

**Visual Impact Assessment
Route 74 Route Widening Project**

VISUAL IMPACT ASSESSMENT

ROUTE 74 WIDENING PROJECT

December 20, 2006

12-Ora-74
KP 1.0/1.9
EA 086900

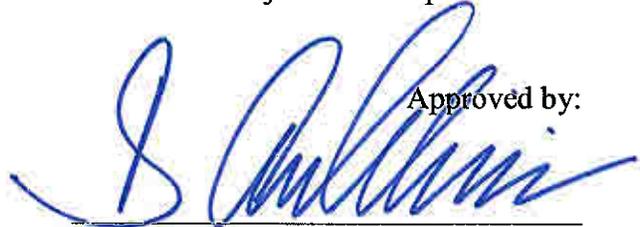
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EXECUTIVE SUMMARY

This visual impact assessment is a technical report of the Draft Environmental Document to evaluate the visual aspects of the State Route (SR) 74, Ortega Highway, Widening Project in Orange County in the City of San Juan Capistrano.

The visual assessment follows the FHWA guidelines and evaluation method. The assessment includes a visual quality factor, physical quality factor and sensitivity to change tables to evaluate the visual character seen by the viewer groups. Additionally the assessment includes a summary of findings, conclusions, and general and specific mitigation recommendations and requirements.

The project proposal is a highway improvement that provides for safety improvements along approximately 1.5 km (0.9 miles) of Ortega Highway. The improvement is to primarily widen the highway and includes some construction related sound walls, retaining walls and landscape. This visual study includes 5 view assessments that depict typical conditions within the project corridor:

- **Assessment #1 – Project Boundary View** – evaluates the view at Calle Entradero. This view of both sides of the highway includes the Hunt Club and residential streets. There is a horse trail, meandering sidewalks, significant street trees, meandering sidewalks, groundcover vegetation in the view to the North.
- **Assessment #2 – Residential Zone View** – evaluates the impact of the widened roadway on the residential use on the north side of the project area. Currently there are no sidewalks or curb and gutters seen along this section of roadway. Driveways that directly feed into the highway have a steep grade.
- **Assessment #3 – Agricultural Zone View** – evaluates the view of the Tanaka Farm, a small fruit and vegetable stand that is set back from the highway with room for motorists to stop and shop.
- **Assessment #4 – Rural Environment View** – evaluates the visual disruption for a proposed hillside cut and retaining wall installation for the highway widening. Further east along the highway is the beginning of the rural character of Route 74.
- **Assessment #5 – Rural Environment View** – evaluates a typical rural highway views and vistas.

The project needs proper mitigation development and implementation to reduce the project associated negative impacts. The visual impacts are to users of the transportation corridor and the residents with driveways adjacent to the widening project. The negative visual impacts include the visible utility lines; the removal of trees and vegetation; and installation of retaining walls and sound walls necessary to widen the roadway.

Further visual analysis is necessary after the final project alternative selection. A general mitigation recommendation for the project construction is to plant trees, shrubs, vines and ground cover to offset any negative visual impacts. The Hunt Club needs specific mitigation recommendations. An aesthetic committee of community leaders, City

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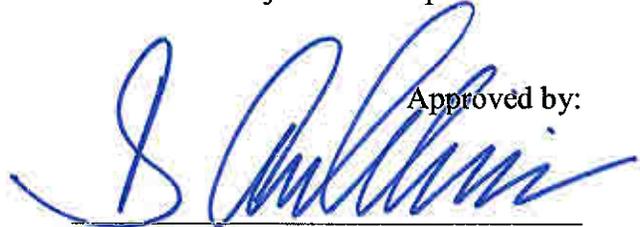
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officials, and Caltrans landscape architects to identify and formulate the project mitigation is appropriate.

Mitigation measures are to reduce the visual impacts of the proposed construction project to a less than significant level. Aesthetic treatments and plantings that visually compliment and mirror the surrounding environment can preserve the visual quality of the Route 74.

I. Purpose of the Study

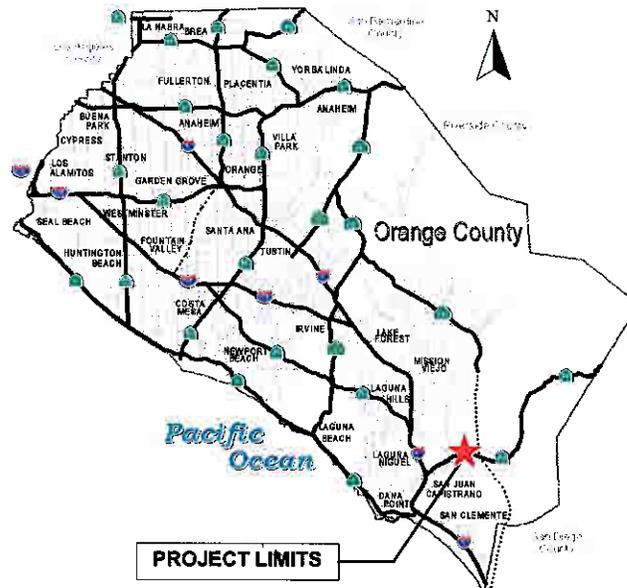
The purpose of the study is to assess the visual impacts of the proposed project and to propose measures to mitigate any adverse visual impacts associated with the Route 74 widening project on the surrounding environment.

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations requires the consideration and determination of the likely effects of proposed Federal actions or projects on the quality of the human environment. The identification of visual effect is an environmental factor of required consideration. NEPA includes this under the subject "aesthetics."

Major Federal actions that significantly affect the environment and require Environmental Impact Statements (EIS). They identify whenever there are potential visual impacts. Additionally an EIS needs to identify the impacts to an existing visual resource, the relationship and impacts to potential viewers to and from the project, and provides measurements to avoid, minimize, or reduce any adverse action impacts.

II. Project Description

The focus of the visual study for the proposed project on Route 74 and includes a section of the Highway within the City of San Juan Capistrano from Calle Entradero to the City limits.



The Ortega Highway provides interregional access between south Orange County and Riverside County. The project portion of the highway has commuter traffic from the adjacent residential communities and interregional recreational traffic. San Juan Creek dominates the geography. The river meanders along and crosses Ortega Highway to the North. As the roadway runs through the San Juan Canyon area, it has sharp curves lined by steep slopes. Route 74 is the only major highway in southern Orange County that connects to Riverside County. The primary users on weekday morning and afternoon peak operation hours are commuters from Riverside County that travel to southern Orange County. The primary weekend users travel for recreation.

Roadway Design Considerations

The original roadway design, circa 1930, provided for a 2-lane and 6.7 meter wide roadway with a maximum grade of six percent. The Ortega Highway inclusion into the State Freeway and Express System was in 1959.

State Route 74 is now a 4-lane highway from I-5 to Calle Entradero, and a 2-lane highway from Calle Entradero to Riverside County line. Between Calle Entradero and La Pata Avenue the existing facility provides a median with left turn pocket lanes and right turn lanes at the intersections.

A typical project section within the City consists of 4 through lanes with a painted median. Additionally, the project includes a 5-foot paved shoulder on both sides of the roadway to accommodate a Class II bicycle facility. The edge of pavement is to have concrete curbs on each side of the roadway. The project does not include any new intersections. All of the existing intersections in the City limits are to be widened and improved to accommodate the project 4 through lanes with a 5 foot shoulder improvement.

Sound walls are a project element since they are necessary along the south side of Ortega Highway adjacent to the residential development within the City limits. The project sound wall construction abuts private property walls.

Retaining walls are a project element since they are necessary to accommodate the widening improvements on the north side of Ortega Highway. The wall construction needs to meet the aesthetic requirements of the City. Where feasible, extensive landscape is necessary to blend the wall structures into the natural environment. The determination of the final design of the retaining walls is at a later date.

III. Methodology

The visual assessment begins with an analysis of the regional landscape. This analysis establishes a frame of reference for the comparison of the visual effects of the proposed project and with the determination of the significance of the effects. Visual character includes visual attributes (form, line, color, and texture) to derive visual patterns, such as dominance, scale, diversity, and continuity. The components of the regional landscape that set it apart from other regional landscapes include the landform (topography), land cover, water, vegetation and the man-made environment. This visual impact assessment uses the methodology provided in FHWA guidelines, Visual Impact Assessment for Highway Projects, March 1981.

Once established, there is an analysis of the proposed project. A view-shed is the visual study area of the proposed project. The view is a two-way view. They are the areas seen to and from the project area. Topography, vegetation and the man-made structures influence the view shed. The product of the analysis is a view-shed map. The study divides the view shed into landscape units for the analysis. A landscape unit is an area of visual character. For each landscape unit there are key viewpoints that represent the typical condition. This includes the visual condition and the proposed and mitigated condition. The key viewpoints do not represent the worst case or least case impacts. Rather the key viewpoint indicates a typical level of impact.

Project Planning and Regulatory Policies

□ Federal Policies

- **The Historic Preservation Act of 1966** – The United States Congress and President adopted the Historic Preservation Act of 1966 to protect highway aesthetics for scenic roads and parkway view protection. The Act directs all Federal agencies to account for their efforts to preserve historic resources for project proposals. Additionally in 1966 the United States government recognized the visual effects of highway projects in Section 4(f) of the Department of Transportation Act. This Act declares the national beauty of the countryside; public park and recreation lands; wildlife and waterfowl refuges; and historic sites. Highway projects can only cross these special lands if there is no feasible and prudent alternative and if the sponsor agency demonstrates accomplishments and implements planning practices to minimize harm to the identified protection elements of the Act.
- **The National Environmental Policy Act of 1969 (NEPA)** – NEPA Section 109 (h) declares the responsibility of the Federal government to use all practicable means to assure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- **United States Government Code** – Highway aesthetics definition in Title 23 of the U.S. Code governs the Federal Highway Administration (FHWA) to augment and reflect the directives of NEPA. Section 109 (h) of the Code. The directive requires costs identification to minimize or eliminate the destruction or disruption of man-made and natural resources,” and identifies the need to include aesthetic values to balance the impacts of highway construction.

□ State Policies

- **The Council on Environmental Quality (CEQ)** strengthens the relationship of the NEPA process by an early determination of the EIS scope and the environmental issues that are most significantly related the decision of project alternatives. This process identifies the project scope, nature, potential significance, and level of effort necessary to resolve the visual issues of the project impact.

□ **County Policies**

- **State Scenic Highways per the California Streets and Highway Code, Sections 260 thru 263.8, Component III, Advance Planning Program, Transportation Element, County of Orange, April 1990**

The goal of the State Scenic Highway, California Streets and Highway Code, Section 260 – 263.8 is to preserve and enhance unique or special aesthetic and visual resources with sensitive highway design and development of scenic corridors. The division of Orange County Designated Scenic Highways is into two categories: Viewscape Corridors and Landscape Corridors.

- (1) **Viewscape Corridors:** Routes that traverse a scenic corridor that contain unique or unusual scenic resources and aesthetics.

County view corridors are Route 74, from Interstate Route 5 to the eastern Orange County boundary line and the eastern extension of Oso Parkway from Antonio Parkway.

- The intention of scenic designation of a transportation corridor, in view corridors, is to minimize the impact of development on scenic resources. When feasible and appropriate, the County supports the development of safety roadside rests and vista points for the motorist to enjoy and appreciate scenic values.
- Transportation corridor right-of-way development in a view corridor needs to use the adopted view shed typical section; a 3-meter wide center median and a 9-meter wide parkway strip to accommodate highway beautification and paved facilities for pedestrians and bicycles. A scenic corridor implementation plan needs to use these standard widths. The County considers the modification of the view shed typical section when the design destroys the corridor scenic amenities.

- (2) **Landscape Corridor:** A landscape corridor is a picturesque vegetative area that traverses a current or future development designated for special treatments to provide for a pleasant driving environment and community enhancement.

- Development within the landscape corridor needs to complement the scenic value of the highway.
- Landscape corridor development needs to follow the County adopted landscape typical section. The typical section includes a 2-meter wide center median and a 7.6-meter wide parkway strip to accommodate highway beautification and paved facilities for pedestrians and bicycles. Any variation to the typical section needs discussion in the associated scenic corridor implementation plans.

- Oso Parkway, east from Interstate 5 to Antonio Parkway is a landscape corridor in Orange County.

□ **City Policies**

City of San Juan Capistrano General Plan, December 1974

Open space and Conservation Element Goals:

Conserve natural resources, scenic beauty and agriculture, and other land and water resources whose retention is necessary for the continued maintenance of the quality of the environment and prosperity of the community.

Prevent incompatible development of areas that should be preserved for scenic, historic, conservation or public safety purposes. Scenic features include floodplains and creeks, major ridgelines, plant and wildlife habitats, landmark trees and general open space areas. Landslide areas may be removed or stabilized on the condition that remedial grading and landscaping serve to restore the natural character and appearance of such areas.

Scenic Highway Element Goals:

The scenic, historic or cultural character of the scenic corridor should have a quality that merits recognition, or it should be of sufficient interest to be destination for recreation purposes. In addition, it should provide frequent opportunities for the development of roadside complementary facilities adjacent to the road. Eligible scenic highway routes include Ortega Highway, Interstate 5 south of Ortega Highway, and San Juan Creek Road.

Floodplain Element Goals:

Public works projects that affect creeks and floodplains should include measures to enhance and/or restore natural character by means of riparian tree, shrub, and grass planting, removal of undesirable plants such as giant reed, restoration of animal habitat, or similar measures.

• **City of San Juan Capistrano Municipal Code, Title 9 – Land Use, October 1994**

• **Hillside Management District:**

The purpose and intent of the Hillside Management District is to implement the programs and policies of the General Plan. The plan includes the Open Space and Conservation

Federal legislation acknowledged highway aesthetics by scenic road and parkway view protection. The Historic Preservation Act of 1966 directs all federal agencies to account for their- efforts of proposed projects on historic resources. Coverage of the visual effects of highway projects recognized in 1966 by Section 4(f) of the Department of Transportation Act. It declares the national beauty of the countryside and public park and recreation lands, wildlife, and waterfowl refuges, and historic sites. Highway projects can only cross these special lands if there is no feasible and prudent alternative and the sponsoring agency demonstrates that all possible planning to minimize harm has been accomplished.

Viewer Summary

The basis of the viewer experience is the combination of visual resources and viewer response. Identification of the viewers and the aspect of the visual environment they respond to are necessary to understand and predict viewer response to the proposed projects. The determination of viewer exposure is the level of response to the visual environment by evaluation of activities, visual element sensitivity and the view duration.

Viewer Groups

Project viewers fall into the two categories of highway users and viewers. They include;

- **Tourists and Recreational Motorists**
Tourists and recreational motorists, especially their passengers, have the highest sensitivity and time to see views than other types of motorists.
- **Local Residents**
Local residents have a high sensitivity to visual resources due to their familiarity of the area.
- **Commuters**
Commuters do frequent repeat trips and develop a sense of identity with landmarks in the view shed. They have moderate sensitivity.
- **Commercial and Industrial Drivers**
Commercial and industrial drivers have lower viewer sensitivity since their priorities are timely arrivals and safety.

Sensitivity to Change Factors:

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY
Form	• Single dominant form.	• Many similar forms.	• Many different forms.
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.
Intactness	• Natural.	• Disturbed.	• Scarred.

Visual Character Units

A visual character unit is a definable area that contains a consistent visual and perceptual character. The unit size range is from a few acres to several hundred acres. The boundaries of the unit can be dramatic or transitional.

The visual and perceptual character determination of the unit is by landform, vegetation, and architectural character, scale and land use. Since visual impacts are relative and need quantification for comparison, the visual environmental unit delineation is very important. A qualitative description of the views, landform quality and visual sensitivity is necessary.

- **Landform** – The topographical features of the project area and the uniqueness of the form, pattern and edge identification.
- **Vegetation** – The type and magnitude of vegetative cover within the project area.
- **Water** – The resources in the project area, whether this resources are affected directly, indirectly or not at all by the proposed project.
- **Color** – The elements of visual pattern on the surrounding project element of soil, vegetation and landforms.
- **Diversity** – The amount and variety of patterns of the visual elements and their visual relationship.

Evaluation Table:

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features.
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3).
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable.
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones.

Perceptual Quality

Perceptual Quality Factors are the perceptions of the view of the landscape quality. The analysis of the visual quality uses three evaluation criteria. These criteria are vividness, intactness and unity. Each of these three criteria is independent and intended to evaluate one aspect of visual quality. No one criteria captures visual quality. The analysis of visual quality uses three criteria. The criteria terms are vividness, intactness, and unity. Each of these three criteria is independent with the intention to evaluate one aspect of visual quality. No one criterion captures visual quality. The evaluation of each factor is as high, moderate, or low. These perceptions are for the cognitive assimilation of the viewer of landscape elements into a memorable landscape image that are distinguishable from other landscapes within the region. Perceptual quality factors include the following:

Vividness – the memorable landscape components as they combine in striking and distinctive visual patterns.

Intactness – the visual integrity of the natural and man-made landscape and the visual freedom from element encroachment.

Unity – the visual coherence and compositional harmony of the landscape considered as a whole, a combination of the natural and man-made elements of the view.

EVALUATION TABLE:

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY
Vividness	<ul style="list-style-type: none"> Highly memorable. Elements combine in striking visual patterns. Presence of distinct focal point(s). 	<ul style="list-style-type: none"> Somewhat memorable. Elements form perceivable pattern(s). 	<ul style="list-style-type: none"> Not vivid. Elements appear random with no perceivable pattern(s).
Intactness	<ul style="list-style-type: none"> The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	<ul style="list-style-type: none"> Man-made development and the natural landscape are disturbed and encroach on the visual setting. 	<ul style="list-style-type: none"> The landscape has encroaching elements that create an eyesore to viewers.
Unity	<ul style="list-style-type: none"> The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern. 	<ul style="list-style-type: none"> Some visual relation between man-made and natural setting. 	<ul style="list-style-type: none"> Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.

Distance Zones

Distance can play an important role in any visual impact analysis. Generally, the further the distance, the smaller the project element appearance, the less detail is discernible. Atmospheric conditions subdue texture, color and the portion of the cone of vision. Elements of the view become insignificant. The visual quality of a landscape and visual impact to the user can be magnified or diminished by the visibility of the landscape from major key viewpoints.

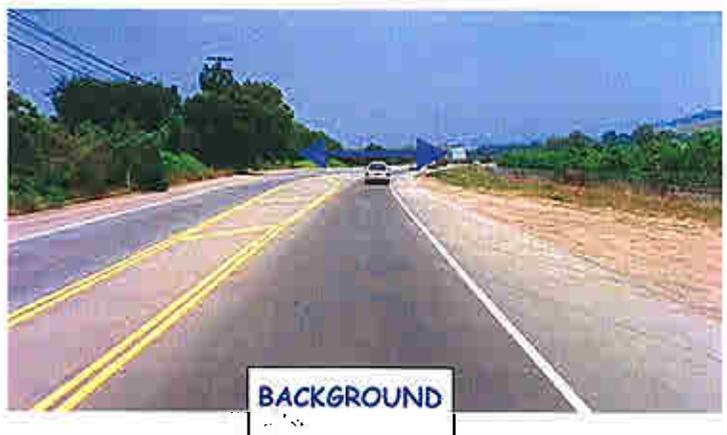
Fore ground – the area where designation clarification and simplification is not possible in middle and background since the observer is a direct participant.



Middle ground – the area where the parts of the landscape visually join together; where hills become a range or trees make a forest.



Background – the areas where surfaces of landforms lose detail distinctions; emphasis is on outline or edge.



Analysis of the Proposed Condition

Key viewpoints provide the basis for the analysis of the visual condition. The first step is the identification of the physical changes from the key viewpoints. We accomplish this by the use of the project plans and profiles, aerial photographs, and other available project information. We then use visualization techniques to predict the appearance of the future visual environment. Techniques are from rough sketches to computer visual simulations. Sometimes we use the observations of similar existing highway elements to aid with the visualization process.

Visibility Summary

An important step in the analysis of visual impacts is the delineation of the project visibility. If the project is not visible to an identified viewer group in the project view-shed, there would not be a visual impact. Likewise, if a relatively minor visual change occurs in an area that is highly visible to a large viewer group, then there is a visual impact even though the actual visual change is slight or moderate.

View Conditions

The determination of view conditions is the number of physical conditions, Physical topography, temporary and permanent obstructions, lighting and atmospheric conditions.

Light has an affect on views. In general, back lighting from the sun tends to wash out detail and increase ridgeline prominence. Foreground lighting from the sun increases detail, texture and color differences. Clouds and fog can also change view conditions by the increase and decrease of contrast.

Atmospheric conditions in coastal Orange county tend to be hazy a large percentage of the time. A combination of fog, mist, haze and smog combine to decrease visibility to less than 5 kilometers (3 miles) quite often throughout the year.



Examples of lighting conditions on the landscape

IV. Visual Impact Assessment

There are five assessments that depict typical conditions within the project corridor to determine the affects of the widening project.

- **Assessment #1 – Project Boundary View** – The Hunt Club and residential streets are on both sides of the highway. The viewer sees significant streetscape elements. They include tree plantings, meandering sidewalks, and ground cover. The north side has a horse trail.
- **Assessment #2 – Residential Zone View** – Several residences are located on the northern side of the street. There are no roadway sidewalks, curbs or gutters. The views see a residential home driveway with a steep grade.
- **Assessment #3 – Agricultural Zone View** – The viewer sees the Tanaka Farm, a small fruit and vegetable stand set back from the highway. A significant amount of motorist stop and shop.
- **Assessment #4 – Rural Environment View** – The assessment examines a hillside cut to accommodate the widened highway. The project proposes a retaining wall at this location.
- **Assessment #5 – Rural Environment View** – The assessment analyzes the project area where the roadway widens in an area of views and vistas.

The evaluation of each view is by FHWA guidelines and evaluation tables. First, the assessment is of the existing visual quality prior to construction. This assessment uses a perceptual quality factor table, a physical quality factor table, and the sensitivity to change table. Then the evaluation assesses the project proposal at each location and the types of post construction impacts. This determination is by comparison of the visual analysis of the evaluation tables. Finally the assessment contains a summary review of findings, conclusions and mitigation recommendations for the entire project.

Visual Assessment #1



Existing easterly view at the beginning of project

- **Assessment of the Visual Quality of Pre-Project Conditions**

- **Location:**

East of Calle Entradero to project beginning location.

- **Current conditions:**

- The Hunt Club and residential streets are on both sides of the highway.
- The viewer sees significant streetscape elements. They include ornamental tree plantings, meandering sidewalks, and ground cover.
- The north side has a horse trail.
- A two-lane, two directional highway with a painted median and curb and gutter.
- The Hunt Club entry.

- **View assessment:**

- Project boundary view
- Foreground view of the Route 74 eastbound highway users and viewers.

- **Perceptual Quality Factors:**

- The landscape has no intrusions.
- The visual landscape joins to form coherent, harmonious visual patterns.
- The foreground, middle ground, and background landscapes are high to moderate with elements that combine striking visual patterns.
- Presence of focal points.

PERCEPTUAL QUALITY FACTORS		EXISTING VIEW		
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	High/ Moderate
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	High/ Moderate
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	High

- **Physical Quality Factors**

- **Landform** rating is of low quality as the features do not have much variation and there is flat terrain with limited distant views.
- **Vegetation** is of high physical quality with different vegetation types from the influence of residential development.
- **Water** is of low physical quality due to the absence of any water features.
- **Color** is of high/moderate quality due to the ornamental landscape on the highway.

PHYSICAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features. 	Low
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3). 	High
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable. 	Low
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones. 	High/Moderate

□ **The physical quality factors are moderate.**



• **Sensitivity to Change Factors**

- Form, line, color contrast, texture, and intactness are of moderate sensitivity to change. Visual change considerations are that;
 - There are many similar forms rather than one single dominant form.
 - The ornamental landscape forms naturally geometric lines.
- There is consistent variety of color contrast within the project site as and a consistent variety of textures that create perceivable patterns in the landscape.

SENSITIVITY TO CHANGE FACTORS

EXISTING VIEW

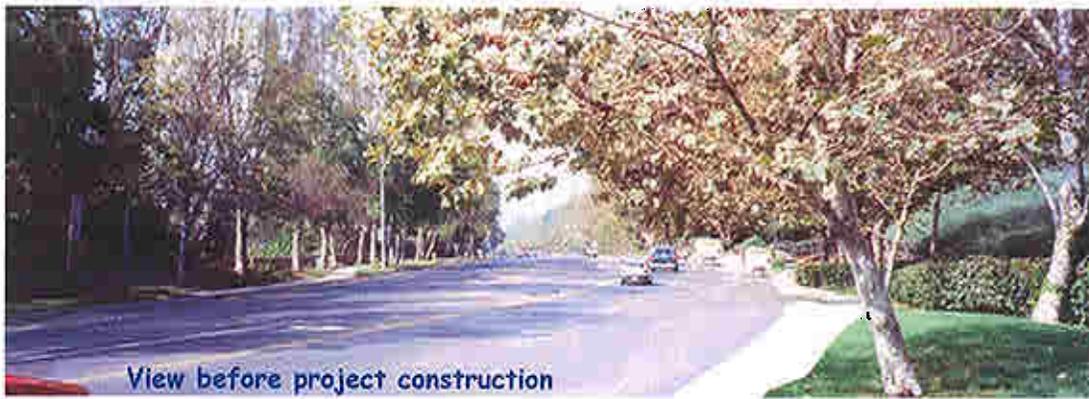
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	• Single dominant form.	• Many similar forms.	• Many different forms.	Moderate
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.	Moderate
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.	Moderate
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.	Moderate
Intactness	• Natural.	• Disturbed.	• Scarred.	Moderate

- **Since the environment is a combination of built and natural elements, there is a disturbance to the intactness yet the change is not major. The sensitivity to change factors is moderate.**



- **Changes in the Views after Project Construction**

- There are several changes in the views after project construction.
- The road is to have 2 additional lanes with shoulders on the north and south sides of Route 74.
- There is to be a sound wall along the south side of the highway from Via Cordova to Via Errecarte to reduce any traffic noise associated with the closer proximity of the roadway to the residents along Ortega Highway. The changes in the views are to the highway users and viewers.



Analysis the Visual Impacts of Project Construction

- Assessment of the visual quality change is by matrix evaluation.
- Nearby residential viewers have the highest view duration and experience high sensitivity. The expectation is the proposed alterations are to have adverse impact on the adjacent and affluent community and a high sensitivity to change.

PERCEPTUAL QUALITY FACTORS

PROPOSED VIEW

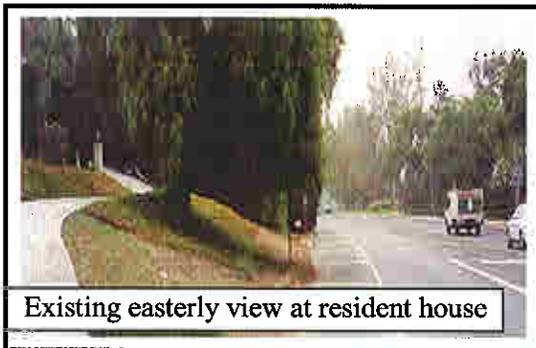
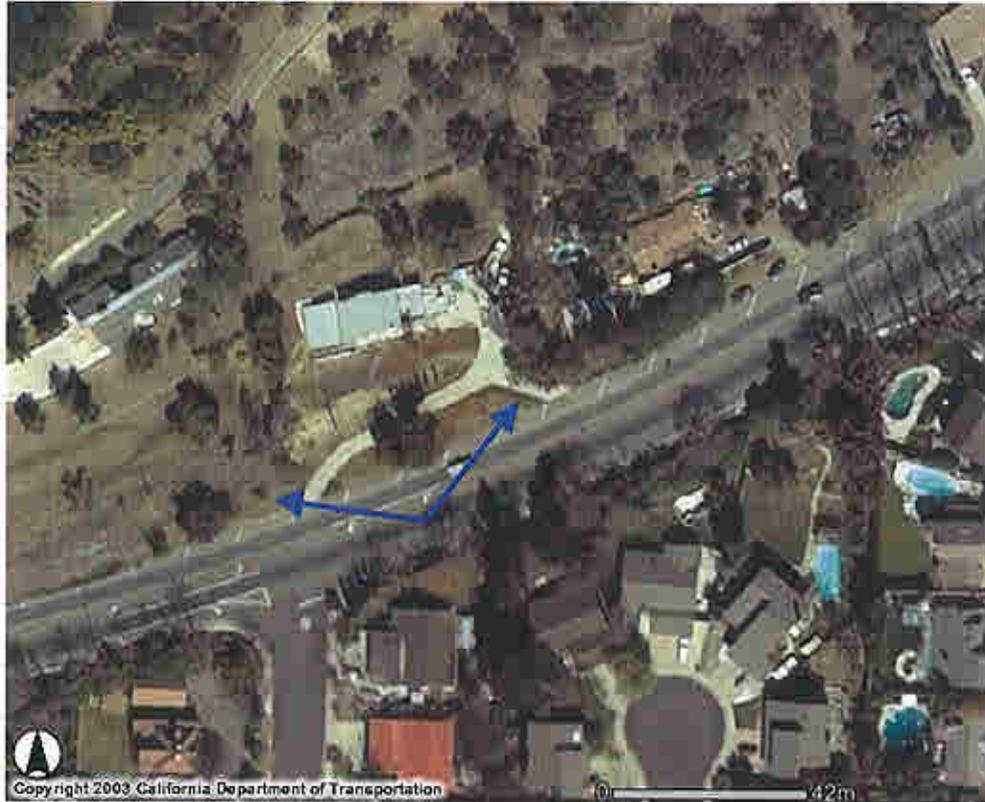
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	Moderate
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	Moderate/ Low
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	Moderate

SENSITIVITY TO CHANGE FACTORS**PROPOSED VIEW**

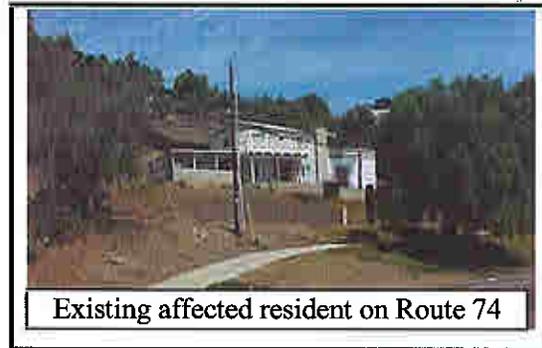
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	• Single dominant form.	• Many similar forms.	• Many different forms.	Moderate
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.	Moderate / Low
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.	Moderate
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.	Moderate
Intactness	• Natural.	• Disturbed.	• Scarred.	Moderate / Low

- **The perceptual quality factors from the widened highway are moderate to low quality due to the construction features of projects.**

Visual Assessment #2



Existing easterly view at resident house



Existing affected resident on Route 74

Assessment of the Visual Quality of Pre-Project Conditions

- **Location:**
 - East view of the widened highway of the residents on the north side of Route 74.
- **Current conditions:**
 - There are several residences located on the northern side of the street.
 - There are no roadway sidewalks, curbs or gutters.
 - The views see a residential home driveway with a steep grade.
- **Assessment View:**
 - The assessment is a foreground view of westbound highway users on highway.
 - This location is a typical view of the visual impact of the road widening.

PERCEPTUAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> Highly memorable. Elements combine in striking visual patterns. Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	Moderate
Intactness	<ul style="list-style-type: none"> The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	Moderate
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	Moderate

• **Perceptual Quality Factors**

- The evaluation of the view shows moderate vividness, and the view is somewhat memorable. The view is less memorable than the area near the Hunt Club that is beautifully landscaped.
- There are also has less striking patterns and distant focal points than at the club. Intactness is of moderate quality.
- There are views of the existing power poles and few vegetative types in the area. Unity is of moderate perceptual quality due to the adjacent residential land use.

• **Physical Quality Factors**

- The evaluation of landform, vegetation and water is low to moderate quality due to the lack of features variation.
- The area is flat except for the driveway slope.
- There are limited distant views.
- The existing vegetation is sparse on the north side and there is the absence of water features.
- Color is of moderate quality from the ornamental landscape on the south side of the highway.



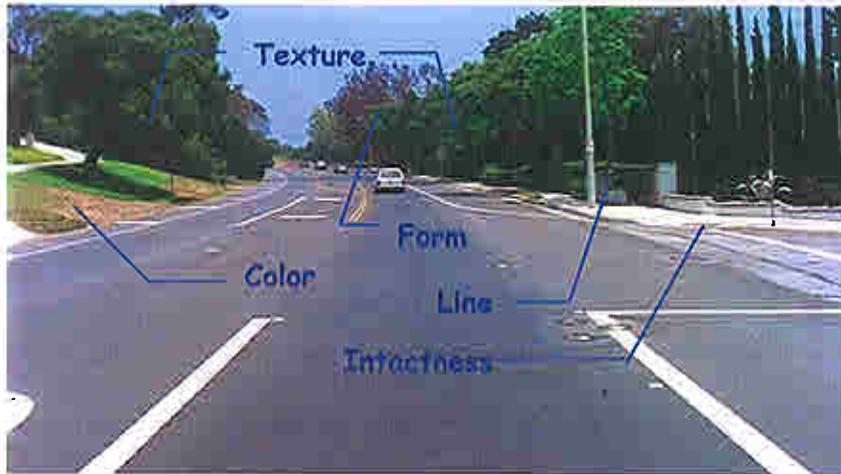
PHYSICAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features. 	Low
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3). 	Moderate
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable. 	Low
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones. 	Moderate

□ **Sensitivity to Change Factors**

- Form and line have moderate to low sensitivity to change because of the many different man-made forms that are seen here.
- Color contrast, texture and intactness are of moderate quality. There is consistent variety of color contrast within the project site and a consistent variety of textures that create perceivable patterns within the landscape.
- Since the environment has a combination of built and natural elements, intactness is seen as disturbed.



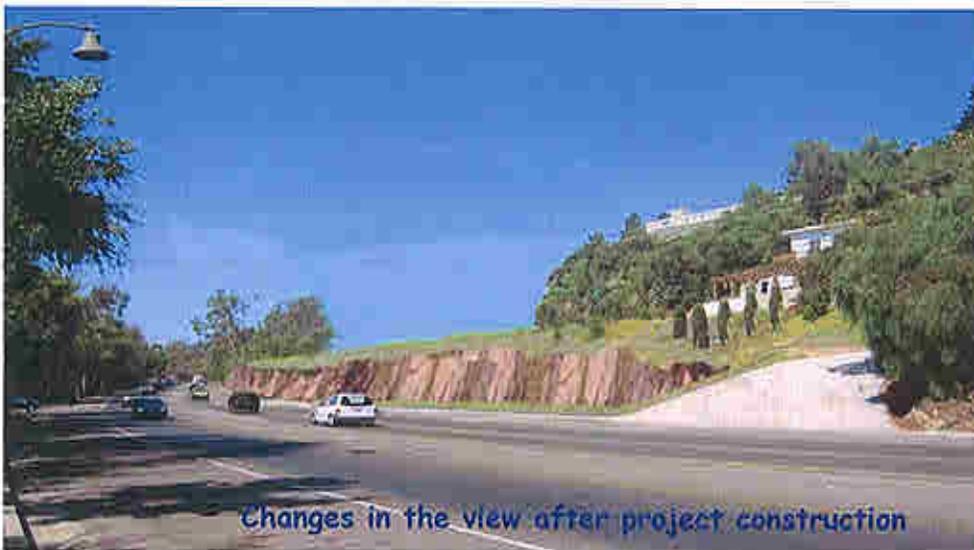
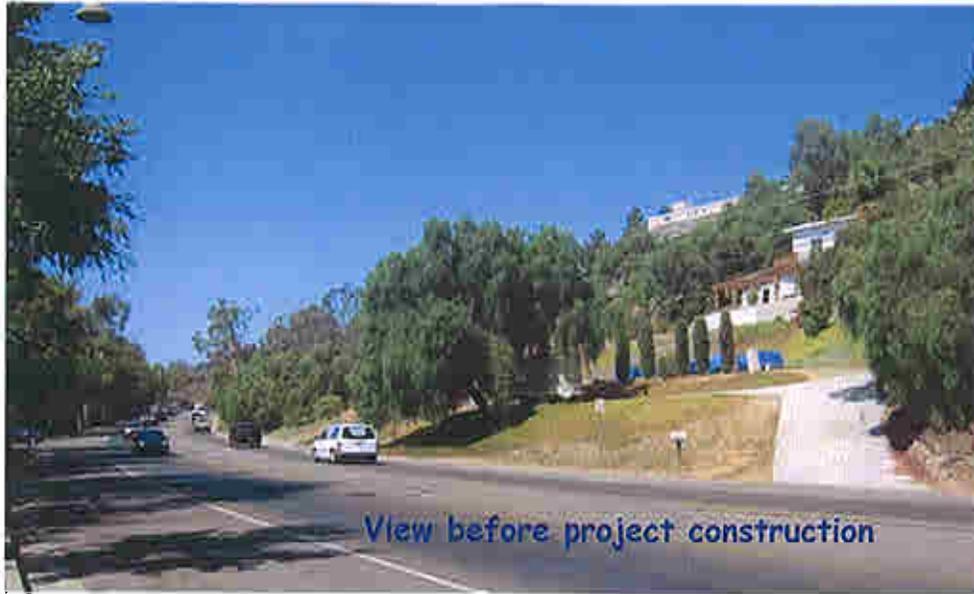
SENSITIVITY TO CHANGE FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	• Single dominant form.	• Many similar forms.	• Many different forms.	Moderate/ Low
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.	Low
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.	Moderate
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.	Moderate
Intactness	• Natural.	• Disturbed.	• Scarred.	Moderate

• **Changes in the Views after Project Construction**

- The project widens Route 74 by two lanes and a shoulder in both directions.
 - On the north portion of the highway, the existing residential use slope is to be cut to grade the roadway. A retaining wall is necessary to hold back the soil.
 - On the south portion of the highway, there is a sound wall in a residential land use area. Removal of the existing streetscape on the south. This includes the meandering sidewalk. The change after project construction is to a linear sidewalk next to the new sound wall with the absence of any landscape.



- **Analysis of the Visual Impacts of the Project Construction**

- It is possible that the large mature tree in the front yard will need to be removed. Otherwise, the tree may sit right at the edge of the road and the branches may pose a sight distance problem for motorists.
- Slopes and driveways need to be cut back to properly grade the road. This leads to steeper slopes and driveways on the residential property and the need for retaining walls adjacent to the highway. At this location it is proposed to place a 4.5-meter (15 feet) retaining wall.
- On the south, the removal of all existing landscape is to accommodate the widening project. There is to be a replacement of the meandering sidewalk with a linear sidewalk and a sound wall.
- When looking at the viewer groups, both the motorists and the residential viewers will be negatively impacted.

- Any large-scale wall detracts both from the motorist and residential view and an engineered wall takes away from the rural environment found here.
 - The height, length and texture of the wall shown above are only used to portray negative view impacts.
 - There are different types of walls, textures, and color that will need further study with the determination some type of wall is needed and no other alternative can be implemented.
- The perceptual quality factors and sensitivity to change factors after construction are of low quality and have a negative visual effect.

PERCEPTUAL QUALITY FACTORS

PROPOSED VIEW

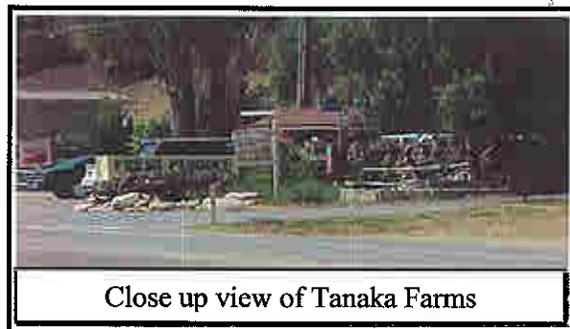
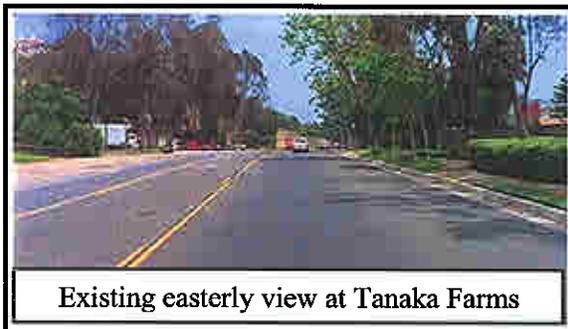
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	Low
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	Low
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	Low

SENSITIVITY TO CHANGE FACTORS

PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	<ul style="list-style-type: none"> • Single dominant form. 	<ul style="list-style-type: none"> • Many similar forms. 	<ul style="list-style-type: none"> • Many different forms. 	Moderate
Line	<ul style="list-style-type: none"> • Curvilinear. 	<ul style="list-style-type: none"> • Naturally geometric. 	<ul style="list-style-type: none"> • Man-made geometric. 	Low
Color Contrast	<ul style="list-style-type: none"> • Dominant mono-color. 	<ul style="list-style-type: none"> • Consistent variety of color contrast. 	<ul style="list-style-type: none"> • Overwhelming variety of color contrasts. 	Moderate
Texture	<ul style="list-style-type: none"> • Dominant mono-texture. 	<ul style="list-style-type: none"> • Consistent variety of textures creating perceivable pattern. 	<ul style="list-style-type: none"> • Overwhelming variety of textures in chaotic pattern. 	Moderate
Intactness	<ul style="list-style-type: none"> • Natural. 	<ul style="list-style-type: none"> • Disturbed. 	<ul style="list-style-type: none"> • Scarred. 	Moderate

Visual Assessment #3



- Assessing the Visual Quality of Pre-Project Conditions
 - **Location:**
Agricultural Zone View.
 - **Current conditions:**
Tanaka Farms is in the foreground of the east view between Via Cristal and Via Errecarte.
 - Vividness is of moderate quality.
 - There is a distinct overhead skyline of mature trees that line the roadway and provides color and texture for the viewer.
 - On the south side of the highway is a sidewalk and parkway landscape.

• **Assessment View:**

- The Tanaka Farm building has an appearance of an old farmhouse add a unique charm to the area and appropriately fits the rural setting.
- Visual intactness is of moderate quality.
- The north side is predominately natural in character.
- The man-made development of the Tanaka Farms is set back from view and adds an element that does not encroach on the visual setting.
- There are visible overhead utility lines.
- There is a stand of mature trees that camouflage the overhead utility lines that are normally visually negative.
- Unity is of moderate quality.
- The many existing mature trees add to the visual quality of the area. The mad-made setting is setback from the highway. There is no view disruption.

PERCEPTUAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	<ul style="list-style-type: none"> ♦ Somewhat memorable. ♦ Elements form perceivable pattern(s). 	<ul style="list-style-type: none"> ♦ Not vivid. ♦ Elements appear random with no perceivable pattern(s). 	Moderate
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	<ul style="list-style-type: none"> ♦ Man-made development and the natural landscape are disturbed and encroach on the visual setting. 	<ul style="list-style-type: none"> ♦ The landscape has encroaching elements that create an eyesore to viewers. 	Moderate
Unity	<ul style="list-style-type: none"> ♦ The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern. 	<ul style="list-style-type: none"> ♦ Some visual relation between man-made and natural setting. 	<ul style="list-style-type: none"> ♦ Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled. 	Moderate

• **Physical Quality Factors**

- The highway is tree lined with a variety of vegetation types in view.
- The area is flat terrain with limited distant views.
- The rating of landforms and water are of low quality since the landform features do not have variation and since there is a lack of water visible at this location.
- Vegetation and color are of moderate quality.



PHYSICAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features. 	Low
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3). 	Moderate
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable. 	Low
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones. 	Moderate

• **Sensitivity to Change Factors**

- There is a combination of ornamental landscape on the south side of the highway.
- The rural environment begins on the north side of the highway.
- The sensitivity to change is moderate to moderate/low quality.



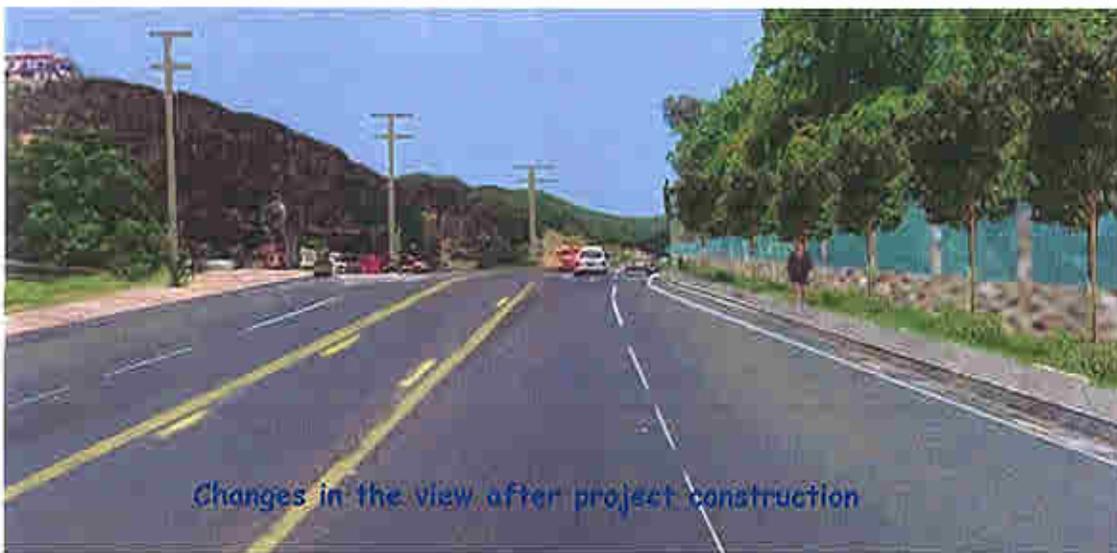
SENSITIVITY TO CHANGE FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	<ul style="list-style-type: none"> • Single dominant form. 	<ul style="list-style-type: none"> • Many similar forms. 	<ul style="list-style-type: none"> • Many different forms. 	Moderate
Line	<ul style="list-style-type: none"> • Curvilinear. 	<ul style="list-style-type: none"> • Naturally geometric. 	<ul style="list-style-type: none"> • Man-made geometric. 	Moderate/Low
Color Contrast	<ul style="list-style-type: none"> • Dominant mono-color. 	<ul style="list-style-type: none"> • Consistent variety of color contrast. 	<ul style="list-style-type: none"> • Overwhelming variety of color contrasts. 	Moderate
Texture	<ul style="list-style-type: none"> • Dominant mono-texture. 	<ul style="list-style-type: none"> • Consistent variety of textures creating perceivable pattern. 	<ul style="list-style-type: none"> • Overwhelming variety of textures in chaotic pattern. 	Moderate
Intactness	<ul style="list-style-type: none"> • Natural. 	<ul style="list-style-type: none"> • Disturbed. 	<ul style="list-style-type: none"> • Scarred. 	Moderate

• **Changes in the Views after Project Construction**

- As a result of the new construction, Tanaka Farms and the associated building are close to the highway and more visible to the highway user.
- Absence of existing trees.
- The tree removal makes the overhead utilities visible.
- There is a sound wall and sidewalk on the south side next to the residential land use.
- The construction of these features requires removal the existing landscape and sidewalk. The existing tall trees in the adjacent residential help to lessen the visual impact.



- **Analysis of the Visual Impacts of the Project Construction**

- There is the loss of existing trees along the north side of the highway. As a result there is no longer a screen of tree for the overhead utilities visual encroachment for the highway users and viewers.
- The Tanaka farm building remains due to the significant existing set back from the roadway. Upon complete of construction the structure is to be more visible to the highway user.
- Along the south side of the highway a sound wall and sidewalk replaces the sidewalk, ornamental landscape and street trees. As a result of the project construction the adjacent residence will be closer to the roadway and have a view of 4-meter sound wall in their rear yard.
- The existing painted median is to remain a painted median. There is very little room to plant trees.
- The perceptual quality factors and sensitivity to change factors after construction are of moderate/ low quality and have a negative visual effect.

PERCEPTUAL QUALITY FACTORS

PROPOSED VIEW

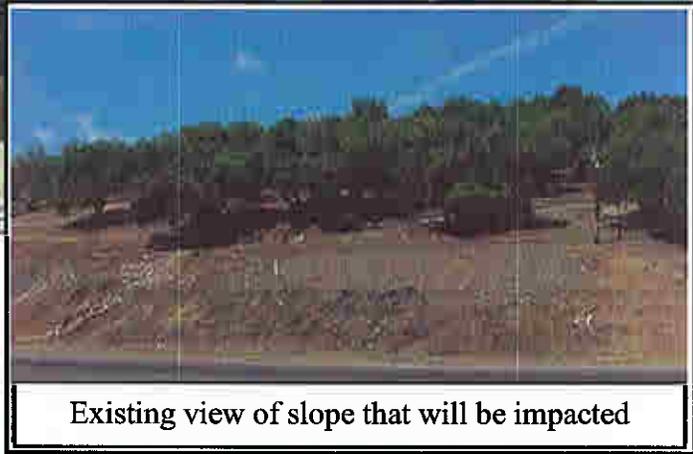
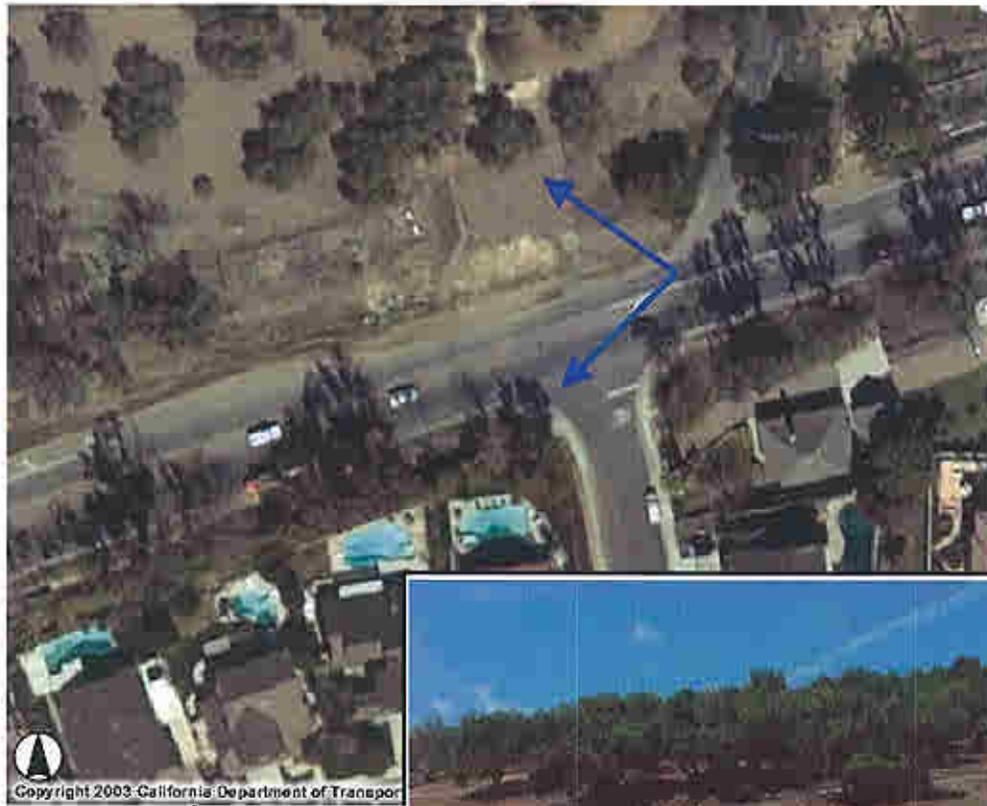
	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> Highly memorable. Elements combine in striking visual patterns. Presence of distinct focal point(s). 	<ul style="list-style-type: none"> Somewhat memorable. Elements form perceivable pattern(s). 	<ul style="list-style-type: none"> Not vivid. Elements appear random with no perceivable pattern(s). 	Moderate/ Low
Intactness	<ul style="list-style-type: none"> The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	<ul style="list-style-type: none"> Man-made development and the natural landscape are disturbed and encroach on the visual setting. 	<ul style="list-style-type: none"> The landscape has encroaching elements that create an eyesore to viewers. 	Moderate/ Low
Unity	<ul style="list-style-type: none"> The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern. 	<ul style="list-style-type: none"> Some visual relation between man-made and natural setting. 	<ul style="list-style-type: none"> Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled. 	Moderate

SENSITIVITY TO CHANGE FACTORS

PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	<ul style="list-style-type: none"> Single dominant form. 	<ul style="list-style-type: none"> Many similar forms. 	<ul style="list-style-type: none"> Many different forms. 	Moderate/Low
Line	<ul style="list-style-type: none"> Curvilinear. 	<ul style="list-style-type: none"> Naturally geometric. 	<ul style="list-style-type: none"> Man-made geometric. 	Moderate/Low
Color Contrast	<ul style="list-style-type: none"> Dominant mono-color. 	<ul style="list-style-type: none"> Consistent variety of color contrast. 	<ul style="list-style-type: none"> Overwhelming variety of color contrasts. 	Moderate
Texture	<ul style="list-style-type: none"> Dominant mono-texture. 	<ul style="list-style-type: none"> Consistent variety of textures creating perceivable pattern. 	<ul style="list-style-type: none"> Overwhelming variety of textures in chaotic pattern. 	Moderate
Intactness	<ul style="list-style-type: none"> Natural. 	<ul style="list-style-type: none"> Disturbed. 	<ul style="list-style-type: none"> Scarred. 	Moderate

Visual Assessment #4



- **Assessment of the Visual Quality of the Pre-Project Conditions**

- **Location:**

Rural Environment View

- **Current Use:**

The west slope is steep and requires erosion control.

- **Assessment View:**

- There are to be visual impacts to the foreground view resultant for the widening. The assessment shows there is sensitivity to change and a negative visual impact for the highway user.

- **Perceptual Quality Factors**

- Vividness, intactness and unity are all moderate in quality.
 - The slope is not vegetated and shows signs of erosion close to the roadway.
 - Further up the slope are mature trees and utility poles.
 - The south side of the highway has ornamental landscape development and has a rural character.

PERCEPTUAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	Moderate
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	Moderate
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	Moderate

- **Physical Quality Factors**

- The rating of landform is low quality, as the land features do not have any significant variation.
- The area is flat terrain with limited distant views.
- Vegetation and color are moderate physical in quality.
- There is a combination of ornamental landscape on the south side of the highway and large overgrown trees and shrubs on the north side.
- Water is of low physical quality as there is the absence of any water



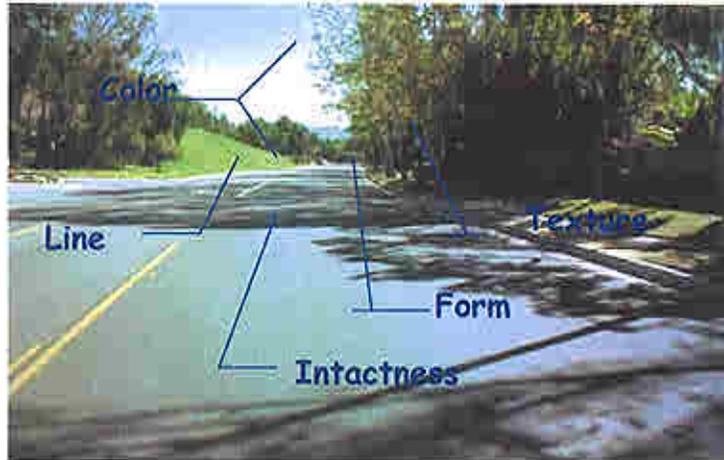
PHYSICAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features. 	Low
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3). 	Moderate
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable. 	Low
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones. 	Moderate

- **Sensitivity to Change Factors**

- Form, line, color contrast, texture, and intactness are of moderate sensitivity to change.
- There are many similar forms rather than one single dominant form.
- The street lined trees form naturally geometric lines, color contrast and texture.
- There is a disruption of intactness from the surrounding residential community and the built environment.



SENSITIVITY TO CHANGE FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	• Single dominant form.	• Many similar forms.	• Many different forms.	Moderate
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.	Moderate
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.	Moderate
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.	Moderate
Intactness	• Natural.	• Disturbed.	• Scarred.	Moderate

- **Changes in the Views after Project Construction**

- Along this portion of highway, retaining walls are on the north side to accommodate the construction of the two additional lanes, median and shoulders.
- Along the south side of the highway, a sound wall begins at Via Errecarte and continues to the west to Via Cristal. This eliminates all the existing ornamental landscape.



• **Analysis of the Visual Impacts of Project Construction**

The proposal is to build a 12 foot (3.7-meter) retaining wall at this location to accommodate the new widening project.

- Any type of wall visually detracts from the view of the highway user and the rural environment.
- The utility line along the north side of the highway is a visual intrusion. As a result of the widening project, the utility poles are to be closer to the edge of the roadway. The result is a greater distraction in the foreground view.
- The addition of a sound wall to the south and the removal of all the existing ornamental landscape is another negative visual impact.
- The retaining wall and sound wall encroaches on the rural landscape and is a negative intrusion for the highway user and viewer. The sensitivity to change factors of the walls is of low quality due to the height, location and type of wall. The residents along Route 74 are to have a 4-meter wall visible in their rear yard. The height and length of the wall has a negative visual impact upon the community, the scenic highway and the highway users. There is a significant removal of landscape along the corridor. Trees are a major portion of this landscape. Therefore there is a negative visual impact.

PERCEPTUAL QUALITY FACTORS

PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	<ul style="list-style-type: none"> ♦ Somewhat memorable. ♦ Elements form perceivable pattern(s). 	<ul style="list-style-type: none"> ♦ Not vivid. ♦ Elements appear random with no perceivable pattern(s). 	Low
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	<ul style="list-style-type: none"> ♦ Man-made development and the natural landscape are disturbed and encroach on the visual setting. 	<ul style="list-style-type: none"> ♦ The landscape has encroaching elements that create an eyesore to viewers. 	Low
Unity	<ul style="list-style-type: none"> ♦ The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern. 	<ul style="list-style-type: none"> ♦ Some visual relation between man-made and natural setting. 	<ul style="list-style-type: none"> ♦ Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled. 	Low

- **The perceptual quality factors after project construction are all of low quality.**

SENSITIVITY TO CHANGE FACTORS

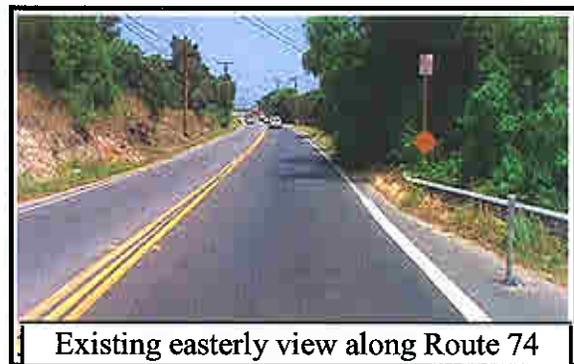
PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	<ul style="list-style-type: none"> • Single dominant form. 	<ul style="list-style-type: none"> • Many similar forms. 	<ul style="list-style-type: none"> • Many different forms. 	Low
Line	<ul style="list-style-type: none"> • Curvilinear. 	<ul style="list-style-type: none"> • Naturally geometric. 	<ul style="list-style-type: none"> • Man-made geometric. 	Low
Color Contrast	<ul style="list-style-type: none"> • Dominant mono-color. 	<ul style="list-style-type: none"> • Consistent variety of color contrast. 	<ul style="list-style-type: none"> • Overwhelming variety of color contrasts. 	Low
Texture	<ul style="list-style-type: none"> • Dominant mono-texture. 	<ul style="list-style-type: none"> • Consistent variety of textures creating perceivable pattern. 	<ul style="list-style-type: none"> • Overwhelming variety of textures in chaotic pattern. 	Low
Intactness	<ul style="list-style-type: none"> • Natural. 	<ul style="list-style-type: none"> • Disturbed. 	<ul style="list-style-type: none"> • Scarred. 	Low

Visual Assessment #5



Existing westerly view along Route 74



Existing easterly view along Route 74

Assessment of the Visual Quality of the Pre-Project Conditions

- **Location:**
 - Rural environment view located at the corner of Avenida Siega and Ortega Highway.

- **Current Use:**

This location is unique in that the residential community ends and the rural environment begins.

- **Assessment View:**

- Distant views on Ortega Highway are first seen.
- The assessment analyzes the entire view of eastbound drivers on Ortega Highway. The current conditions include one-lane road in east and west direction, a median that narrows to a painted yellow strip, trees and vegetation.
- Utility poles line the north side of the highway that string across the landscape.

- **Perceptual Quality Factors**

- The eastbound highway user enters the rural landscape and has a view of the natural landscape.
- There is an absence of residential land use. Eastbound motorists enter the rural area where the residential community disappears and the natural landscape appears.
- Overhead utility lines are a negative visual intrusion.
- The evaluation of the visual impact prior shows the perceptual quality as high/moderate.

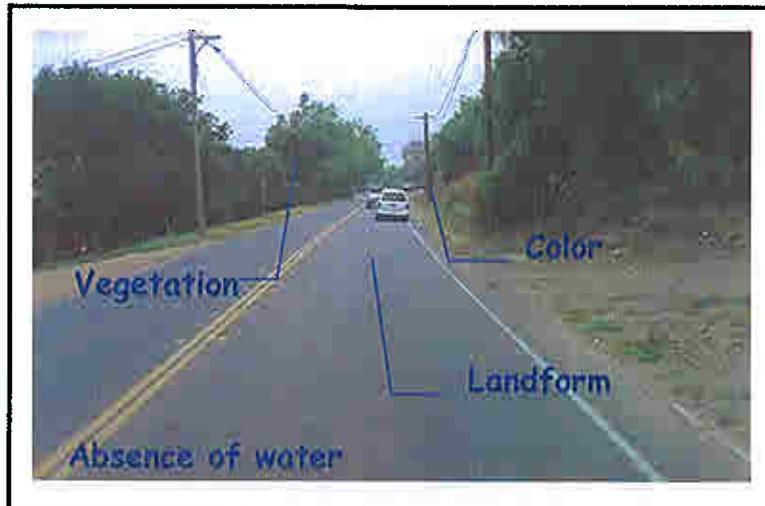
PERCEPTUAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> • Highly memorable. Elements combine in striking visual patterns. • Presence of distinct focal point(s). 	Somewhat memorable. Elements form perceivable pattern(s).	Not vivid. Elements appear random with no perceivable pattern(s).	Moderate
Intactness	<ul style="list-style-type: none"> • The integrity of visual pattern. The extent to which the landscape is free from visual encroachments.	Man-made development and the natural landscape are disturbed and encroach on the visual setting.	The landscape has encroaching elements that create an eyesore to viewers.	High/ Moderate
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	Some visual relation between man-made and natural setting.	Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled.	Moderate

- **Physical Quality Factors**

- The landform is low quality as the terrain is flat.
- Vegetation and color are of moderate physical quality as there is a variety of native vegetation along the highway.
- Water is of low physical quality as there is an absence of any water features.



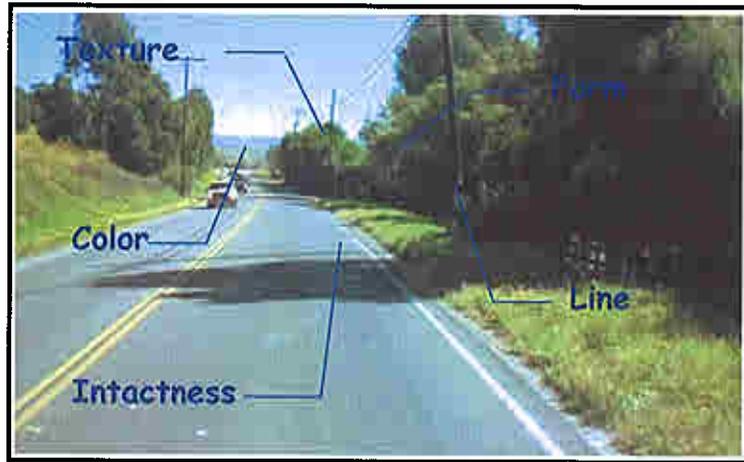
PHYSICAL QUALITY FACTORS

EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Landform	<ul style="list-style-type: none"> • High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or • Severe surface variation or highly eroded formations including major badlands or dune systems; or • Detail features dominant and exceptionally striking and intriguing. 	<ul style="list-style-type: none"> • Steep canyons, mesas, buttes, cinder cones, and drumlins; or • Interesting erosion patterns or variety in size and shape of landforms, or • Detail features that are interesting, though not dominant or exceptional. 	<ul style="list-style-type: none"> • Low rolling hills, foothills, or flat valley bottoms, or • Few or no interesting landscape features. 	Low
Vegetation	<ul style="list-style-type: none"> • Many vegetation types (>5) expressed by different forms, colors, textures & patterns. 	<ul style="list-style-type: none"> • Diverse vegetation (3-5), but only one or two major types. 	<ul style="list-style-type: none"> • Few vegetation types (<3). 	Moderate
Water	<ul style="list-style-type: none"> • Clear and clean appearing, still, or cascading white water, any of which are a dominant feature in the landscape. 	<ul style="list-style-type: none"> • Flowing or still, but not dominant in the landscape. 	<ul style="list-style-type: none"> • Absent, or present, but not noticeable. 	Low
Color	<ul style="list-style-type: none"> • Numerous (>5), colors in the soil, rock, vegetation or water. 	<ul style="list-style-type: none"> • Some colors (3-5) but not a dominant element. 	<ul style="list-style-type: none"> • Few color variations (<3) with generally mute tones. 	Moderate

- **Sensitivity to Change Factors**

- Form, line, color contrast, texture, and intactness are of moderate sensitivity to change.
- The street lined trees and overgrown shrubs form naturally geometric lines, color contrast and texture.
- There is a disturbance of the intactness from the view of a built environment.



SENSITIVITY TO CHANGE FACTORS EXISTING VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	• Single dominant form.	• Many similar forms.	• Many different forms.	Moderate
Line	• Curvilinear.	• Naturally geometric.	• Man-made geometric.	Moderate
Color Contrast	• Dominant mono-color.	• Consistent variety of color contrast.	• Overwhelming variety of color contrasts.	Moderate
Texture	• Dominant mono-texture.	• Consistent variety of textures creating perceivable pattern.	• Overwhelming variety of textures in chaotic pattern.	Moderate
Intactness	• Natural.	• Disturbed.	• Scarred.	Moderate

- **Changes in the Views after Project Construction**

There is a major addition to the view a 12-foot (3.8-meter) retaining wall on the north side of Route 74 and the removal of the existing vegetation to accommodate the wall and widened highway. Possible aesthetic treatments for the retaining walls need further studied.





- **Analysis of the Visual Impacts of the Project Construction**

- The removal of the existing shrubs at the bottom of the slope was necessary to accommodate the retaining wall.
- There is to be a relocation of power lines. There are trees visible up slope.
- The visual analysis shows that the addition of the 3.8-meter retaining wall negatively impacts the visual quality at this location.
- Both the perceptual quality factors and sensitivity to change factors are of moderate/low quality from the addition of the retaining wall and the removal of existing vegetation.

PERCEPTUAL QUALITY FACTORS

PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Vividness	<ul style="list-style-type: none"> Highly memorable. Elements combine in striking visual patterns. Presence of distinct focal point(s). 	<ul style="list-style-type: none"> Somewhat memorable. Elements form perceivable pattern(s). 	<ul style="list-style-type: none"> Not vivid. Elements appear random with no perceivable pattern(s). 	Moderate/ Low
Intactness	<ul style="list-style-type: none"> The integrity of visual pattern. The extent to which the landscape is free from visual encroachments. 	<ul style="list-style-type: none"> Man-made development and the natural landscape are disturbed and encroach on the visual setting. 	<ul style="list-style-type: none"> The landscape has encroaching elements that create an eyesore to viewers. 	Moderate / Low
Unity	The degree to which visual elements of the landscape join to form a coherent, harmonious visual pattern.	<ul style="list-style-type: none"> Some visual relation between man-made and natural setting. 	<ul style="list-style-type: none"> Man-made and natural patterns do not reinforce each other and visually looks chaotic and jumbled. 	Moderate

SENSITIVITY TO CHANGE FACTORS

PROPOSED VIEW

	HIGH QUALITY	MODERATE QUALITY	LOW QUALITY	EVALUATION
Form	<ul style="list-style-type: none"> Single dominant form. 	<ul style="list-style-type: none"> Many similar forms. 	<ul style="list-style-type: none"> Many different forms. 	Moderate
Line	<ul style="list-style-type: none"> Curvilinear. 	<ul style="list-style-type: none"> Naturally geometric. 	<ul style="list-style-type: none"> Man-made geometric. 	Moderate / Low
Color Contrast	<ul style="list-style-type: none"> Dominant mono-color. 	<ul style="list-style-type: none"> Consistent variety of color contrast. 	<ul style="list-style-type: none"> Overwhelming variety of color contrasts. 	Moderate
Texture	<ul style="list-style-type: none"> Dominant mono-texture. 	<ul style="list-style-type: none"> Consistent variety of textures creating perceivable pattern. 	<ul style="list-style-type: none"> Overwhelming variety of textures in chaotic pattern. 	Moderate
Intactness	<ul style="list-style-type: none"> Natural. 	<ul style="list-style-type: none"> Disturbed. 	<ul style="list-style-type: none"> Scarred. 	Moderate

V. Proposed Mitigation Measures

The entire project need appropriate mitigation development and implementation to reduce any negative visual impacts. The negative impacts include, the visible utility lines, the retaining and sound walls. The residents with driveways adjacent to the widening project experience negative visual impacts. The walls in the visual simulation examples to show the typical examples of negative visual impacts. The wall color, texture, and wall height need further study once there is a project alternative determination. A recommendation to improve visual quality is to install trees, shrubs, vines or other landscape to enhance visual quality. Mitigation also needs special attention adjacent to the Hunt Club. An aesthetic committee comprised of community leaders, City officials, and Caltrans landscape architects can best determine how to mitigate the disturbed area.

The following mitigation recommendations reduce visual impacts from the Route 74 widening to a less than significant level.

- On the south side, a preliminary tree survey was prepared indicating within the area of the sound wall, the removal of 41 trees was anticipated for a modular panel sound wall. The sound wall can be either a natural light penetrating sound wall to maintain view corridors, or a sound absorbing wall. Both walls require construction methods to greatly reduce the amount of tree removal and retain the rural character of the area. A sound wall that permits light penetration maintains view corridors, and minimally disturbs the existing landscaped vegetation. The sound wall construction can be with Plexiglas panels built on top of the existing garden walls, or with a combination of aesthetically treated concrete and/or Plexiglas panels. The selection of a sound wall that absorbs sound needs consideration to blend with the area and to meet City requirements. Planting of vines on the walls, and small street trees can help to minimize the harshness of a sound wall.
- On the north side a preliminary survey anticipated the removal of 70 trees for widening and adding retaining walls. Any tree removal needs replacement with boxed-sized trees within the project limits. Where there are space limitations, plant tree near the project area within the City limits. Where speeds are posted greater than 35 mph, large trees (trees with trunks over 4" in diameter when mature) shall be placed outside the clear recovery zone. Small trees (trees with trunks 4" diameter and less when mature) should be used to replace the trees within the clear recovery zone. Tree spacing for small trees can be adjusted to account for the removal of existing mature trees.
- Underground utilities to reduce the visual impact of these dominant features within the residential neighborhood.
- Retaining walls need aesthetic treatments or textures applied to the wall finish. Wall finishes may include simulated rock, stone veneer, slump block veneer or an aesthetic committee recommendation finish to give the walls a natural appearance to blend with the existing terrain or blend with the residential neighborhood.
- Plant small trees, shrubs, groundcovers, and vines in front of the walls to enhance the visual quality.
- Terraced retaining walls with aesthetic treatments and the planting of landscape can reduce the visual impact of the retaining wall. By terracing the walls, this could increase the width of the right-of-way for construction, and could require additional cost for right-of-way to be acquired.
- Replacement planting can be constructed as a separate landscape project complying with mitigation recommendations, and city concurrence.

VI. Conclusion:

The proposed construction can reduce the visual impacts to a less than significant level with the incorporation of the listed mitigation measures. Aesthetic treatments and a unified design preserve the visual quality of the existing facility.

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