited in this section.

### **D.13.1 Visual Setting for the Proposed Project**

The project area for visual resources encompasses the on-site landscapes directly affected by the Proposed Project's components (the wellhead site, compressor station, and pipeline segments one and two) and the surrounding off-site areas that would be within view of the Proposed Project actions. The visual analysis is based on a review of relevant government plans and policies regarding visual resources, independent site evaluations, and a review of Sacramento Natural Gas Storage (SNGS), LLC's Proponent's Environmental Assessment (PEA) (2007a), PEA Addendum (2007b), and deficiency responses.

One visual rendering has been prepared to document viewing conditions of the wellhead site. The visual analysis focuses on changes to residential, park, recreation, and travel route views, and the effects on conformity with plans and policies regarding visual quality.

#### ***D.13.1.1 Definitions Related to Visual Resources***

Visual resources consist of the landforms, vegetation, rock and water features, and cultural modifications that create the visual character and sensitivity of a landscape. A number of factors are documented for the existing visual resources of the project area in order to determine the manner in which those resources or characteristic landscapes may be modified by the Proposed Project or alternatives. The primary existing visual condition factors considered in this study are defined below and include: Visual Quality, Viewer Types and Volumes, Viewer Exposure, and Visual Sensitivity. Key Observation Points (KOPs) are used in this analysis to document these factors from high visual sensitivity viewing locations.

#### **Visual Quality**

This is defined as the overall visual impression or attractiveness of an area as determined by the particular landscape characteristics, including landforms, rock forms, water features, and vegetation patterns. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to the overall visual quality of an area. For the purposes of this EIR, visual quality is defined

according to three levels: (1) indistinctive or industrial—defined as generally lacking in natural or cultural visual resource amenities typical of the region, (2) representative—defined as visual resources typical or characteristic of the region’s natural and/or cultural visual amenities, and (3) distinctive—defined as visual resources that are unique or exemplary of the region’s natural or cultural scenic amenities.

### **Viewer Types and Volumes**

This pertains to the type and amount of use that various land uses receive. Land uses that derive value from the quality of their settings are considered potentially sensitive. Land uses within the project area that may be visually sensitive to change include residential areas; designated park, recreation, and natural areas; major transportation systems; and designated scenic roads.

### **Viewer Exposure**

This term addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers: (1) landscape visibility (the ability to see the landscape where the project would be); (2) the viewing distance (i.e., the proximity of viewers to the project); (3) viewing angle (whether the project or alternative would be viewed from above (superior), below (inferior), or from a level line of sight (normal)); (4) extent of visibility—whether the line of sight is open and panoramic to the project area or restricted by terrain, vegetation, and/or buildings; and (5) duration of view.

### **Visual Sensitivity**

This is the overall measure of an existing landscape’s susceptibility to adverse visual changes. This analysis of visual sensitivity is based on the combined factors of visual quality, viewer types and volumes, and visual exposure to the Proposed Project or alternatives. Visual sensitivity is reflected in this Environmental Impact Report (EIR) according to high, moderate, and low visual sensitivity ranges.

### **Key Observation Points (KOPs)**

These are typical viewing conditions from select locations to the Proposed Project. KOPs have been chosen to represent the range of viewing conditions and visual changes that would result from the Proposed Project. KOPs are included in the visual analysis for residential areas, parks, and travel routes in the project area.

### *D.13.1.2 Description of Existing Visual Resources*

#### **Visual Quality**

The visual quality of the project area ranges from heavy industrial areas to agricultural zones. The visual resources project area encompasses:

- Portions of the Glen Elder residential neighborhood as well as Danny Nunn Park, both located west of Power Inn Road in the City of Sacramento. Both would be within view of the proposed wellhead site. Industrial uses define the northern, eastern, and southern limits of the wellhead site, and Power Inn Road marks the western boundary.
- Portions of the City of Sacramento that would be visually changed by the installation and operation of the compressor station and undergrounding of pipeline segments one and two. The compressor station would be located in Depot Park, which is an area not accessible to or visible by the general public.

Aspects of the Proposed Project associated with pipeline installation are solely addressed during construction activities. Proposed pipelines would be underground and therefore would either not be seen or would result in very small, incremental visual changes to affected landscapes and viewers.

#### **Aboveground Facilities**

##### *Wellhead Site*

The proposed wellhead site is located at the northeast quadrant of Power Inn Road and Junipero Street on approximately 4 acres of vacant land. The site is surrounded by a chain link fence and contains disturbed vegetation, non-native grasses, and exposed soil. Power lines traverse the western boundary of the project site along with a roadside ditch. The power lines are within a 100-foot easement. Small trees generally run along the northern border of the proposed wellhead site. Industrial uses surround the site to the north, east, and south. These surrounding properties are characterized by large warehouse or industrial buildings. There is currently no lighting within the proposed wellhead site boundary. Figure D.13-1 provides views of the wellhead site from multiple locations.

Immediately west of the proposed wellhead site are residential uses and a park. Single-family residences are situated in the northwest quadrant of Power Inn Road and 53rd Avenue within the Glen Elder neighborhood. Danny Nunn Park is also situated within the Glen Elder neighborhood, in the southwest quadrant of Power Inn Road and 53rd Avenue. The park is approximately 15 acres with two soccer fields and a lighted rugby field.

Roadways bordering the site include Power Inn Road on the west and Junipero Street on the south. Power Inn Road is a heavily traveled four-lane road and Junipero Street is a cul-de-sac typically traversed by users of the industrial sites east of the Proposed Project site. Othel Court and 53rd Avenue intersect Power Inn Road just west of the site.

### *Compressor Station*

The compressor station site is situated in Depot Park, which is currently a controlled-access industrial business park. Access to the site is limited; the entire business park is fenced and the access gates are either locked or guarded. The Proposed Project would be located on approximately 5 acres of land in the southerly portion of Depot Park within an area of land bound by Saipan Street to the north, Midway Avenue to the east, Kwajalein Street to the south, and Caroline Drive to the west. Morrison Creek and the Union Pacific Railroad (UPRR) tracks run in the northwest–southeast direction parallel to and west of Caroline Drive. Storage containers, barrels, and other miscellaneous equipment are currently on a concrete pad on the center of the project site. The remaining 5 acres, along with the surrounding undeveloped land to the east, south, and west, consists of disturbed vegetation areas including non-native grasslands and weedy vegetation. Due to the site's location within Depot Park and its limited access, the compressor site is not visible to the general public. Figure D.13-2 provides views of the compressor site.

North of Saipan Street and east of Midway Avenue are industrial uses including warehouse buildings and large parking lot facilities. There are several light poles located within this parking area. Additional industrial buildings and parking facilities are located at the northwest quadrant of Midway Avenue and Santa Cruz Street. A portion of the undeveloped land north and south of Kwajalein Street is designated park lands per the City of Sacramento.

### **Belowground Facilities**

Visual impacts would occur along roads where pipelines would be installed only during construction. The natural gas reservoir would not be visible during construction or operation activities.

### *Pipeline Segments 1 and 2*

The portion of pipeline segment one within Power Inn Road would be near residential uses to the west. Pipeline installation activities near the wellhead site may be visible from Danny Nunn Park. The remainder of the pipeline alignment would generally traverse alongside undeveloped land and industrial areas. The portion of pipeline segment two within Depot Park would be situated beneath land designated as parkland per the City of Sacramento and is within a natural resource protection area set aside in the City of Sacramento Army Depot Reuse Plan.





**KOP 1:**  
View of wellhead site from front yard of residences on 53rd Avenue looking east.



**KOP 2:**  
View toward wellhead site from front yard of residences on Othel Court looking southeast.



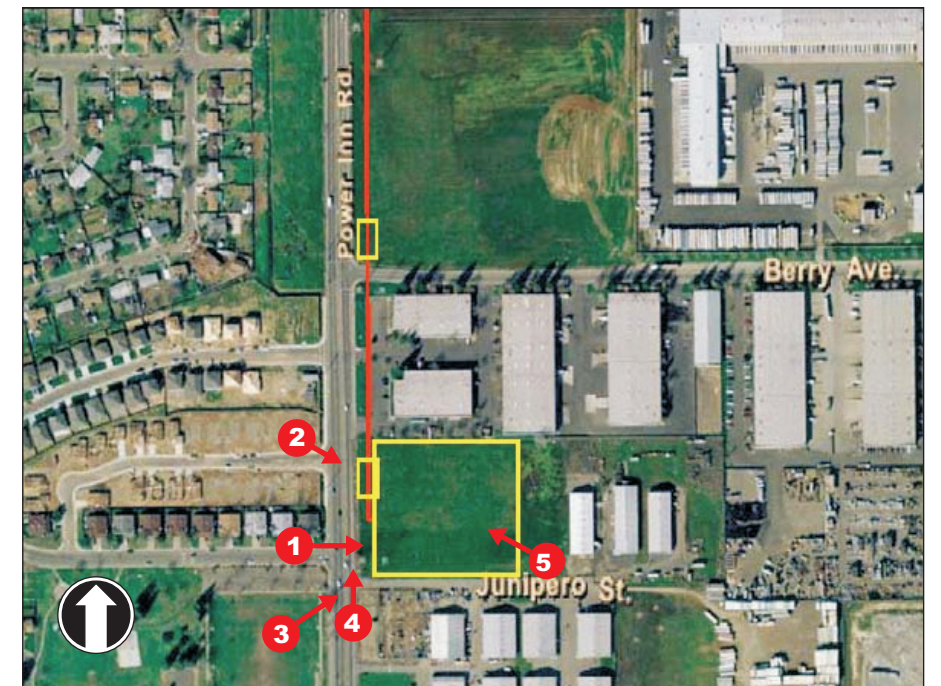
**KOP 3:**  
View toward wellhead site from Danny Nunn Park looking northeast.



**KOP 4:**  
View toward wellhead site driving north on Power Inn Road.



**KOP 5:**  
View looking northwest from east end of Junipero Street toward Glen Elder neighborhood.



**Wellhead Site KOP Key Map**



INTENTIONALLY LEFT BLANK



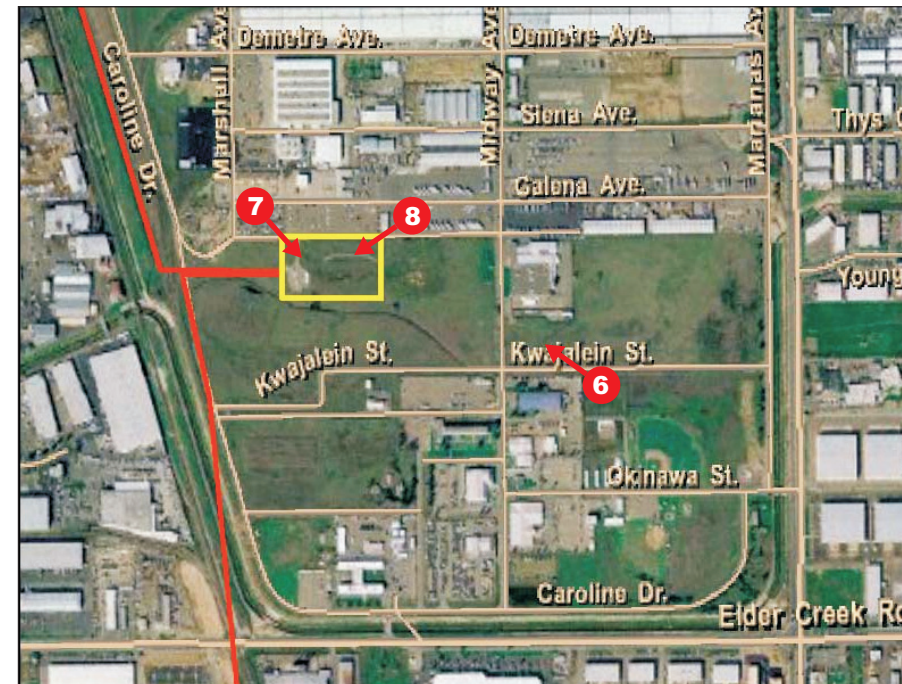
**KOP 6:**  
View of compressor station site looking northwest from Army Depot Park baseball fields.



**KOP 7:**  
View looking southeast from road north of Site.



**KOP 8:**  
View looking southwest from road north of Site.



**Compressor Station Site KOP Key Map**

INTENTIONALLY LEFT BLANK



### *Florin Gas Field*

The natural gas reservoir is situated approximately 3,800 feet belowground. The reservoir is not visible and no construction activities are associated with the reservoir aside from connections via the wellhead and compressor station sites. The remainder of the section, therefore, omits further discussion of the reservoir component of the Proposed Project.

### **Viewer Types and Exposure Conditions**

Viewer types and exposure conditions vary substantially in the project area. Viewer groups considered in the EIR include residents of the Avondale and Glen Elder neighborhoods; visitors to park and recreation areas including Danny Nunn Park, Depot Park, George Sim Park; and motorists along Power Inn Road, Junipero Street, and 53rd Avenue.

For each of the viewer groups identified in the project area, viewer exposure conditions were documented in the field. Variables considered include the viewing distance, angle of the view, the extent to which views are screened or open, and duration of the view. Viewing distances are documented according to whether the Proposed Project would be viewed within a foreground (i.e., within 0.5 mile), middleground (0.5 to 2 miles), or background (beyond 2 miles). Viewing angle and extent of visibility considers the relative location of the project to the viewer and whether visibility conditions are open or panoramic, or limited by intervening vegetation, structures, or terrain. Duration of view pertains to the amount of time the project would typically be seen from a sensitive viewpoint. In general, duration of view would be less in instances where the project would be seen for short or intermittent periods (such as from major travel routes and recreation destination roads) and greater in instances where the project would be seen regularly and repeatedly (such as from permanent residences or public use areas).

### *Wellhead Site*

*Residential Viewers:* Residential viewers of the wellhead site include residences in the Glen Elder community. Residences in the Avondale neighborhood are situated north of Lemon Hill Avenue, and given the distance and obstructing buildings do not have views of the wellhead site. Viewer exposure is greatest for residences situated at the northwest quadrants of 53rd Avenue and Othel Court and Power Inn Road. Unobstructed foreground views of the project site are present from the front lawn areas and second story windows from the residences near Power Inn Road. The height of adjacent residences limits viewer exposure from residences further west and north (see KOPs 1 and 2 on Figure D.13-1).

*Parks and Recreation Areas:* Two parks are identified within proximity to the wellhead site: Danny Nunn Park and George Sim Park. Danny Nunn Park is approximately 100 feet southwest of the Power Inn Road and Junipero Street intersection, within the southwest quadrant of the intersection of

Power Inn Road and 53rd Avenue. Users of the park would experience foreground views of the wellhead site looking northeast from the parking lot (see KOP 3 on Figure D.13-1). There are ornamental trees that border the grass area of the park along the parking lot and Power Inn Road, which obstructs direct views of the wellhead site. The duration of the view would be conditional on time spent at the park facility. Users of George Sim Park would not experience views of the wellhead site given the distance from the site (over 3,500 feet) and intervening structures.

*Motorists on Major or Scenic Travel Routes:* Direct views of the wellhead site are visible by both northbound and southbound motorists on Power Inn Road, by eastbound motorists on 53rd Avenue and Othel Court, and by eastbound and westbound motorists on Junipero Street (see KOPs 1, 2, 4, and 5 on Figure D.13-1). Views are predominantly unobstructed along Power Inn Road. Junipero Street, which marks the southern border of the wellhead site, affords motorists unobstructed foreground views of the site. Motorists traveling eastbound on 53rd Avenue and Othel Court are afforded foreground views of the wellhead site as they approach the Power Inn Road intersections. Duration of the views would be conditional on the time required to turn either right or left onto Power Inn Road.

#### *Compressor Station*

*Residential Viewers:* No residences are afforded views of the compressor station site. The compressor station site would be located within Depot Park in the City of Sacramento. Views of the compressor station would be limited to users of Depot Park, which are generally employees maintaining/using the on-site industrial storage facilities. Duration of exposure to users of the compressor station site would be limited given the nature of uses on site.

*Parks and Recreation Areas:* Depot Park consists of two facilities within the park, both under the jurisdiction of the City of Sacramento. The western 35.5-acre site is currently undeveloped. Should the City of Sacramento develop the site, park users would experience foreground unobstructed views of the project site when looking north (see KOP 6 on Figure D.13-2). The 22-acre park on the east side of Depot Park includes a ball field, bleachers, and scoreboard. Users of this facility may experience middleground views of the compressor station site looking northwest; however, intervening buildings pose obstructions.

*Motorists on Major or Scenic Travel Routes:* The compressor station site would not be directly visible to motorists along Power Inn Road and Fruitridge Road. Intervening buildings block site visibility from Power Inn Road to the west and Fruitridge Road to the north. There are no other major or scenic travel routes near or adjacent to the compressor station site, due to its location within the access-controlled Depot Park.

### *Pipeline Segments 1 and 2*

Belowground facilities would not be visible beyond the construction phase of the Proposed Project. Viewers during construction include those described under the wellhead and compressor station sites. In addition to the viewers previously described, temporary visual impacts would be observed by the following:

*Residential Viewers:* Residences north and south of Elder Creek Road and the intersection with Power Inn Road would be situated within 1,000 feet of the proposed pipeline installation activities associated with pipeline segment one. Intervening buildings would generally block foreground and middleground views of these activities. Residences south of Elder Creek Road, north of Junipero Street, and fronting Power Inn Road would experience foreground views of pipeline installation activities along Power Inn Road. The duration of these views would be temporary.

*Motorists on Major or Scenic Travel Routes:* A major travel route along segment one includes Power Inn Road. Motorists traveling in both directions on Power Inn Road would experience foreground views of the pipeline installation in passing. The duration of these views would be temporary by nature. There are no other major travel routes along the remainder of segment one nor along segment two.

### **Visual Sensitivity**

Visual sensitivity is a composite measurement of the overall susceptibility of an area or viewer group to adverse visual or aesthetic impacts, given the combined factors of landscape, visual quality, viewer types, exposure conditions, and duration. Table D.13-1 summarizes the visual sensitivity of the major viewer types that would be affected by the Proposed Project. Site photographs have been captured to show the range of existing viewing conditions for the Proposed Project components. KOPs have been determined for the various project components (see Figures D.13-1 and D.13-2). A KOP reflects a view that would endure high visual sensitivities. Table D.13-1 provides a summary of visual sensitivity findings as well as the associated index number corresponding with site photographs included on Figures D.13-1 and D.13-2.



**Table D.13-1**  
**Summary of Visual Sensitivity Findings**  
**Viewer Types, Viewer Exposures, and Visual Quality**

Viewer Type	Visual Quality	Viewer Exposure	Visual Sensitivity	Representative Views
<b>Wellhead Site</b>				
<b>Residential</b>				
Glen Elder Neighborhood	Indistinctive	Foreground distances; unobstructed and partially obstructed views; moderate number of viewers; long view duration	High	KOP 1—View from lawns of residences looking east toward wellhead site along 53rd Avenue.  KOP 2—View from lawns of residences looking east toward wellhead site along Othel Court.
<b>Park/Recreation</b>				
Danny Nunn Park	Indistinctive	Foreground and middleground distances; partially obstructed views; moderate number of viewers; moderate view duration	Moderate to High	KOP 3— View from Danny Nunn Park looking northeast at the wellhead site.
<b>Travel Routes</b>				
Power Inn Road	Indistinctive	Foreground distances; unobstructed and partially obstructed views; high number of viewers; short view duration	Moderate	KOP 4—View from Power Inn Road traveling northbound looking at the wellhead site.
Junipero Street	Indistinctive	Foreground distances; unobstructed views; low number of viewers; short view duration	Moderate	KOP 5—View from Junipero Street looking northwest over the wellhead site toward the Glen Elder neighborhood.
53rd Avenue and Othel Court	Indistinctive	Foreground distances; unobstructed views traveling eastbound; moderate number of viewers; short view duration	Moderate	KOP 1—View from 53rd Avenue traveling eastbound looking at the wellhead site. KOP 2—View from Othel Court traveling eastbound looking at the wellhead site.
<b>Compressor Station Site</b>				
<b>Park/Recreation</b>				
Depot Park	Indistinctive	Middleground and obstructed views; low number of viewers; short to moderate view duration	Low	KOP 6—View from the Depot Park looking northwest at the compressor station site. KOP 7—View from the Depot Park looking southeast across the compressor station site. KOP 8—View from the Depot Park looking southwest across the compressor station site.

### D.13.2 Applicable Regulations, Plans, and Standards

Many city and county public agencies establish planning policies with visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are contained in resource management plans, comprehensive plans and elements, and local specific plans. Applicable plans and the Proposed Project's consistency with these plans are addressed in Section D.8, Land Use, Agriculture, and Recreational Resources. Specific City of Sacramento policies and directives pertinent to visual resources are summarized in Table D.13-2.

**Table D.13-2  
Summary of Applicable Regulations, Plans, and  
Standards for Visual Resources**

Regulations/Plans	Description
<i>City of Sacramento</i>	
City of South Sacramento Community Plan (2008)	<ul style="list-style-type: none"> <li>• Industrial developments should be as attractive as possible. All industrially zoned land should be placed within the M-1S (Light Industrial) or M-2S (Heavy Industrial) zones. Landscaping and fencing on screening storage, junk yards, or other outside industrial uses should continue to be required and maintained.</li> <li>• Continue to enforce existing setback requirements that require the landscaping, screening, and fencing of industrial activities (Planning Division, Code Enforcement).</li> </ul>
City of Sacramento General Plan (1988)	<ul style="list-style-type: none"> <li>• It is the policy of the City of Sacramento to promote sustainable and balanced development that makes efficient and effective use of land resources and existing infrastructure by using the following Smart Growth Principle:               <ul style="list-style-type: none"> <li>○ Promote distinctive, attractive communities with a strong sense of place, including the rehabilitation of and use of historic buildings (Section 1).</li> </ul> </li> </ul>
Redevelopment Plan for the Sacramento Army Depot Project (Sacramento Housing and Redevelopment Agency 2004)	<ul style="list-style-type: none"> <li>• The Depot Park Redevelopment Plan goal as amended in 2004 is as follows: Eliminate the ugliness. The elimination and prevention of the spread of blight and deterioration, and the conservation and rehabilitation of the project area in accordance with the General Plan, applicable specific plans, and local codes and ordinances.</li> </ul>

### D.13.3 Environmental Impacts and Mitigation Measures for the Proposed Project

#### *D.13.3.1 Definition and Use of Significance Criteria*

##### **Definition of Adverse Visual Impacts**

An adverse visual impact may occur when: (1) an action perceptibly changes the existing physical features of the landscape that are characteristic of the region or locale; (2) an action introduces new features to the physical landscape that are perceptibly uncharacteristic of the region or locale, or become visually dominant in the viewshed; or (3) an action blocks or totally obscures aesthetic features of the landscape. The degree of visual impact depends upon how noticeable the adverse

change is. The noticeability of a visual impact is a function of the project features, context, and viewing conditions (angle of view, distance, and primary viewing directions). The key factors in determining the degree of visual change are visual contrast, project dominance, and view blockage/impairment.

*Visual Contrast:* Visual contrast is a measure of the degree of change in line, form, color, and texture that the project would create, when compared to the existing landscape. Visual contrast ranges from none to strong, and are defined as:

- None—The element contrast is not visible or perceived.
- Weak—The element contrast can be seen but does not attract attention.
- Moderate—The element contrast begins to attract attention and begins to dominate the characteristic landscape.
- Strong—The element contrast demands the viewer’s attention and cannot be overlooked.

*Project Dominance:* Visual dominance is the measure of a project feature’s apparent size relative to other visible landscape features in the viewshed, or seen area. A feature’s dominance is affected by its relative location in the viewshed and the distance between the viewer and feature. The level of dominance can range from subordinate to dominant.

*View Blockage or Impairment:* View blockage or impairment is a measure of the degree to which project features would obstruct or block views to aesthetic features due to the project’s position and/or scale. Blockage of aesthetic landscape features or views can cause adverse visual impacts, particularly in instances where scenic or view orientations are important to the use, value, or function of the land use.

*Overall Adverse Visual Impact:* This reflects the composite visual changes to both the directly affected landscape and from sensitive viewing locations. The visual impact level references in this EIR indicate the relative degree of overall change to the visual environment that the Proposed Project or alternatives would create, considering visual sensitivity, visual contrast, view blockage, and project dominance.

### **Significance Criteria**

The criteria used to assess the significance of adverse visual impacts resulting from the project takes into consideration the factors described above and state CEQA guidelines pertaining to visual resources. Appendix G of the CEQA Guidelines identifies the following circumstances that can lead to a determination of significant visual impact:



- The project has a substantial adverse effect on a scenic vista.
- The project substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- The project substantially degrades the existing visual character or quality of the site and its surroundings.
- The project creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

In general, the determination of impact significance is based on combined factors of visual sensitivity and the degree of visual change that the project would cause. The interrelationship of these two factors in determining whether adverse visual impacts are significant is shown in Table D.13-3.

**Table D.13-3**  
**Guidelines for Determining Adverse Visual Impact Significance**

Overall Visual Sensitivity	Overall Visual Change				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	Not Significant	Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant
Low to Moderate	Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant
Moderate	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant
Moderate to High	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant
High	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant	Significant

Notes: "Not Significant" impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

"Adverse but Not Significant" impacts are perceived as negative but do not exceed environmental thresholds.

"Adverse and Potentially Significant" impacts are perceived as negative and may exceed environmental thresholds depending on project- and site-specific circumstances.

"Significant" impacts may be reduced to less-than-significant levels with feasible mitigation or avoided altogether. Without mitigation or avoidance measures, significant impacts would exceed environmental thresholds.

### ***D.13.3.2 Applicant Proposed Measures***

SNGS, LLC proposes the following applicant proposed measure (APM), presented in Table D.13-4, to reduce visual resource impacts associated with the Proposed Project.

**Table D.13-4**  
**Applicant Proposed Measure for Visual Resources**

APM No.	Description
15	SNGS, LLC has proposed constructing a 10-foot perimeter wall surrounding the wellhead site along with landscaping along Power Inn Road and Junipero Street to reduce visual impacts. Landscaping would consist of drought-tolerant plants, which would naturalize after irrigating for two or three growing seasons.

### ***D.13.3.3 Visual Impact Analysis***

Visual effects from the Proposed Project would consist of both short-term and long-term changes to the visual environment. Short-term visual impacts would occur during the project construction phase and would result from the presence of equipment, crews, and activities during the construction period. Long-term visual impacts would result from the presence of new aboveground structures and facilities including the wellhead masonry wall surrounding the wellhead site and compressor station building. In addition, 6- to 8-foot-high pipeline markers would be visible along the pipeline segments.

This section of the EIR describes the short-term (V-1) and long-term (V-2) visual and aesthetic impacts of the aboveground and belowground Proposed Project components.

### **Impact V-1: Short-Term Visual Impacts**

#### *Aboveground Facilities*

*Wellhead Site:* The construction of the 4-acre wellhead site is scheduled to take approximately 3 months. Construction at the wellhead site would involve installation of water and wastewater lines along the south side of the site to the adjacent parcel on the east, construction of the perimeter wall, installation of curbs, gutters, sidewalks, and landscaping along Power Inn Road and Junipero Street. The wellhead site would be cleared, graded, and rocked to accommodate drilling equipment. The drill tower may stand at a maximum height of 150 feet above ground. The drill rig would include a maximum height of 125 feet for the rig and an additional 25 feet for the platform. It is anticipated that the drill rig would be visible from approximately 5 miles from the wellhead site. The same drill rig would be used for each well and would operate daily, 24 hours a day/7 days a week.

During this period, adverse short-term visual impacts would result from the presence of construction equipment, materials, work forces, and nighttime lighting for drilling activities at the wellhead site. Vehicles, heavy equipment, project components, workers, and nighttime lighting would be visible during site clearing, grading, and wellhead construction. Construction activities and equipment would primarily be seen by motorists travelling north and south on Power Inn Road, east on 53rd Avenue and Othel Court, east and west on Junipero Street, and to Glen Elder neighborhood residences from the lawn areas when looking east toward the site. Views of construction activities

from Danny Nunn Park would be partially blocked by existing trees on the park site. The movement of equipment to and from the site would be most evident during the construction of the wellhead site. Most construction activities would be screened once the 10-foot-high masonry wall is constructed around the site (see Figure D.13-3). Therefore, short-term visual impacts to scenic resources would be less than significant (Class III). Classifications of impacts are defined in Section D.1 of this EIR.

Nighttime lighting would occur on a daily basis during wellhead drilling. The nighttime light and glare associated with this construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact would be reduced to a less-than-significant level (Class II).

### **Mitigation Measure for Impact V-1: Short-Term Visual Impacts**

**V-1 Lighting Direction.** Site lighting shall be hooded and directed toward the interior of the wellhead, compressor station, and HDD drilling locations.

*Compressor Station:* The construction of the 5-acre compressor station is scheduled to take approximately 6 to 8 months. Construction activities at the compressor station site would involve site preparation and grading, installation of the perimeter fence, and construction of the building. Vehicles, heavy equipment, project components, and workers would be visible during site clearing, grading, and compressor station construction. Views of construction activities at the site would not be visible to sensitive receptors, as the site is within the access-controlled Depot Park; therefore, visual resource impacts would be less than significant (Class III).

#### *Belowground Facilities*

*Natural Gas Reservoir:* The natural gas reservoir site is situated approximately 3,800 feet below the ground. Therefore, there would be no construction impacts from this project component.

*Pipeline Segments 1 and 2:* Installation of the proposed pipeline segments would result in temporary visual resource impacts along the pipeline corridors during construction activities.

The Glen Elder residential neighborhood, Danny Nunn park users, and travelers along Power Inn Road, would be able to view pipeline segment one construction activities in the roadway corridor. Visual impacts would occur due to construction activities along Power Inn Road. While construction activities would be visible, they are not expected to significantly diminish the visual resources in the project area and therefore, impacts to visual resources due to construction in this portion of segment one would be less than significant (Class III).

HDD techniques would be used for segment one beneath Morrison Creek, Elder Creek Road, and the UPRR. Drilling equipment would result in temporary visual impacts; however, due to the location of



the HDD activities within a mainly industrial area with no sensitive public views present, impacts to visual resources for this portion of segment one would be less than significant (Class III). In addition, the remainder of segment one is within the gated Depot Park site and would be within an existing utility ROW; therefore, physical ground disturbances associated with project construction would not substantially impact scenic vistas or natural scenic resources. Short-term impacts for the northern portion of segment one would be less than significant (Class III).

Pipeline construction of segment two is located within the access-controlled Depot Park site. Views of construction activity would not be visible to the general public for the majority of segment two. Motorists traveling along Fruitridge Road would have views of the pipeline interconnect construction activities when looking south at the end of segment two. As impacts are temporary along segment two, impacts to visual resources would be less than significant (Class III).

### **Impact V-2: Long-Term Visual Impacts**

#### *Aboveground Facilities*

*Wellhead Site:* The wellhead site would be screened by a 10-foot masonry wall and by landscaping along Power Inn Road and Junipero Street (APM 15); therefore, it would not be highly visible to viewers who see the site once construction is complete (see Figure D.13-3). The wall would be set back from Power Inn Road by a 100-foot-wide landscaped power line easement. Access to the site would be through a gate on Junipero Street. On the outside of the wall, sidewalks and landscaping would be placed along Power Inn Road and Junipero Street. As illustrated in Figure D.13-3, due to the visual screening of the wellhead site, visual resource impacts would be less than significant (Class III).

The wellhead site does not propose continuous nighttime illumination of the site. However, occasional maintenance activities may occur at night, which would require nighttime lighting. When maintenance activities occur, the lighting would be intermittent and temporary. In addition, the wellhead site is set back 100 feet from Power Inn Road, which increases the distance between the illumination source from the adjacent uses and, therefore, would not directly affect residents nearby. Due to the surrounding industrial and residential uses, existing street lighting on Power Inn Road, and the intermittent and temporary nature of new lighting of the wellhead site, there would be no substantial change in the existing ambient nighttime lighting of the site. Therefore, a less-than-significant impact would occur due to light and glare (Class III).

*Compressor Station:* The compressor station would be located on a 5-acre site within Depot Park, which is access-controlled and does not have nearby views visible to the general public. Long-term views of the site would consist of a new building at the site. However, as the site is not visible to nearby sensitive receptors and it is within an industrial use area, the Proposed Project would have a less-than-significant impact to the existing visual resources of the project area (Class III).



SOURCE: SNGS, LLC 2007a.

  
NORTH  
NOT TO SCALE

Sacramento Natural Gas Storage Project - EIR  
**Rendering of 10-Foot Wellhead Site Masonry Wall**

**FIGURE  
D.13-3**

INTENTIONALLY LEFT BLANK



The compressor station site proposes lighting at the entrance gate to support security camera use and walkway lighting, which would be low voltage to reduce spillover of light. As with the wellhead site, occasional maintenance activities may occur at night, which would require illumination of the site. Due to the site being located in an industrial area, the maintenance lighting being intermittent and temporary, and because the site is not near sensitive receptors, there would be no substantial change in the existing ambient nighttime lighting of the site. Therefore, a less-than-significant impact would occur due to light and glare (Class III).

#### *Belowground Facilities*

*Natural Gas Reservoir:* The natural gas reservoir site is situated approximately 3,800 feet below the ground. Therefore, there would be no long-term visual impacts from this project component.

*Pipeline Segments 1 and 2:* Scenic vistas would not be affected by operations along the pipeline connections. Once construction is complete, the pipelines would be located underground and would be hidden from sight. Visual resources impacts would be less than significant (Class III).

### **D.13.4 Project Alternatives**

#### *D.13.4.1 Gas Field Alternatives*

##### **Freeport Gas Field**

#### *Environmental Setting*

The Freeport Gas Field is located in a suburban fringe area and is and is partially located underneath a wastewater treatment plant. The area is surrounded on the north, west, and south by the City of Elk Grove (population 59,984) (U.S. Census 2000). The actual reservoir area contains few residences and little population. The residential uses could have views of the new aboveground facilities.

#### *Environmental Impacts and Mitigation Measures*

Due to the existing wastewater plant facilities located on site, implementation of this alternative would not substantially alter the visual resources of the site. Therefore, less-than-significant impacts to scenic views, sensitive receptors, or a state scenic highway would occur with implementation of this alternative (Class III).

Lighting associated with the wellhead site and compressor station would introduce new light and glare in an area. The nighttime light and glare associated with construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact is reduced to a less-than-significant level (Class II). During operations, due to the intermittent and temporary nature of new lighting required for aboveground facilities and existing lighting associated

with the existing wastewater plant, a less-than-significant impact would occur due to light and glare (Class III).

#### *Comparison to the Proposed Project*

As with the Proposed Project, implementation of this alternative with mitigation would not result in significant impacts to visual resources.

### **Snodgrass Slough Gas Field**

#### *Environmental Setting*

The Snodgrass Slough is a former gas field that is located in a primarily agricultural area. The nearest population center is Walnut Grove, 4 miles to the south with a population of approximately 669 (U.S. Census 2000). The area does not have nearby sensitive receptors and is not within a scenic highway corridor. Light and glare is minimal at this alternative site due to its rural character. Except for occasional passing vehicles and local residences, few man-made light sources are present at night in the area where permanent aboveground structures would be added.

#### *Environmental Impacts and Mitigation Measures*

The implementation of this alternative does not have the potential to impact scenic views or sensitive receptors due to its remote location in a primarily agricultural area. No state scenic highways pass the site. Therefore, less-than-significant impacts to scenic views, sensitive receptors, or a state scenic highway would occur with implementation of this alternative (Class III).

Lighting associated with the wellhead site and compressor station would introduce new light and glare in an area. The nighttime light and glare associated with construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact is reduced to a less-than-significant level (Class II). During operations, due to the lack of sensitive receptors and the intermittent and temporary nature of new lighting of the wellhead site, a less-than-significant impact would occur due to light and glare (Class III).

#### *Comparison to the Proposed Project*

As with the Proposed Project, implementation of this alternative with mitigation would not result in significant impacts to visual resources.

### **Thornton Gas Field**

#### *Environmental Setting*

The Thornton Gas Field is located in a primarily agricultural area. The nearest population center is Thornton (population 4,650), approximately 1 mile to the south (U.S. Census 2000). The Cosumnes

River Preserve is located to the north of the site. The area does not have permanent sensitive receptors and is not within a scenic highway corridor. Light and glare are minimal at this alternative site due to its rural character. Except for occasional passing vehicles and local residences, few man-made light sources are present at night in the area where permanent aboveground structures would be added.

#### *Environmental Impacts and Mitigation Measures*

Implementation of this alternative has the potential to impact visitors/hikers to the Cosumnes River Preserve area during installation of pipelines and other facilities. In addition, long-term views for visitors/hikers would be impacted by the development of aboveground facilities. Although this alternative is in a primarily agricultural area, the implementation of this alternative has the potential to impact scenic views or sensitive receptors (visitors/hikers) due to its location near the Cosumnes River Preserve. The addition of the wellhead and compressor station sites would be a permanent change to the scenic vista and would therefore be a potentially significant impact. As a mitigation measure, the applicant would be required to site the structures away from scenic vistas for visitor/hikers of the Cosumnes River Preserve and provide adequate screening both during construction and operation. The long-term screening shall include native vegetation compatible with the surrounding vegetation communities. With implementation of this mitigation measure, this impact will be reduced to be a less-than-significant level (Class III).

No state scenic highways pass the site. Therefore, no significant impacts to a state scenic highway would occur with implementation of this alternative (Class III).

Lighting associated with the wellhead site and compressor station would introduce new light and glare in the area. The nighttime light and glare associated with construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact would be reduced to a less-than-significant level (Class II). During operations, due to the intermittent and temporary nature of new lighting required for aboveground facilities, a less-than-significant impact would occur due to light and glare (Class III).

#### *Comparison to the Proposed Project*

This alternative has a potential to create visual resource impacts for visitors/hikers to the Cosumnes River Preserve due to views of project construction activities and long-term views of aboveground facilities. However, as with the Proposed Project, implementation of this alternative with mitigation would not result in significant impacts to visual resources.

#### ***D.13.4.2 Project Design Alternatives***

Because the project design alternatives would occur within the same vicinity as the Proposed Project, the existing visual resources would be the same for all the gas pipeline route alternatives, as described in Section D.13.1.

#### **Alternative Wellhead Site to Compressor Station Pipeline Route 1**

##### *Environmental Setting*

This route would be approximately 7,800 feet long. This alternative would be approximately 450 feet longer than the Proposed Project.

##### *Environmental Impacts and Mitigation Measures*

Visual impacts would occur in a similar manner as with the Proposed Project (Impact V-1, short-term visual impacts, and Impact V-2, long-term visual impacts).

As with the Proposed Project, short-term construction activities at the wellhead site would be screened once the 10-foot-high masonry wall is constructed (APM 15). Therefore, short-term visual impacts to scenic resources would be less than significant (Class III). Similar to the Proposed Project, nighttime lighting would occur on a daily basis during wellhead drilling. The nighttime light and glare associated with this construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact would be reduced to a less-than-significant level (Class II). Construction activities associated with the compressor station and pipeline segments one and two are not near sensitive receptors. Therefore, no significant impacts to scenic resources would occur for these facilities (Class III).

Similar to the Proposed Project, long-term visual resource impacts (Impact V-2) of the project facilities would be less than significant (Class III). The wellhead site will be screened by the masonry wall and will be landscaped. The compressor station site is not visible to nearby sensitive receptors and is within an industrial use area. Once construction is complete, the pipelines would be located underground and would be hidden from sight.

Due to the surrounding industrial and residential uses, existing street lighting, and the intermittent and temporary nature of new lighting of the wellhead site, there would be no substantial change in the existing ambient nighttime lighting of the site. Due to the compressor station site being located in an industrial area, the maintenance lighting being intermittent and temporary, and because the site is not near sensitive receptors, there would be no substantial change in the existing ambient nighttime lighting of the site. As with the Proposed Project, a less-than-significant impact would occur due to light and glare from either the wellhead or compressor station sites with this alternative (Class III).

### *Comparison to the Proposed Project*

Due to the increased length of pipeline required, short-term construction-related impacts to visual resources resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 1 would be slightly greater than those associated with the Proposed Project.

### **Alternative Wellhead Site to Compressor Station Pipeline Route 2**

#### *Environmental Setting*

This alignment would be approximately 7,700 feet long. This alternative would be approximately 350 feet longer than the Proposed Project.

#### *Environmental Impacts and Mitigation Measures*

Visual impacts would occur in a similar manner as with the Proposed Project (Impact V-1, short-term visual impacts, and Impact V-2, long-term visual impacts).

As with the Proposed Project, short-term construction activities at the wellhead site would be screened once the 10-foot-high masonry wall is constructed (AMP 15). Therefore, short-term visual impacts to scenic resources would be less than significant (Class III). Similar to the Proposed Project, nighttime lighting would occur on a daily basis during wellhead drilling. The nighttime light and glare associated with this construction activity is considered a temporary significant impact. With implementation of Mitigation Measure V-1, this impact would be reduced to a less-than-significant level (Class II). Construction activities associated with the compressor station and pipeline segments one and two are not near sensitive receptors. Therefore, no significant impacts to scenic resources would occur for these facilities (Class III).

Similar to the Proposed Project, long-term visual resource impacts (Impact V-2) of the project facilities would be less than significant (Class III). The wellhead site will be screened by the masonry wall and will be landscaped. The compressor station site is not visible to nearby sensitive receptors and is within an industrial use area. Once construction is complete, the pipelines would be located underground and would be hidden from sight.

Due to the surrounding industrial and residential uses, existing street lighting, and the intermittent and temporary nature of new lighting of the wellhead site, there would be no substantial change in the existing ambient nighttime lighting of the site. Due to the compressor station site being located in an industrial area, the maintenance lighting being intermittent and temporary, and because the site is not near sensitive receptors, there would be no substantial change in the existing ambient nighttime lighting of the site. As with the Proposed Project, a less-than-significant impact would occur due to light and glare from either the wellhead or compressor station sites with this alternative (Class III).



### *Comparison to the Proposed Project*

Due to the increased length of pipeline required, short-term construction-related impacts to visual resources resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 2 would be slightly greater than those associated with the Proposed Project.

### **Alternative Wellhead Site to Compressor Station Pipeline Route 3**

#### *Environmental Setting*

This alternative would be approximately 7,100 feet long. This alternative would be approximately 250 feet shorter in length as compared to the Proposed Project.

#### *Environmental Impacts and Mitigation Measures*

Visual impacts would occur in a similar manner as with the Proposed Project (Impact V-1, short-term visual impacts, and Impact V-2, long-term visual impacts).

As with the Proposed Project, short-term construction activities at the wellhead site would be screened once the 10-foot-high masonry wall is constructed (AMP 15). Therefore, short-term visual impacts to scenic resources would be less than significant (Class III). Similar to the Proposed Project, nighttime lighting would occur on a daily basis during wellhead drilling. The nighttime light and glare associated with this construction activity is considered a temporary, significant impact. With implementation of Mitigation Measure V-1, this impact would be reduced to a less-than-significant level (Class II). Construction activities of the compressor station and pipeline segments one and two are not near sensitive receptors. Therefore, no significant impacts to scenic resources would occur for these facilities (Class III).

Similar to the Proposed Project, long-term visual resource impacts (Impact V-2) of the project facilities would be less than significant (Class III). The wellhead site will be screened by the masonry wall and will be landscaped. The compressor station site is not visible to nearby sensitive receptors and is within an industrial use area. Once construction is complete, the pipelines would be located underground and would not be visible.

Due to the surrounding industrial and residential uses, existing street lighting, and the intermittent and temporary nature of new lighting of the wellhead site, there would be no substantial change in the existing ambient nighttime lighting of the site. Due to the compressor station site being located in an industrial area, the maintenance lighting being intermittent and temporary, and because the site is not near sensitive receptors, there would be no substantial change in the existing ambient nighttime lighting of the site. As with the Proposed Project, a less-than-significant impact would occur due to light and glare from either the wellhead or compressor station sites with this alternative (Class III).

### *Comparison to the Proposed Project*

Due to the decreased length of pipeline required, the short-term construction-related visual resource impacts resulting from developing Alternative Wellhead Site to Compressor Station Pipeline Route 3 would be slightly less than those associated with the Proposed Project.

#### **D.13.4.3 Environmental Impacts of the No Project Alternative**

Implementation of the No Project Alternative would result in the SNGS Facility not being constructed. Therefore, there would be no impacts to visual resources associated with the construction or operation of facilities.

#### **D.13.5 Mitigation Monitoring, Compliance, and Reporting**

Table G-1 describes the mitigation monitoring, compliance, and reporting program for visual resources.

#### **D.13.6 References**

Sacramento, City of. 1988. *City of Sacramento General Plan*. Approved Jan 1988; revised in 2000 and 2003. 2030 General Plan is in preparation. Sacramento, California.

Sacramento, City of. 2008. *City of South Sacramento Community Plan Map*. Approved 1986; amended July 2008.

Sacramento Housing and Redevelopment Agency. 2004. *Redevelopment Plan for the Sacramento Army Depot Redevelopment Project*. Approved June 1995; amended 2004.

SNGS (Sacramento Natural Gas Storage), LLC. 2007a. *Proponent's Environmental Assessment (PEA) for the Sacramento Natural Gas Storage (SNGS) Project*. Sacramento, California: Sacramento Natural Gas Storage, LLC and EIP Associates, a division of PBS&J. April 5, 2007.

SNGS (Sacramento Natural Gas Storage), LLC. 2007b. *Proponent's Environmental Assessment (PEA) for the Sacramento Natural Gas Storage (SNGS) Project: Addendum*. Sacramento, California: Sacramento Natural Gas Storage, LLC and EIP Associates, a division of PBS&J.

U.S. Census. 2000. "Data Year 2000." *U.S. Census Bureau American Fact Finder*. Accessed online at: [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)

INTENTIONALLY LEFT BLANK