

RTPL 5432 (019)

Project ID 21473/ALA150003

Visual Impact Assessment

for the

DUBLIN BOULEVARD – NORTH CANYONS PARKWAY EXTENSION PROJECT

North of Interstate 580 (I-580) from east of the Dublin Boulevard/Fallon Road intersection to the North Canyons Parkway/Doolan Road intersection.



Prepared for:



Dated: November 2018

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VISUAL IMPACT ASSESSMENT

Dublin Boulevard/North Canyons Parkway Extension Project

November 2018

California Department of Transportation
District 4, Alameda County, Dublin Boulevard/North
Canyons Parkway Extension
RTPL 5432 (019)/Project ID 21473/ALA150003

Prepared By:

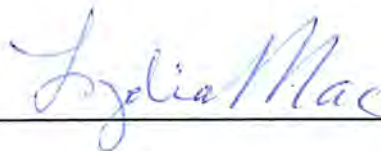


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Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

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APPENDICES

Appendix A: Project Design Plan

1.0 PURPOSE OF STUDY

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes. This VIA follows the guidance outlined in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA) in March 1981. This VIA was prepared by Circlepoint with review and approval by the California Department of Transportation (Caltrans).

2.0 PROJECT DESCRIPTION

2.1 Introduction

The City of Dublin (Dublin), in cooperation with the California Department of Transportation (Caltrans), City of Livermore (Livermore), Alameda County (County), and Federal Highway Administration (FHWA), proposes to extend Dublin Boulevard approximately 1.5 miles eastward through Dublin and an unincorporated portion of the County, terminating at North Canyons Parkway along the boundary between the County and Livermore (project). **Figure 1** shows the general location of the project limits.

Dublin Boulevard is a major arterial facility connecting western parts of Dublin, Dublin's downtown area, and partially developed areas in eastern Dublin. It is defined as Minor Arterial to Other Principal Arterial, depending on location, in the California Road System, maintained by Caltrans. Dublin Boulevard provides connectivity between downtown Dublin and the Dublin/Pleasanton Bay Area Rapid Transit (BART) Station, Camp Parks Army Base, the regional Iron Horse Trail, and various residential, office, and commercial land uses. North Canyons Parkway is a four-lane major street in Livermore that provides access to commercial, industrial, residential development, and educational facilities in western Livermore. The project was envisioned to provide access to "potentially developable areas" in Dublin, to provide a local roadway connection between eastern Dublin and Livermore.

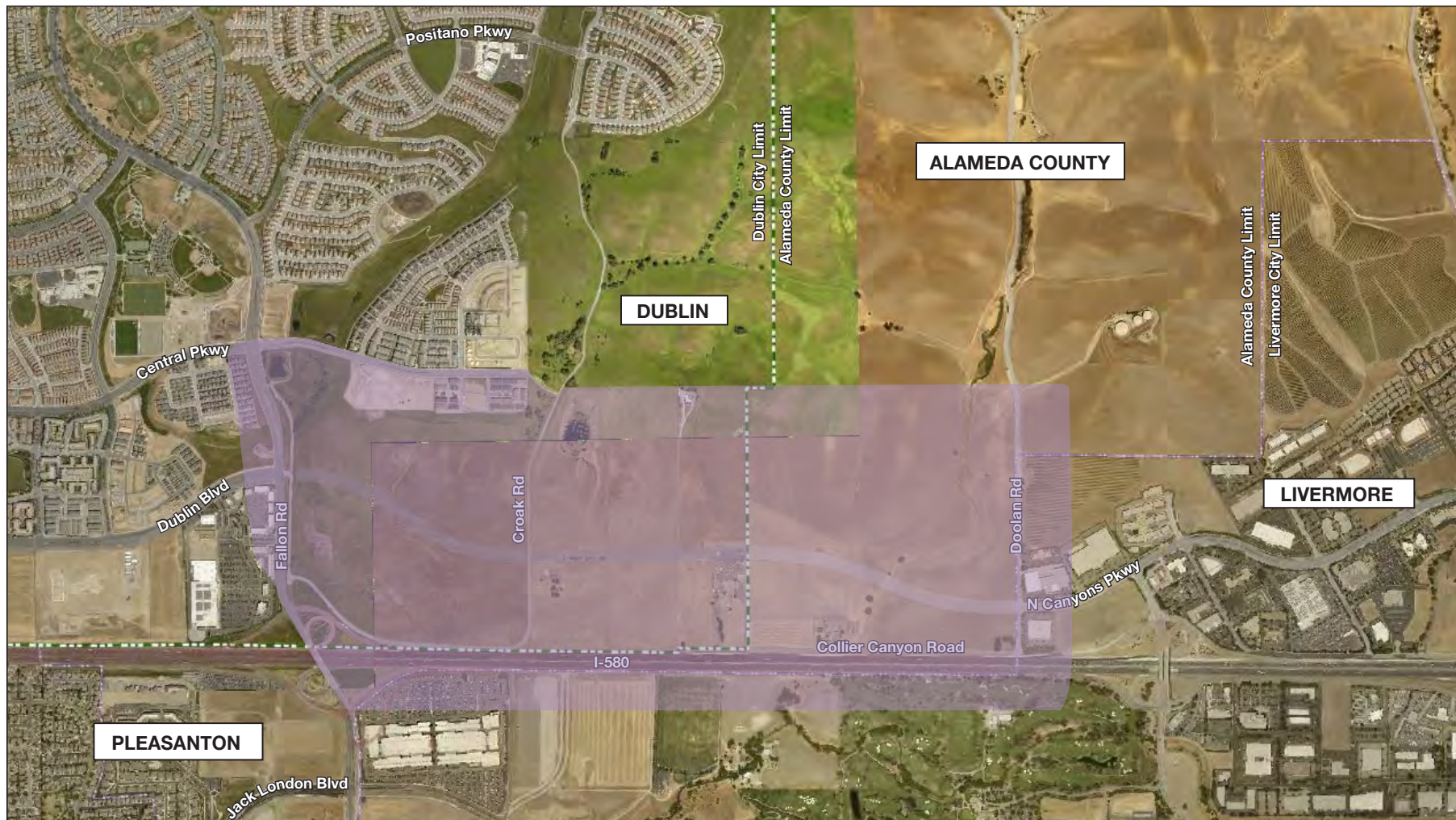
In the discussion below and throughout this VIA, the term "project site" refers to the permanent area that would be changed by the project (**Figure 1**). The term "visual impact study area" refers to an area including the project site, but extending beyond the project site to include surrounding areas that could be affected by the project. The visual impact study area is determined by topography, vegetation, and viewing distance, and includes areas visible from the project site and public viewpoints that offer views of the project site. This encompasses portions of Fallon Road, Central Parkway, Croak Road, Interstate 580 (I-580), Collier Canyon Road, Doolan Road, and North Canyons Parkway (**Figure 2**).

2.2 Purpose

The purpose of the project is to improve east-west local roadway connectivity between Dublin and Livermore and improve mobility, multimodal access and efficiency for all roadway users. The purpose is also to support an integrated corridor management strategy.

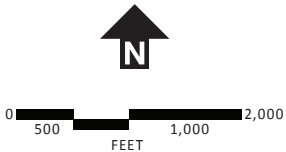


Source: Circlepoint, 2018



Legend

 Visual Impact Area



Visual Impact Study Area

Figure **2**

Source: Circlepoint, 2018

2.3 Need

The need for the project is to:

- Eliminate a gap in local roadway network connectivity within the cities of Dublin and Livermore and the County, and improve interconnectivity between Dublin and Livermore PDAs.
- Establish transportation facilities and other public infrastructure to serve planned development in the Dublin General Plan, EDSP, and Plan Bay Area.
- Reduce vehicle miles traveled (VMT) on the local highway system by providing local access to existing and planned land uses, including residential, commercial, industrial, and business uses, and local destinations on an alternate local route that is convenient to I-580.
- Reduce local trip lengths in Dublin and between Dublin and Livermore by diverting localized inter-city trips from I-580.
- Provide complete streets and multimodal access between Dublin and Livermore, particularly for key public facilities such as Las Positas College, consistent with the requirements of Senate Bill (SB) 375 and regional complete streets policies on multimodal roadways and sustainable transportation.
- Indirectly relieve congestion on I-580 by providing a completed local route on the north side of I-580 between west of I-680 in Dublin to SR-84 in Livermore.

2.4 Alternatives

Build Alternative

The project would include the extension of Dublin Boulevard 1.5 miles eastward through eastern Dublin and an unincorporated portion of the County (project) as defined above.

The roadway extension would start from the current terminus of Dublin Boulevard at the Dublin Boulevard/Fallon Road intersection in Dublin and would end at the Doolan Road/North Canyons Parkway intersection along the boundary of the County and Livermore. This roadway extension would provide four to six travel lanes and bicycle and pedestrian facilities (i.e., sidewalks and bike lanes). Beginning at Fallon Road, the roadway extension would have six travel lanes (three in each direction). Continuing eastward, the roadway extension would transition to four travel lanes (two in each direction) before or at the intersection with Croak Road. From Croak Road to Doolan Road, the roadway extension would remain in the four lane configuration. The permanent area needed for the project, including the roadway, sidewalks, intersections, and land acquired for right-of-way is estimated at 29 acres.

The project would require removal of the Fallon Road/Croak Road intersection, as well as abandonment of a north-south portion of Croak Road which runs parallel to, and would remain visible from, Fallon Road. The project would also include creation of a new intersection between Dublin Boulevard and

Croak Road east of Fallon Road (**Figure 1**). Additionally, the Dublin Boulevard/Fallon Road and North Canyons Parkway/Doolan Road intersections would be visually altered by the conversion from a “T” intersection to a four-way intersection.

Visible changes would include a new roadway, bridge structure, stormwater treatment areas, streetlights, traffic signals, landscaping and street trees, grading, and new bicycle and pedestrian facilities. The project may include retaining walls, which would generally range from 3 to 10 feet in height. Retaining walls may be used in lieu of large areas of grading, and would be determined during the design stage.

Beneficial visual features of the project include new landscaping, street trees, and the removal of overhead utility lines. The project would incorporate strategic tree planting, as well as the preparation of a master streetscape plan in order to avoid or minimize visual impacts. Other beneficial features of the project include increased roadway connectivity, reduced trip length, and reduced VMT.

No-Build Alternative

Under the No Build Alternative, none of the project features described under the project would be constructed. Dublin Boulevard and North Canyons Parkway would continue to operate unconnected in their current configurations. Other planned and approved transportation improvements and land use developments along local routes may be implemented by local agencies or under other projects. The No Build Alternative includes the potential for planned improvements to be implemented through design year 2040. The No Build Alternative is the baseline for comparing environmental impacts under the National Environmental Policy Act (NEPA).¹

3.0 PROJECT LOCATION AND SETTING

The project location and setting provides the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined below in **Chapter 6.0, Visual Resources and Resources Change**, and are used to further describe the visual environment. The project setting is hereafter referred to as the visual impact study area, as defined in 2.1, Introduction, and shown in **Figure 2**.

3.1 Physical Setting

The project is located in the northeast portion of the San Francisco Bay Area in Northern California, north of I-580 across eastern Dublin, the County, and Livermore between Dublin Boulevard and North Canyons Parkway (**Figure 1**). Views of the project site are provided and discussed in detail in **Chapter 6.0, Visual Resources and Resource Change**.

The project site is used primarily as undeveloped grazing ranchland and open space. The landscape in and around the visual impact study area is characterized by a mix of grasslands surrounded by rolling hills and agricultural, commercial, industrial, and residential development. Natural land cover in the

¹ Under the California Environmental Quality Act (CEQA), the baseline for environmental impact analysis consists of the existing conditions at the time the Notice of Preparation (NOP) or at the time the environmental studies began. Near-term impacts (2020) and long-term impacts (2040) are also considered under CEQA; similar to the No-Build baseline used for NEPA.

project area includes trees, shrubs, and grassland vegetation. Trees are primarily willows and valley oaks along Cottonwood Creek, which flows generally north to south across the project site in the County.

Man-made land cover is primarily around the periphery of the visual impact study area and includes two- to three-story mid-rise commercial development such as big box stores, and shopping centers; parking lots; single family homes; low to medium-rise industrial development; and the I-580 corridor. Improvements to areas adjacent to the project site generally consist of paved and unpaved roads used to access private property and scattered fences, barns, corrals, wells, water tanks, single-family homes and various outbuildings.

Views through the project site from public roads along the western, southern, and eastern edges of the visual impact study area are generally unobstructed, and views of the project site from the north are intermittent, broken up by the rolling hills.

I-580 is a major regional connector, an Eligible State Scenic Highway, portions of it are Classified Landscaped Freeway, and it's locally designated as a scenic corridor. I-580 follows an east-west alignment parallel to, and south of, the project site.² I-580 is an Eligible State Scenic Highway from the Alameda/San Joaquin County Line to I-80 in Alameda County (postmile (PM) 0.0/47.4). The I-580 scenic corridor is defined as the area which is both within 3,500 feet on each side of the centerline of I-580 and visible from I-580.

Dublin Land Use and Setting

The visual impact study area in Dublin includes undeveloped grazing ranchland and residential, public roads, I-580, industrial, open space, and commercial land uses. To the west and northwest of the project site the visual impact study area includes single-family residential and medium-density residential development. Commercial properties are located within a shopping center directly across Fallon Road to the west of the project site. Operating businesses include Target, Panera Bread, Guitar Center, and BJ's Restaurant & Brew House, among others. Within the visual impact study area, Fallon Road is a designated scenic roadway (City of Dublin General Plan). Scenic resources include the open space and rolling hills north of the project site, Cottonwood Creek, and general open space within the City. See **Section 3.2, Regulatory Setting** for more details regarding applicable planning documents.

There are public views of the project site from portions of Fallon Road, public roads associated with residences north of the project site, the I-580 scenic corridor, and Croak Road. Residences to the north of the project site have partially obstructed views of the project site between the rolling hills. I-580 affords drivers peripheral views of the project site to the north, and Croak Road has direct views of the project site.

Alameda County Land Use and Setting

The visual impact study area in the County consists of primarily undeveloped grazing ranchland and open space, with intermittent residences and outbuildings. Land uses in this area consist of resource management and large parcel agricultural. According to the Alameda County General Plan and the East Alameda County Area Plan, scenic resources within the County and visible from the project site include the ridgelines to the north. The resource management area separating eastern Dublin and northern

² I-580 is a Classified Landscaped Freeway in a variety of areas between PM 10.22 and PM 48.04, as listed by Caltrans and available at http://www.dot.ca.gov/design/lap/livability/docs/class_ls_fwy_01122018_.pdf

Livermore, located to the south of the project site, is also an identified scenic resource. See **Section 3.2, Regulatory Setting** for more details regarding applicable planning documents.

There are public views of the project site from portions of Collier Canyon Road to the south of the project site. Views of the project site from Collier Canyon Road may be obstructed at some angles by scattered agricultural development and vegetation, particularly near Cottonwood Creek.

Livermore Land Use and Setting

The visual impact study area in Livermore includes business commercial parks along North Canyons Parkway. Land dedicated to Hillside Conservation is located north of North Canyons Parkway. General commercial and commercial/campus office land uses are located southeast of the project site, adjacent to eastbound I-580. According to the City of Livermore General Plan, scenic resources within Livermore and visible from the project site include the I-580 scenic corridor and hills and ridgelines to the north. See **Section 3.2, Regulatory Setting** for more details regarding applicable planning documents.

There are public views of the project site from the I-580 scenic corridor, Doolan Road, and the area immediately around the intersection of Doolan Road and North Canyons Parkway. I-580 offers drivers peripheral views of the project site to the north. Doolan Road has generally unobstructed views of the project site, with the exception of the southern portion of the roadway where views are obscured by trees and other vegetation.

3.2 Regulatory Setting

State Scenic Highway Program

The Caltrans' Scenic Highway Program is intended to protect and enhance the natural scenic beauty of California's highways and adjacent corridors, through special conservation treatment. The program protects against encroachment of incompatible land uses, mitigates and minimizes development activities along the corridor, prohibits billboards, and regulates grading activity. The four criteria used to determine whether a highway may be designated as scenic are as follows:

- The State or county highway consists of a scenic corridor composed of a memorable landscape that showcases the natural scenic beauty of agriculture of California.
- Its existing visual intrusions do not significantly impact the scenic corridor.
- It demonstrates strong local support for the proposed scenic highway designation.
- The length of the proposed scenic highway is not less than a mile and is not segmented.

Visual intrusions are evaluated in the following manner:

- The more pristine the natural landscape is and less affected by intrusions, the more likely the nominated highway will qualify as scenic.
- Where intrusions have occurred, the less impact they have on an area's natural beauty, the more likely the nominated highway will qualify as scenic.
- The extent to which intrusions dominate views from the highway will determine the significance of their impact on the scenic corridor.

Once the scenic highway designation is granted, a wide range of protections apply to the designated corridor, including a prohibition on off-premise advertising displays (colloquially known as billboards).¹ I-580 is an Eligible State Scenic Highway from the Alameda/San Joaquin County Line to I-80 in Alameda

County (PM 0.0/47.4). Within the visual impact study area, I-580 is considered eligible for listing as a State Scenic Highway. For the purposes of CEQA, formally eligible scenic highways are treated as State Scenic Highways for environmental analysis. Based on the foregoing, I-580 is considered a State Scenic Highway for the purposes of this VIA. No other roadways within the visual impact study area are considered scenic highways.

Classified Landscaped Freeways

Caltrans-classified “Landscaped Freeways” are landscaped freeways with plantings that meet the State Outdoor Advertising Regulations criteria. These regulations are used in the control and regulation of outdoor advertising displays, and are not an indication of an area that should be protected as a scenic corridor. Criteria for Landscaped Freeways include freeways with plantings within the state right-of-way that are continuous (no gaps greater than 200 feet), ornamental (not functional), at least 1000 feet long, on at least one side of the freeway, and require reasonable maintenance. The project site is north of I-580, which, as of 2016, is classified as a Landscaped Freeway (PM 14.97-15.63).³ The project would include the extension of Dublin Boulevard eastward which would be visible to drivers traveling on I-580. Direct modifications to and along I-580 are not included within the project’s scope. Given this, I-580 falls within the visual impact study area but would not be directly affected by the project improvements.

City of Dublin General Plan

Scenic resources are addressed in the Scenic Highways Element of the City’s General Plan. The following designated scenic resources and policies apply to the project.

Land Use Element

The Land Use Element includes discussion and policies proposed by the Dublin Open Space Initiative of 2014. The initiative includes several visual safeguards that may be implemented to preserved visual character and visual quality within the City of Dublin. The following scenic resource policies apply to the project.

Visual Safeguard Policies:

- 2.8.13.C** Development shall be subordinate to and blend harmoniously with the natural and open space qualities of the area where located, in order not to impair those qualities and to be as unobtrusive as possible. In all cases, appropriate landscaping, preservation of vegetation, screening, building materials, design, and limits on surface alternations shall be required by the City to reduce as much as practicable the visibility of development.
- 2.8.13.D** Exterior lighting, including roadway lighting, shall be designed and placed, to the maximum extent practicable, to confine direct rays to the parcel or roadway where the lighting is located and to protect the darkness of the night sky.

Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element identifies several scenic routes within the City of Dublin, including I-580, I-680, and Fallon Road to Tassajara Road. The following scenic resource policies apply to the project.

³ Caltrans. 2016. Classified “Landscaped Freeways.” Accessed April 2018. Available: <http://www.dot.ca.gov/design/lap/livability/docs/class-ls-fwy-REVISED-12-14-2016.pdf>.

Scenic Routes Policies:

- 5.7.1A.1** Incorporate County-designated scenic routes, and the Fallon Road extension, in the General Plan as adopted City-designated scenic routes, and work to enhance a positive image of Dublin as seen by through travelers.
- 5.7.1.B.1** Exercise design review of all projects visible from a designated scenic route.
- 5.7.1.B.2** Implement the Eastern Dublin Scenic Corridors Policies and Standards for projects within the Eastern Extended Planning Area.

Eastern Dublin Specific Plan

The Eastern Dublin Specific Plan discusses several goals, policies, and programs dedicated to preserving visual resources within the City. Such resources include the open hills, creeks, major stands of vegetation and general open space. The following scenic resource policies apply to the project.

Open Space Network Policies:

- 6-2** Locate development so that large, continuous open space areas/corridors are preserved. Avoid creating open space islands. Encourage single-loaded streets in areas adjacent to open space, rural residential, and agricultural lands.

Open Space Access Policies:

- 6-4** Preserve views of designated open space areas.

Visual Resources Policies

- 6-28** Preserve the natural open beauty of the hills and other important visual resources, such as creeks and major stands of vegetation.
- 6-31** High quality design and visual character will be required for all development visible from designated scenic corridors.
- 6-32** Visual impacts of extensive grading shall be reduced by sensitive engineering design, by using gradual transitions from graded areas to natural slopes and by revegetation.
- 6-33** Site grading and access roads shall maintain the natural appearance of the upper ridgelands or foreground hills within the viewshed of travelers along I-580, Tassajara Road, and the future extension of Fallon Road.⁴ Streets should be aligned to follow the natural contours of the hillsides. Straight, linear rows of streets across the face of hillsides shall be avoided.
- 6-34** Alterations of existing natural contours shall be minimized. Grading shall maintain the natural topographic contours as much as possible. Grading beyond actual development areas shall be for remedial purposes only.
- 6-35** Extensive areas of flat grading are not appropriate in hillside areas, and should be avoided. Building pads should be graded individually or stepped, wherever possible. Structures and roadways should be designed in response to the topographical and geotechnical conditions.

⁴ The extension of Fallon Road to Tassajara Road is now complete.

- 6-37** Graded slopes shall be re-contoured to resemble existing landforms in the immediate area. Cut and graded slopes shall be revegetated with native vegetation suitable to hillside environments.
- 6-38** The height of cut and fill slopes shall be minimized to the greatest degree possible. Grades for cut and fill slopes should be 3:1 or less whenever feasible.
- 6-39** Tassajara Creek and other stream corridors, as shown on Figure 4.1, are visual features that have special scenic value for the planning area. The visual character of these corridors should be protected from unnecessary alteration or disturbance, and adjoining development should be sited to maintain visual access to the stream corridors.

Alameda County General Plan

The Alameda County General Plan defines and discusses three types of scenic routes: scenic freeways and expressways, scenic thoroughfares, and scenic rural-recreation routes. Scenic resources are also discussed in the Scenic Route Element and East County Area Plan, both of which are part of the larger Alameda County General Plan, and include I-580, the ridgelines above Doolan and Collier Canyon, and the resource management area separating eastern Dublin and northern Livermore. The following Alameda County General Plan scenic resource objectives and policies apply to the project.

Scenic Route Element Objectives:

- To establish a continuous system of routes, that will be convenient to all persons in Alameda county, and that will increase the enjoyment of, and opportunities for, recreational and cultural pursuits and tourism in Alameda County and adjacent counties by providing for scenic pleasure drives and scenic routes to all major recreation areas and cultural centers throughout the country and adjacent areas.
- To conserve, enhance, and protect scenic views observable from scenic routes.

Scenic Route Element Policies:

- On downslope scenic corridors along routes with outstanding scenic views, no building structure of more than one story should project above the highest point of the paved road directly in front of the building structure, and no wall, fence, solid row of trees or other plants should project above the building structure or above the roadbed, whichever is higher. Where single story building structures are higher than the roadbed, there should be no wall, fence, or plant material that is not located directly between the main building structure and the roadbed that will obstruct the view from automobiles on the scenic route.

East Alameda County Area Plan

The East Alameda County Area Plan includes several policies and goals meant to preserve visual resources. Such policies discuss scenic ridgelines, open space, viewsheds, landscaping, utility lines, and grading techniques. The following scenic resource policies apply to the project.

Ridgelines Policies

- 105.** The County shall preserve the following major visually-sensitive ridgelines largely in open space use:
2. The ridgelines of Schafer, Shell, Skyline, Oak and Divide Ridges west of Dublin and the ridgelines above Doolan Canyon east of Dublin
 3. The ridgelines above Collier Canyon and Vasco Road and the ridgelines surrounding Brushy Peak north of Livermore

Community Separators Policies

A Community separator serves as a green buffer between cities and towns, contain[s] urban development, and preserve[s] the rural charm of open landscapes.

- 109** The County shall preserve community separators largely in open space in the following locations:
1. The Resource Management area of approximately 7,400 acres separating East Dublin and North Livermore

Tree Policies

- 110** The County shall require that developments are sited to avoid or, if avoidance is infeasible, to minimize disturbance of large stands of mature, healthy trees and individual healthy trees of notable size and age. Where healthy trees will be removed, the County shall require a tree replacement program which includes a range of tree sizes, including specimen-sized trees, to achieve immediate visual effect while optimizing the long-term success of the replanting effort.

Viewshed Policies

- 112** The County shall require development to maximize views of the following prominent visual features:
1. The major ridgelines listed in Policy 105;
 2. Brushy Peak, Donlan Peak, and Mount Diablo; and
 3. Cresta Blanca, near Arroyo Road South of Livermore.
- 113** The County shall review development proposed adjacent to or near public parklands to ensure that views from parks and trails are maintained.

Landscaping Policies

- 114** The County shall require the use of landscaping in both rural and urban areas to enhance the scenic quality of the area and to screen undesirable views. Choice of plants should be based on compatibility with surrounding vegetation, drought-tolerance, and suitability to site conditions; and in rural areas, habitat value and fire retardance.
- 115** In all cases appropriate building materials, landscaping and screening shall be required to minimize the visual impact of development. Development shall blend with and be subordinate to the environment and character of the area where located, so as to be as unobtrusive as possible and not detract from the natural, open space or visual qualities

of the area. To the maximum extent practicable, all exterior lighting must be located, designed and shielded so as to confine direct rays to the parcel where the lighting is located.

Alteration of Landforms Policies

- 116** To the maximum extent possible, development shall be located and designed to conform with rather than change natural landforms. The alteration of natural topography, vegetation, and other characteristics by grading, excavating, filling or other development activity shall be minimized. To the extent feasible, access roads shall be consolidated and located where they are least visible from public view points.

Grading Policies

- 117** The County shall require that where grading is necessary, the off-site visibility of cut and fill slopes and drainage improvements is minimized. Graded slopes shall be designed to simulate natural contours and support vegetation to blend with surrounding undisturbed slopes.
- 118** The County shall require that grading avoid areas containing large stands of mature, healthy vegetation, scenic natural formations, or natural watercourses.
- 119** The County shall require that access roads be sited and designed to minimize grading.

Utilities Policies

- 120** The County shall require that utility lines be placed underground whenever feasible. When located above ground, utility lines and supporting structures shall be sited to minimize their visual impact.

City of Livermore General Plan

Although the majority of the project activities and planned improvements would occur outside of Livermore's jurisdiction, scenic views from public areas of Livermore could be impacted. Livermore residents and visitors on the western edge of town looking toward the hills would see the roadway extension.

Scenic resources are addressed in the Community Character Element and the Land Use Element. Policies in the Land Use Element generally focus on the construction of new buildings, and therefore would not apply to the project. The following scenic resource policies would apply to the project.

Community Character Element

Scenic Routes Policies

- CC-4.1.P1. Development shall not be allowed to obscure, detract from, or negatively affect the quality of the views from designated scenic routes.
- CC-4.1.P2. The City shall maintain in open space that portion of the hills which is seen from the freeway and which is within the I-580 Scenic Corridor as shown in Figure 4-1. Any development within the I-580 Scenic Corridor is subject to the policies set forth under Goal CC-4 and the conditions set forth in Section C, I-580 Scenic Corridor Implementation.

- CC-4.1.P3. The City shall permit no development to wholly obstruct or significantly detract from views of any scenic area as viewed from a scenic route.
- CC-4.2.P3. The I-580 Scenic Corridor development shall include provision for cycling, hiking, and riding trails within or adjacent to street rights-of-way, where feasible.
- CC-4.7.P2. New, relocated, or existing utility distribution lines should be placed underground.
- CC-4.9.P1. Alteration of natural or artificial land contours should not be permitted without a grading permit as a means of preserving and enhancing the natural topography and vegetation in developable areas.
- CC-4.9.P2. Mass grading should not be permitted in the I-580 Scenic Corridor.
- CC-4.10.P1. As a means of preserving natural “ridge skylines,” no major ridgeline shall be altered to the extent that an artificial ridgeline results. Minor grading below the skylines, ridgelines, or silhouettes may be authorized to accommodate development or activities otherwise consistent with these policies.
- CC-4.10.P3. The I-580 Scenic Corridor is defined as the area which is within 3,500 feet on each side of the centerline of I-580, and visible from the I-580 roadway. Development in the I-580 Scenic Corridor must preserve, to the largest degree feasible, the view of the ridgelines as seen from the I-580 Scenic Corridor roadway. To that end, no development, structures or man-made objects except plantings erected for landscaping purposes may obscure any portion of the ridgeline as seen from the I-580 Scenic Corridor roadway, except as provided in Community Character Element Section IV.C (I-580 Scenic Corridor Implementation). Landscaping, including trees, shall be planted in a manner such that when mature, it does not create a wall-like effect that substantially obscures views of the ridgeline.
- CC-4.16.P2. Development of lands adjacent to scenic routes should not obstruct views of scenic areas, and development should be visually compatible with the natural scenic qualities.

Consistency with Applicable Plans and Policies

The project design is consistent with all underlying local and regional plans and policies, as described in detail in **Chapter 8.0, Visual Impact**. The project would not result in a change in the status of I-580 as a Classified Landscaped Freeway or Eligible State Scenic Highway, or otherwise affect scenic resources. Visual changes resulting from the project would not include any unsightly use of land or changes to the scenic quality of the area.

4.0 ASSESSMENT METHOD

This VIA generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA)* in March 1981.

The following steps were followed to assess the potential visual impacts of the project:

- Define the project location and setting
- Identify visual impact assessment units and key views
- Analyze existing visual resources, resource change and viewer response

- Depict (or describe) the visual appearance of project alternatives
- Added the visual impacts of project alternatives
- Propose measures to offset visual impacts

Visual quality and *visual character* are identified for both existing and future appearances of the project study area. Visual impacts are assessed in terms of anticipated changes in visual resources as a result of the project and expected responses of affected viewers to these changes. The assessment is supported with photographs showing pre-project conditions and two computer-generated visual simulations depicting two of the key views with the project fully implemented. Global positioning system (GPS) recording and professional rendering techniques that incorporate detailed project design information (i.e., elevation and section drawings; grading plans; landscape plans; and architectural treatments) were used to ensure the accuracy of the visual simulations.

5.0 VISUAL ASSESSMENT UNITS AND KEY VIEWS

The visual impact study area was divided into two “outdoor rooms” or visual assessment units. Each visual assessment unit has its own visual character and visual quality. Various methods are acceptable for identifying visual units, such as utilizing the limits of a particular viewshed or by an area of similar visual character. Visual assessment units are geographically discrete portions of a larger project area that are often separated by natural and built features. The two visual assessment units identified for the project, and their associated distinct views, are discussed below and depicted in **Figure 3**.

5.1 Visual Assessment Unit 1

Visual Assessment Unit 1 begins at the western edge of the visual impact study area and is defined by Fallon Road as well as portions of the residential and commercial development located just west of the roadway, Central Parkway to the north, and Croak Road to the east. The southern portion of the visual assessment unit includes I-580 as well as a portion of the San Francisco Premium Outlet parking lot. The visual assessment unit encompasses portions of Central Parkway and the residential development located just south of the parkway.

Distinctive visual attributes of the unit include intermixed residential development and the rolling hills, various roadway elements such as travel lanes and roadside landscaping, remnant agricultural fencing, overhead utility lines, traffic on I-580, and low- to mid-rise commercial development west of Fallon Road and south of I-580.

The following key viewpoints are present within Unit 1 and are depicted in **Section 6.2, Existing Visual Environment**:

- **Viewpoint 1:** The key viewpoint was taken north of the Dublin Boulevard and Fallon Road intersection facing southeast towards I-580 and Croak Road. Viewpoint 1 was selected as a key view for providing views from Fallon Road. The key viewpoint offers views of Fallon Road as well as commercial development south of I-580.
- **Viewpoint 2:** The key viewpoint was taken from Croak Road facing eastward towards Doolan Road. Viewpoint 2 was selected as a key view as it provides an eastward view of the visual impact area. The key viewpoint offers views of the rolling hills as well as remnant agricultural fencing and equipment.



Legend

- Visual Assessment Unit #1
- Visual Assessment Unit #2

Visual Assessment Units and Key Viewpoints

Source: Circlepoint, 2018

- **Viewpoint 3:** The key viewpoint was taken from Collier Canyon Road looking north towards the proposed roadway extension. Viewpoint 3 was selected as a key viewpoint for providing views between Fallon Road and Croak Road facing northward toward the rolling hills. The key viewpoint offers views of the rolling hills intermixed with residential development.
- **Viewpoint 4:** The key viewpoint was taken from Camino Loop facing southeast towards Croak Road. Viewpoint 4 was selected as a key view for providing northern views of the project area and the rolling hills. The key viewpoint offers views of the hills, Croak Road, I-580, and commercial development south of I-580.

Each of the key viewpoints listed above were carefully selected and assessed to provide a holistic representation of the Visual Assessment Unit and the varying degrees of development spanning between Fallon Road and Croak Road.

5.2 Visual Assessment Unit 2

Visual Assessment Unit 2 encompasses the eastern portion of the visual impact study area and is defined by Croak Road to the west, the intersection of Central Parkway and Croak Road to the north, I-580 and portions of the San Francisco Premium Outlet parking lot to the south, and Doolan Road to the east. Visual Assessment Unit 2 also encompasses some areas of developed and undeveloped land just east of Doolan Road.

Distinctive visual attributes of the unit include views of the rolling hills, open space and natural land cover, Cottonwood Creek, scattered agricultural development, commercial development along North Canyons Parkway, and traffic along I-580.

The following key viewpoints are present within Unit 2 and are depicted in **Section 6.2, Existing Visual Environment**:

- **Viewpoint 5:** Taken from the western end of Collier Canyon Road facing northwest towards Croak Road and grazing land, this viewpoint was selected as a key view as it provides a northwestern view of the visual impact area. The key viewpoint offers views of an unpaved private roadway, metal fencing and overhead powerlines.
- **Viewpoint 6:** The key viewpoint was taken from Collier Canyon Road facing northwest towards the proposed roadway extension. Viewpoint 6 was selected as a key view for providing views of Cottonwood Creek, scattered agricultural development, and the rolling hills. The key viewpoint offers views of grazing land, agricultural development including water tanks, outbuildings, fencing, and the rolling hills.
- **Viewpoint 7:** The key viewpoint was taken from Collier Canyon Road facing northeast towards the intersection of Doolan Road and North Canyons Parkway. Viewpoint 7 was selected as a key view for providing views of the eastern boundary of the visual impact area. The key viewpoint offers views of open land, the rolling hills, and commercial development along North Canyons Parkway.
- **Viewpoint 8:** The key viewpoint was taken from Doolan Road facing south towards the intersection of Doolan Road and North Canyons Parkway. Viewpoint 8 was selected as a key view for providing views of the eastern boundary of the visual impact area facing the south. The key viewpoint offers views of open land, Doolan Road, and I-580.

Each of the key viewpoints listed above were carefully selected and assessed to provide a holistic representation of the Visual Assessment Unit and the scattered agricultural development spanning between Croak Road and Doolan Road.

6.0 VISUAL RESOURCES AND RESOURCE CHANGE

Resource change is assessed by describing the visual character and evaluating the visual quality of visual resources in the visual impact study area before and after construction of the project. Resource change is one of the two major variables that determine visual impacts. The other is *viewer response*, discussed in **Chapter 7.0, Viewers and Viewer Response**.

A narrative rating system was used to assess the existing visual quality and the change to that quality which would result from the project. The system rates various elements of the visual setting from low to high, as shown in **Table 1**. The FHWA *Visual Impacts Assessment for Highway Projects* was used to define each level of narrative rating and to guide what attributes to consider when choosing the appropriate rating for each of the criteria described below in the **Visual Quality Evaluation** section.⁵

6.1 Visual Resources

Formally designated visual resources in the project area have been identified by Dublin, the County, and Livermore, in their respective planning documents (See **Section 3.2, Regulatory Setting**) Additional visual resources in the project area are defined and identified below by assessing visual character and visual quality under existing conditions.

Visual Character Evaluation

The visual character of a place or area includes attributes such as form, line, color, and texture. Visual character is used to describe, not evaluate, a place; the visual character attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be described and evaluated using character attributes. For this project the following attributes were considered:

- Form – visual mass or shape
- Line – edges or linear definition
- Color – reflective brightness (light, dark) and hue (red, green)
- Dominance – position, size, or contrast
- Scale – apparent size as it relates to the surroundings
- Diversity – a variety of visual patterns
- Continuity – uninterrupted flow of form, line, or color

The existing visual character of the visual impact study area consists of a diversity of scale and form provided by the contrast of natural and man-made elements (**Viewpoint 1, Viewpoint 2, and Viewpoint 3**). The rolling hills and natural ground cover are the dominant visual elements in views to the north, and

⁵ Federal Highway Administration (FHWA). 1981. *Visual Impact Assessment for Highway Projects*. Page 52.

open space, I-580, and commercial development are the dominant visual elements in views to the west, south, and east. The hills and natural areas offer continuity, which is interrupted at intervals by the lines of Fallon, Croak, and Doolan roads, as well as by residential development in Dublin (**Viewpoint 5, Viewpoint 4, and Viewpoint 3**).

Views of the area are diversified by man-made development around the periphery of the visual impact study area. I-580 creates a line along the southern edge of the visual impact study area, dominating views to the south from the project site along with the tree line and commercial development (**Viewpoint 4, Viewpoint 8**). The open sky dominates many portions of the visual impact study area.

The visual character of the project would be generally compatible with the existing visual character of the visual impact study area. Existing man-made features in the area are a mix of linear elements including local roadways and I-580 (**Viewpoints 2, 4 and 8**), residences (**Viewpoint 3**), commercial buildings (**Viewpoints 4, 7, and 8**), and agricultural outbuildings (**Viewpoint 6**). The proposed man-made components of the project would be of similar form, line, and appearance to major arterials within the visual impact study area.

Design components of the project include intersection improvements, removal of overhead utility lines, creation of new intersections, construction of a new bridge structure over Cottonwood Creek, pedestrian and bicycle facilities, street lighting, landscaping, new street trees, and signage. In accordance with exterior lighting policies of Dublin and the County, streetlights will be designed to minimize light pollution and glare. Design specifics for the bridge structure crossing Cottonwood Creek would be determined at a later stage of design. However, preliminary engineering has identified a possible three-span option requiring two piers. As project components are designed to look similar to existing intersections, roadways, and structures that already exist in the visual impact study area, and would adhere to applicable design guidelines and scenic resources policies listed in **Section 3.2, Regulatory Setting**, the visual character of the project would be compatible with its surroundings.

The addition of the project would increase the diversity of the visual impact study area, and would somewhat alter the dominance of the rolling hills in views to the north. Views from the south, and to a lesser extent from the west and east, would include the new line of both the roadway and street trees in the middle ground, changing the continuity of existing views of the hills. However, the dominance and continuity of these views is already somewhat interrupted by residential development visible in Dublin, including views from I-580.

An analysis of the project's impact to the visual character of the area is discussed in more detail in **Chapter 8.0, Visual Impact**.

Visual Quality Evaluation

Visual quality is evaluated by identifying the vividness, intactness and unity present. This evaluation looks for indicators of the level of visual relationships, rather than judgments of physical landscape components. The three criteria for evaluating visual quality can be defined as follows:

- **Vividness** is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and man-made landscape of the immediate environs and its freedom from encroaching elements (non-typical visual intrusions).
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components of the landscape.

The existing visual quality at each of the visual assessment units has been evaluated using the criteria identified above, and rated as high, moderate-high, moderate, moderate-low, or low based on FHWA's Visual Impact Assessment for Highway Projects guidance (**Table 1**).⁶ In addition to the three criteria listed above, the FHWA guidance includes a ranking of the amount of man-made development and encroachments on the landscape (referred to as developed components in the table).

Table 1 Visual Quality Evaluation Criteria and Scale

Developed Components		Visual Quality Rating	
Man-made Development	Encroachments on the landscape	Vividness	Unity/Intactness
Little/None	Few/None	High	High
Some	Some	Moderate-High	Moderate-High
Moderate	Moderate	Moderate	Moderate
High	Many	Moderate-Low	Moderate-Low
Very High	Very Many	Low	Low

Source: Federal Highway Administration (FHWA), 1981

The visual quality of the project would be generally compatible with the existing visual quality of the visual impact study area. Existing man-made features in the area are a mix of linear elements, including local roadways and I-580, and individual structures including residences, commercial buildings, and agricultural outbuildings. In addition to I-580, the existing tree line south of the project site creates a visual intactness similar to the tree line that would be created by the project. While project features are consistent and typical for a roadway, additional man-made features affect the existing visual quality rating, as discussed in more detail in **Chapter 8.0, Visual Impact**.

6.2 Existing Visual Environment

Because it is not feasible to analyze all views from which the project would be seen, it is necessary to identify visual assessment units and select a number of viewpoints that would most clearly represent the existing visual environment within the visual impact study area. Viewpoints also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, viewpoints are used to demonstrate the change in the visual resources within the visual impact study area as a result of project implementation.

⁶ There is no comprehensive official process for identifying areas of high visual quality, thus is determined on a project by project basis. Federal Highway Administration (FHWA). 1981. *Visual Impact Assessment for Highway Projects*; page 46.

Visual Assessment Unit 1

Four viewpoints were selected within Visual Assessment Unit 1 in order to best represent the existing character of the area west of Croak Road.

Viewpoint 1: Fallon Road (Dublin)



Viewpoint 1 is within Dublin, just northeast of the existing Fallon Road and Dublin Boulevard intersection. The photo was taken looking to the southeast towards I-580 and Croak Road. Notable features include common roadways elements such as travel lanes, roadside landscaping, street signage, overhead traffic signals, and vehicle traffic. Fallon Road is dominant in the photo, composing the majority of the foreground and middle ground. The background of the photo depicts Croak Road, overhead power lines, I-580, and commercial development in the distance.

Viewpoint 2: Fallon Road (Dublin)



Viewpoint 2 is within Dublin, just southeast of the existing Fallon Road and Dublin Boulevard intersection. The photo was taken looking eastward towards Doolan Road. Notable features include remnant agricultural fencing, agricultural equipment, and overhead utility lines, as well as the natural land cover in the foreground and middle ground of the photo. The middle ground on the left side of the photo depicts the rolling hills, a notable scenic resource. The right side of the photo depicts I-580 and low- to mid-rise commercial structures in the distance.

Viewpoint 3: Croak Road (Dublin)



Viewpoint 3 is within Dublin. The photo was taken along Croak Road just north of I-580 looking north. Natural land cover dominates the foreground and middle ground, and the rolling hills (a scenic resource) are seen in the background intermixed with residential development. This view is representative of views from Croak Road and I-580 in eastern Dublin.

Viewpoint 4: Central Parkway (Dublin)



Viewpoint 4 is within Dublin, just south of Central Parkway and is representative of views from public residential streets such as Camino Loop, Panorama Drive, and Twain Harte Road. The photo was taken looking south towards Croak Road, which creates a line traveling through the center of the photo, interrupting the continuity of the rolling hills and natural land cover. The hills dominate the foreground and middle ground of the photo and create intermittent views of the project site. Notable features include a natural green hue to the landscape, and the overhead power lines which extend the length of Croak Road, and development in the background which includes I-580, commercial development, a tree line, and ridgelines in the distance.

Visual Character

As shown in the viewpoints above, the existing visual character of Visual Assessment Unit 1 consists of diverse scale and form provided by the contrast of natural and man-made elements. The rolling hills and natural ground cover are the dominant visual element in views to the north, and open space, I-580, and commercial development are the dominant visual elements in views to the south and southeast. The hills and natural areas offer continuity, which is interrupted at intervals by the linear nature of Fallon Road, Croak Road, overhead utility lines, and I-580.

Visual Quality

The contrast of developed and rural land noted above results in the unity and intactness of this visual assessment unit being moderate. The rolling hills and natural ground cover are intermittently disrupted by Fallon Road, Croak Road, and I-580, decreasing the intactness and unity of the area. Therefore, the visual quality of this unit has moderate intactness and unity. **Table 2** summarizes the visual quality in Visual Assessment Unit 1. The overall visual quality rating for this unit is moderate.

Table 2 Existing Visual Quality in Visual Assessment Unit 1

Developed Components		Visual Quality Rating	
Man-made Development	Encroachment on the landscape	Vividness	Unity/Intactness
Moderate	Some	Moderate	Moderate

Source: Circlepoint, 2018

Visual Assessment Unit 2

Four viewpoints were also selected within Visual Assessment Unit 2 in order to best represent the existing character of the area east of Croak Road.

Viewpoint 5: Collier Canyon Road (Dublin)



Viewpoint 5 is within Dublin at the western end of Collier Canyon Road. The photo was taken looking northwest towards Croak Road and grazing land. A private, unpaved roadway creates a line traveling through the center of the photo, interrupting the continuity of the open space and natural land cover, which dominates the middle ground of the photo. Notable features include a natural green hue to the landscape, metal fencing, and overhead power lines. The background of the photo depicts subtle slopes of the hills in the distance.

Viewpoint 6: Collier Canyon Road (Alameda County)



Viewpoint 6 is within the County. The photo was taken from Collier Canyon Road looking north toward Cottonwood Creek and the rolling hills. Notable features include the natural land cover in the foreground, the majority of the middle ground, and the background of the photo. The middle ground of the photo depicts views of Cottonwood Creek including several large willows and valley oaks (*Quercus lobata*). Also shown is scattered agricultural development including water tanks, outbuildings, and fencing, which is representative of agricultural development near the project site. The rolling hills, a scenic resource, are visible in the background.

Viewpoint 7: Collier Canyon Road (Alameda County)



Viewpoint 7 is within the County, just west of the intersection of Collier Canyon Road and Doolan Road. The photo depicts views looking northeast towards the intersection of Doolan Road and North Canyons Parkway. Notable features include natural land cover in the foreground, middle ground, and the majority of the background. Contrasting the natural landscape is commercial development along North Canyons Parkway in the background and overhead power lines which create a line in front of the continuous rolling hills.

Viewpoint 8: Doolan Road (Livermore)



Viewpoint 8 is within Livermore. The photo was taken from Doolan Road just north of the project site looking southwest toward I-580 and the North Canyons Parkway/Doolan Road intersection. Notable features include agricultural fencing and natural land cover in the foreground and middle ground, and I-580 and a tree line in the background. The photo also depicts a group of trees on the left hand side that border private property owned by Las Positas Community College. The right hand side of the photo depicts rural and commercial development in the distance.

Visual Character

As shown in the previously discussed viewpoints, the existing visual character of Visual Assessment Unit 2 is dominated by the rolling hills, natural ground cover, and open sky, which are visible in all directions. Visual Assessment Unit 2 does have a diverse scale and form provided by the contrast of natural and man-made elements. The rolling hills and natural open space offer continuity, which is interrupted at intervals by the linear nature of private roadways, I-580, and Doolan Road.

Visual Quality

The contrast of developed and rural land noted above increases the vividness of this visual assessment unit to moderate. The rolling hills and natural ground cover are intermittently disrupted by scattered metal fencing, agricultural development, private unpaved roadways, Cottonwood Creek, I-580, and Doolan Road, decreasing the intactness and unity of the area. Therefore, the visual quality of this unit has moderate intactness and unity. **Table 3** summarizes the visual quality in Visual Assessment Unit 2. The overall visual quality rating for this unit is moderate.

Table 3 Existing Visual Quality in Visual Assessment Unit 2

Developed Components		Visual Quality Rating	
Man-made Development	Encroachment on the landscape	Vividness	Unity/Intactness
Moderate	Some	Moderate	Moderate

Source: Circlepoint, 2018

6.3 Resource Change

Overall, the Build Alternative would add man-made features to the visual impact area. Although the additions would be generally compatible with the existing roadways and man-made components of the visual impact area, implementation of the Build Alternative would result in a moderate-low level of visual resource change. Visual resource change, as it related to each Visual Assessment Unit and the Build Alternative, is assessed in **Chapter 8.0, Visual Impact**.⁷

7.0 VIEWERS AND VIEWER RESPONSE

The population affected by the project is composed of viewers. Viewers are people whose views of the landscape may be altered by implementation of the project—either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the project. The other variable is the change to visual resources discussed earlier in **Chapter 6.0, Visual Resources and Resource Change**.

7.1 Types of Viewers

There are two major types of viewer groups for roadway projects: roadway neighbors and roadway users. Each viewer group has their own particular level of viewer exposure and viewer sensitivity, resulting in distinct and predictable visual concerns for each group that help to predict their responses to visual changes.

Roadway Neighbors (Views of the Road)

Roadway neighbors are people who would have views of the project. They can be divided into different viewer groups by land use type. For example, residential, commercial, industrial, educational, recreational and agricultural land uses may each generate roadway neighbors or viewer groups with distinct reasons for being in the project visual impact study area, and therefore having distinct responses to changes in visual resources.

⁷ Visual resource change is the change in visual character and change in visual quality. Additional information on calculating the visual resource change is defined in **Chapter 8, Visual Impact**.

Roadway neighbors for the visual impact study are listed below:

Commercial/Industrial: A number of commercial business including retailers are within the visual impact study area, specifically west of Fallon Road, east of Doolan Road, and south of the project site. The west side of Fallon Road is dominated by low- to mid-rise retail buildings, restaurants, and box stores. South of the project site north of I-580 there is a small landscaping services company with views of the project site. South of I-580, the San Francisco Premium Outlet shopping district has views of the project site. Views are somewhat intermittent and are broken up by existing vegetation and topography. On the eastern side of Doolan Road, there are three commercial buildings with views of the project site – a casino, janitorial equipment supplier, and dialysis clinic.

Residential: Single-family and multi-family residential development to the west and northwest affords views of the project site, broken up by the rolling hills. Fallon Road, Central Parkway, Croak Road, and residential streets such as Positano Parkway, Panorama Drive, and Sunset View Drive offer access to residential neighborhoods and views of the project site.

Agricultural: Undeveloped grazing ranchland and open space, with intermittent residences and outbuildings is located throughout the visual impact study area, between Fallon Road and North Canyons Parkway north of I-580. Croak Road, Collier Canyon Road, Doolan Road, and a network of paved and unpaved roads provided access to agricultural land and views of the project site.

Highway and Local Roadway Users: Within the visual impact study area, I-580 runs east to west between Fallon Road and North Canyons Parkway and provides direct and indirect access to a variety of land uses, including those described above. Highway users are anticipated to include drivers of personal vehicles and haul travelers, and would have views of the project to the north. Additionally, travelers along Fallon Road, Croak Road, Central Parkway, and other local roads would have views of the project site.

Roadway Users (Views from the Road)

Roadway users are people who would have views from the project while using the road. They can be divided into different viewer groups. For example, dividing roadway users by mode of travel may yield transit riders, car drivers and passengers, truck drivers, bicyclists and pedestrians. Dividing roadway users by reason for travel creates categories like tourists, commuters, and long-haul travelers. Both approaches allow for consideration of the duration of views by travelers in the visual impact study area; however analysis of mode only does not lend itself to consideration of the frequency with which viewers would pass through the area. To provide a more robust analysis, roadway users are divided by “reasons for travel” for this assessment, and common modes of travel for each “reason” are discussed as well.

Commuter Travelers: The project is anticipated to be used as an alternative commute route for residents of Dublin, the County, and Livermore to travel between Dublin and Livermore for work. Commuters are likely to include drivers and may also include bicyclists. Due to the distance between Dublin and Livermore, pedestrian commuters are likely to be infrequent.

Local Travelers: Local travelers are residents from nearby communities that would use the new roadway often to meet daily needs, but not necessarily to commute to and from work. It is anticipated local travelers would use the project as an alternative to I-580 for short trips. Local travelers are likely to include drivers, bicyclists, and pedestrians.

Long-Haul Travelers: Long haul travelers include drivers of semi-trucks and other vehicles moving through the Tri-Valley, and are not anticipated to divert from I-580 to use the project.

7.2 Viewer Response

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions: *viewer exposure* and *viewer sensitivity*.

Viewer Exposure and Viewer Sensitivity

This section examines the exposure and viewer sensitivity of roadway neighbors and users to the project. Exposure and sensitivity levels for each group of viewers are categorized using a qualitative scale; terms are the same as those presented in **Table 1** and are based on FHWA guidance.

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. *Location* relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. *Quantity* refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: *activity*, *awareness*, and *local values*. Activity relates to the preoccupation of viewers—while in the visual impact study area, viewers may be engaged in other activities that take their focus away from the visual setting, or the primary focus of viewers may be to engage in their visual surroundings. The more viewers are actively observing their surroundings, the more sensitivity viewers will have of changes to visual resources. Awareness relates to the focus of view—whether the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

Roadway Neighbors

Commercial/Industrial: Views from commercial uses in Dublin such as Guitar Center, Target, and the Fallon Gateway project would be generally obstructed by neighboring structures and other intervening objects in the landscape. However, parking spaces and pedestrian areas along the outskirts of the shopping center adjacent to Fallon Road would afford views of the project. Viewers in the County would be limited to employees of the landscaping business on Collier Canyon Road.

Commercial development on the south side of I-580 in Dublin would afford short-term and partially obstructed views of the project, as shoppers walk to and from parked vehicles. Views from commercial development along North Canyons Parkway and Doolan Road would afford direct views of the project. Viewers are anticipated to be employees and visitors to the casino and dialysis clinic. Viewers would be exposed to the project while walking to and from vehicles, and employees may afford views of the project through east-facing windows.

Although viewers would have direct or partially-obstructed views of the project, the duration of exposure would be limited to brief walks between stores and parking spaces. During this time, viewers' focus would not be primarily on engaging with the broader, more distant visual surroundings, but rather

on their immediate surroundings. While indoors, viewers' focus would primarily be on indoor activities. View of the project site would be general and would be in the middle or background of views. However, views would include the rolling hills to the north/northeast, a locally identified scenic resource per visual resource policies 6-28 and 6-33 of the Eastern Dublin Specific Plan, and policy CC-4.1.P1 of the City of Livermore General Plan.

Due to the short nature of commercial visits and the focus of the viewer, commercial viewers would have moderate-low exposure and sensitivity.

Residential: Residences along the outskirts of Central Parkway and Panorama Drive residential development would afford long-term views of the project when facing to the south. Views of the project would be limited to breaks in the hills, as shown in **Viewpoint 4**.

When looking towards the project site, viewers' focus may be primarily on engaging with their visual surroundings, which would include views of the rolling hills in the middle ground and views of the project in the distance, when viewed between the hills. Views of the project site would be intermittent and general.

As residents would have partial, continuous views of the project in the context of a scenic resource, this viewer group would have moderate-high exposure and sensitivity.

Agricultural: In Dublin, private agricultural parcels would have direct and partially-screened views of the project, depending on viewer location. As some of these parcels feature single family residences and places of work, viewers at these locations would be exposed for longer durations of time. Given the rural-agricultural, undeveloped nature of the area in the County, visits to the area are anticipated to be infrequent and few viewers would be present. Therefore, the discussion below focuses primarily on viewers in Dublin.

While outdoors or viewing the visual impact study area from private residences or agricultural land, viewers' focus may be primarily on engaging with their visual surroundings. Views would include the project in the middle ground and the rolling hills in the background when looking to the north, and project site in the middle ground and I-580 in the background when looking to the south. Views to the east or west would include the project in the middle or foreground, with commercial and industrial development in the background. Views of the project site would be general across the landscape.

Given viewers would have generally unobstructed views of the project over long periods of time, in the context of the rolling hills, a scenic resource per the Eastern Dublin Specific Plan and the City of Livermore General Plan, this viewer group would have moderate-high exposure and sensitivity.

Highway and Local Roadway Users: Travelers on I-580 and local roads listed above would view the project intermittently while passing through the areas adjacent to the project. The duration of views would vary depending on traffic congestion.

Drivers' primary focus would generally be diverted from the project site. Views of the project site would be general and would be in the context of the larger area, including other roadways. Depending on the location, views would include the project in the middle ground and the rolling hills in the background. Fallon Road and I-580 have been locally identified as scenic routes per the City of Dublin General Plan. The Alameda County General Plan and the City of Livermore General Plan also recognized the I-580 as a scenic route.

Based on the duration and focus of these viewers, and the presence of locally-identified scenic resources and scenic routes, the exposure and sensitivity would be moderate.

Roadway Users

Roadway users traveling along the project would primarily include commuters and locals utilizing Dublin Boulevard to complete trips between Dublin and Livermore and potentially as an alternative to I-580.

Commuter and Local Travelers: Notable features within the viewshed from an average vehicle would include overhead traffic signals, street signage, street lights, bicycle lanes, roadside landscaping, and sidewalks. Drivers and passengers traveling along the roadway extension would afford peripheral views of the rolling hills to the north and views of I-580 to the south. The rolling hills are recognized as a scenic resource per the Eastern Dublin Specific Plan, and the I-580 is recognized as a scenic route per the Alameda County General Plan, the City of Dublin General Plan, and the City of Livermore General Plan. Drivers and passengers traveling west would have direct views of commercial development along Fallon Road. Similarly, viewers traveling east would have views of commercial and industrial development at the North Canyons Parkway/Doolan Road intersection. The linear nature of the roadway extension results in commuter and local travelers having moderate-high exposure to non-peripheral, repetitive objects (i.e., signs and lane striping) and views of the rolling hills.

Roadway users that are commuting to and from work on a routine, daily basis are less aware and have lower sensitivity to visual resources than roadway users that are driving to enjoy the scenic views.⁸ Drivers traveling along at normal speeds typically focus their attention on long-range, non-peripheral views while maintaining focus on the roadways and traffic in front of them.⁹ Passengers would likely have a heightened awareness of a wide range of views while traveling, since they are not focused on the task of driving. Motorists and passengers along Fallon Road, Dublin Boulevard, Doolan Road, and North Canyons Parkway are more aware of views when the landscape transitions and may have higher sensitivity on longer, less routine, trips. The average commuter and local traveler would have moderate sensitivity to views of the project.

Views for bicyclists and pedestrians would be similar in nature to those experienced by vehicular users; however non-vehicular users would have views of the project area for a longer duration. Pedestrian and bicyclists would have higher sensitivity to the visual environment due to their greater awareness of their visual setting. For this reason, pedestrians and bicyclists traveling along the roadway extension would have moderate-high exposure to non-peripheral and peripheral objects and landscape features.

Long-Haul Travelers: Long haul travelers include drivers of semi-trucks and other vehicles moving through the Tri-Valley, and are not anticipated to divert from I-580 to use the project.

Group Viewer Response

Highway neighbor views are partially blocked by existing structures, intervening objects in the landscape, and the rolling hills. Exposure would be moderate-low for the pedestrian and patrons/employees of the commercial land uses adjacent to Fallon Road and along North Canyons Parkway and Doolan Road. Patrons and employees would have moderate-low sensitivity because they would likely be focused on their immediate surroundings and exposure would be limited to brief walks between stores and parking spaces. However, residences along the outskirts of Central Parkway and Panorama Drive residential development would afford long-term views of the project site. These views

⁸ California Department of Transportation. Visual Character Lesson 10: Viewers. Accessed April 2018. Available at: http://www.dot.ca.gov/hq/LandArch/via_training/mod_2/mod_02_lesson_10.htm

⁹ Federal Highway Administration (FHWA). 1981. Visual Impacts Assessment for Highway Projects. Pages 69-71.

would be limited to short segments of the new roadway which would be visible through breaks in the hills (**Viewpoint 4**). Residences in this area would have moderate-high sensitivity to the changes. As residents would have partial, continuous views of the project in the context of the rolling hills, this viewer group would have moderate-high exposure and sensitivity. Similarly, private agricultural parcels in Dublin would have generally unobstructed views of the project over long periods of time, in the context of the rolling hills and would also have moderate-high exposure and sensitivity. As highway and roadway neighbors' primary focus would be diverted from the project site, and exposure would be brief, the exposure and sensitivity would be moderate. Therefore, the average roadway neighbor viewer response would be moderate.

Roadway users that make frequent, repeat trips and travel by vehicle have moderate viewer exposure and moderate viewer sensitivity because the activity is routine and there is not a high awareness of views. Pedestrian and bicyclists would have moderate-high exposure to the visual environment due to their greater awareness of their visual setting. Overall, roadway users have an existing viewer response of moderate.

Existing viewer response for the visual impact study area is summarized in **Table 4**. Further analysis is described under the Viewer Sensitivity section of each Visual Assessment Unit.

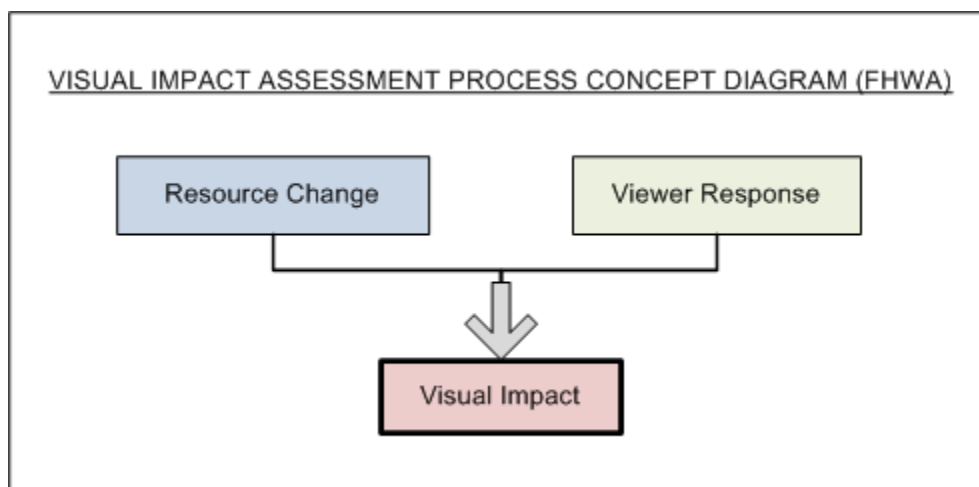
Table 4 Viewer Response

Group	Viewer Exposure	Viewer Sensitivity	Averaged Viewer Response
Roadway Neighbors			
Commercial/Industrial	Moderate-low	Moderate-low	Moderate-low
Residential	Moderate-high	Moderate-high	Moderate-high
Agricultural	Moderate-high	Moderate-high	Moderate-high
Highway and Roadway	Moderate	Moderate	Moderate
Average for all Neighbors	Moderate	Moderate	Moderate
Roadway Users			
Commuter and Local Travelers			
<i>Vehicular Travelers</i>	Moderate	Moderate	Moderate
<i>Bicyclists and Pedestrians</i>	Moderate-high	Moderate-high	Moderate-high
Hauler Travelers	Not Applicable	Not Applicable	Not Applicable
Average for all Users	Moderate	Moderate	Moderate

Source: Circlepoint, 2018

8.0 VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts are also considered. A generalized visual impact assessment process is illustrated in the following diagram:



Source: Caltrans, 2013

Visual impact is determined by comparing the resource change and viewer response to evaluate the change in visual quality score. **Table 5** below provides a reference for determining levels of visual impact. Both the Build Alternative (project) and No Build Alternative are evaluated.

Table 5 Visual Impact Ratings Using Viewer Response and Resource Change

Viewer Response (VR)						
Resource Change (RC)		Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
	Low (L)	L	ML	ML	M	M
	Moderate-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	M	MH	MH
	Moderate-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

Source: Caltrans, 2013

The visual impacts of the Build Alternative are determined by assessing the visual resource change due to the project and predicting viewer response to that change. Visual resource change is the change in visual character and change in visual quality. The first step in determining visual resource change is to

assess the compatibility of the project with the visual character of the existing landscape. The FHWA Method of Visual Resource Analysis is used to determine visual character and visual quality. As part of this process, vividness, intactness and unity of the viewpoint were each given a narrative rating. These qualitative scores were averaged to determine an overall visual quality score. The second step was to compare the visual quality of the existing resources with the projected visual quality after the project is constructed.

For this analysis, visual simulations of the Build Alternative were prepared in two locations where the project is anticipated to result in a moderate level of change to the existing visual setting. The locations of the visual simulations are generally representative of the visual impact study area. The visual impact is determined by comparing the existing and post-construction views and evaluating the change in visual quality score. Changes in visual character are also discussed.

The viewer response to the project incorporates the viewer exposure and viewer sensitivity to the study area, as determined in the preceding section. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to oppose the change.

8.1 Visual Impacts by Visual Assessment Unit and Alternative

As previously discussed in **Section 6.2, Existing Visual Environment**, a number of viewpoints associated with visual assessment units were selected that would most clearly demonstrate the character and quality of the visual impact study area's visual resources. Two viewpoints, one from each Visual Assessment unit, were used in order to assess the types and extent of changes expected to occur as a result of the Build Alternative. Viewpoints also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. This analysis also considers the potential impacts of the No-Build Alternative. The No-Build Alternative would not change existing conditions; therefore, it would not have any effect on visual resources.

The following section describes and illustrates visual impacts by visual assessment unit, compares existing conditions to the Build Alternative, and includes the predicted viewer response and resource change. The vegetation assumed after construction of the Build Alternative is based on conceptual landscaping plans and may not be planned as shown in the visual simulations presented in this section.

Visual Assessment Unit 1

Build Alternative

The analysis below addresses resource change and viewer response to implementation of the Build Alternative in Visual Assessment Unit 1.

Resource Change

Figure 4 depicts the existing and proposed visual impact study area, as visible from Fallon Road (**Viewpoint 2**). The existing view of open space and the rolling hills from Fallon Road offers a natural scenic landscape with overhead utility lines running parallel to the rolling hills. Although commercial development and I-580 are visible on the right hand side, this view is moderate in visual quality based on vividness, intactness, and unity.

Figure 4 also depicts proposed visual changes. The most notable visual component of the Build Alternative is the tree canopy which would alter views of the rolling hills during the day. This visual

change would be low. Additionally, street lighting may result in a new source of glare that was not previously present. This visual change would be moderate. However, the introduction of new glare from street lighting would only occur at night, when street lights would be in use. Based on the above, the overall visual change would be moderate.

Resource Change Determination

The overall resource change for Visual Assessment Unit 1 would be moderate under the Build Alternative.

Viewer Response

Roadway users in Visual Assessment Unit 1 are motorists utilizing Dublin Boulevard to complete trips between Dublin and Livermore and potentially as an alternative to I-580. Roadway neighbors in Visual Assessment Unit 1 include pedestrians and patrons/employees of the commercial land uses along Fallon Road, residences along the outskirts of the Central Parkway and Panorama Drive residential development, and private agricultural parcels west of Croak Road.

Roadway Users

The Build Alternative resource changes include the removal of the Fallon Road/Croak Road intersection, the abandonment of a north-south portion of Croak Road, the creation of a new intersection between Dublin Boulevard and Croak Road. Implementation of the Build Alternative would also entail modifications to the Dublin Boulevard/Fallon Road. Local motorists would continue to experience peripheral views of the rolling hills and commercial development along the perimeter of the visual impact study area. Passengers would likely have heightened awareness of a wide range of views while traveling, since they are not focused on driving responsibilities. Although resource changes would be noticeable to motorists and passengers, they would not be sensitive to such changes because they travel on local roads on a regular basis. While the Build Alternative would result in more man-made features, the open space and rolling hills would continue to be the dominant visual feature. Therefore, the Build alternative would generally be consistent with the existing urban and open setting and would not adversely affect the key elements of visual character of the area.

Roadway Neighbors

Roadway neighbors would be more sensitive to the resources changes because they are either located in a stationary place (i.e., residences), or travel through the visual impact study area at a slower pace (i.e., pedestrians/bicyclists).

Visual Response Determination

Overall, roadway viewers in the visual impact study area would experience a noticeable visual change through implementation of the Build Alternative; however, the main elements of visual character and quality of the area would remain intact. The visual quality of Visual Assessment Unit 1 would be moderate.

No Build Alternative

As previously discussed in **Chapter 2, Project Description**, the No Build Alternative would not construct any of the project features described under the Build Alternative. As such, the No Build Alternative would not feature construction activities, and Dublin Boulevard and North Canyons Parkway would continue to operate unconnected in their current configurations. Given this, no temporary or long-term visual resource change or viewer response would occur.



Visual Assessment Unit 2

Build Alternative

The analysis below addresses resource change and viewer response to implementation of the Build Alternative in Visual Assessment Unit 2.

Resource Change

Figure 5 depicts the existing and proposed views from Collier Canyon Road looking north toward Cottonwood Creek and the Alameda County Hills (**Viewpoint 6**). The existing view of Alameda County open space, Cottonwood Creek, rural development, and associated outbuildings offers a diverse natural and man-made scenic landscape. Recognized scenic resources within the viewshed include the rolling hills and Cottonwood Creek. The scene also includes several large willows and valley oaks (*Quercus lobata*) along Cottonwood Creek, which contributes continuity to the scene. This view is moderate in visual quality based on vividness, intactness, and unity.

Figure 5 also depicts proposed visual changes to the scene. The placement of the new roadway would introduce a new line in the landscape and the addition of the tree canopy would alter daytime views through the project site. This visual change would be low. Similar to **Figure 4**, the addition of street lighting may result in a new source of night time glare that was not previously present. This visual change would be moderate. Based on the above, the overall visual change would be moderate.

The Build Alternative would utilize typical light shielding or the usage of directional devices, as required by the City of Dublin, to reduce potential light pollution and night-time glare within the visual impact study area. While the Build Alternative would include the introduction of new man-made elements along an alignment that is generally undeveloped, the Build Alternative features would generally be flat (pavement, curbs, bike lanes) and landscaping is proposed to soften the man-made elements. Additionally, the Build Alternative would include removal of existing overhead utility lines (**Figure 4**), resulting in a beneficial visual change. With implementation of the Build Alternative, scenic resources would not be altered in such a way that their quality would be diminished.

Resource Change Determination

The overall resource change for Visual Assessment Unit 1 would be moderate under the Build Alternative.

Viewer Response

Roadway users in Visual Assessment Unit 2 are motorists utilizing Dublin Boulevard to complete trips between Dublin and Livermore and potentially as an alternative to I-580. Roadway neighbors in Visual Assessment Unit 2 include patrons/employees of the commercial land uses along Doolan Road and North Canyons Parkway, as well as private agricultural parcels east of Croak Road.

Roadway Users

The Build Alternative resource changes include the Dublin Boulevard roadway extension, modifications to the existing Dublin Boulevard/ North Canyons Parkway intersection, and the addition of a bridge structure crossing Cottonwood creek. Local motorists would continue to experience peripheral views of the rolling hills and commercial development along Doolan Road and North Canyons Parkway. Passengers would likely have heightened awareness of a wide range of views while traveling, since they are not focused on

driving responsibilities. Although resource changes would be noticeable to motorists and passengers, they would not be sensitive to such changes because they travel on local roads on a regular basis. While the Build Alternative would result in more man-made features, the open space and rolling hills would continue to be the dominant visual feature. Therefore, the Build Alternative would generally be consistent with the existing open setting and would not adversely affect the key elements of visual character of the area.

Roadway Neighbors

Roadway neighbors would be more sensitive to the resources changes because they are either located in a stationary place (i.e., residences), or travel through the visual impact study area at a slower pace (i.e., pedestrians/bicyclists).

Visual Response Determination

Overall, roadway viewers in the visual impact study area would experience a noticeable visual change through implementation of the Build Alternative; however, the main elements of visual character and quality of the area would remain intact. The visual quality of Visual Assessment Unit 1 would be moderate.

No Build Alternative

As previously discussed in **Chapter 2, Project Description**, the No Build Alternative would not construct any of the project features described under the Build Alternative. As such, the No Build Alternative would not feature construction activities, and Dublin Boulevard and North Canyons Parkway would continue to operate unconnected in their current configurations. Given this, no temporary or long-term visual resource change or viewer response would occur.

8.2 Summary of Visual Impacts by Visual Assessment Unit

Visual Assessment Unit 1

Build Alternative

The overall visual impact for Visual Assessment Unit 1 is determined by combining the viewer response and the resource change. As shown in **Table 6**, the viewer response and resource change of Visual Assessment Unit 1 would be moderate and moderate low, respectively. Together, the visual change that would occur under the Build Alternative would not substantially lower the moderate visual quality of this assessment unit. Thus, the visual impact would be moderate.

No Build Alternative

Dublin Boulevard and North Canyons Parkway would continue to operate unconnected in their current configurations. Therefore, the broader roadway network composed of I-580, Fallon Road, and Doolan Road would remain unchanged and existing roadway users would have unchanged views. As shown in **Table 6**, there would be no visual impact and no visual resource change under the No Build Alternative.



Visual Assessment Unit 2

Build Alternative

The overall visual impact for Visual Assessment Unit 1 is determined by combining the viewer response and the resource change. As shown in **Table 6**, the viewer response and resource change of Visual Assessment Unit 2 would be moderate and moderate low, respectively. Together, the visual change that would occur under the Build Alternative would not substantially lower the visual quality of this assessment unit from moderate. Thus, the visual impact would be moderate.

No Build Alternative

Dublin Boulevard and North Canyons Parkway would continue to operate unconnected in their current configurations. Therefore, the broader roadway network composed of I-580, Fallon Road, and Doolan Road would remain unchanged and existing roadway users would have unchanged views. As shown in **Table 6**, there would be no visual impact and no visual resource change under the No Build Alternative.

8.3 Summary of Visual Impacts by Alternative

Table 6 summarizes the visual impacts for the Build Alternative and the No Build Alternative and summarizes and compares the narrative ratings for visual resource change and viewer response between alternatives for each Visual Assessment Unit.

Table 6 Summary of Key View Narrative Ratings

Visual Unit	Key Views (View Points)	Build Alternative			No Build Alternative		
		Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact
1	1, 2, 3, 4	Moderate-low	Moderate	Moderate	N/A	Moderate	N/A
2	5, 6, 7, 8	Moderate-low	Moderate	Moderate	N/A	Moderate	N/A

Source: Circlepoint, 2018

9.0 PROJECT VISUAL IMPACT SUMMARY

Implementation of the Build Alternative would result in changes to the existing visual environment. In general, project components would include the extension of Dublin Boulevard, removal of the Fallon Road/Croak Road intersection, abandonment of a north-south portion of Croak Road, and creation of a new intersection between Dublin Boulevard and Croak Road. Additionally, the Build Alternative would entail construction of a bridge structure crossing Cottonwood Creek and would include modifications to the Dublin Boulevard/Fallon Road and North Canyons Parkway/Doolan Road intersections. The visual changes would be more evident in some parts of the visual impact study area than other, where partially obstructed views exist.

Beneficial visual features of the Build Alternative include new landscaping, street trees, and the removal of overhead utility lines within the visual impact study area. Viewers within the visual impact study area would experience an increased level of roadway dominance where the roadway extension would linearly disrupt the continuity of the open space spanning the visual impact study area. In addition, new street lighting would introduce a new source of light and glare at night, when streetlights would be in use.

Overall, the magnitude of change would be noticeable, but would not substantially alter scenic resources, or degrade the existing visual character and visual quality of the visual impact study area. While the Build Alternative would result in additional man-made features, the rolling hills and open space used for grazing land would continue to be the dominant visual feature in the visual impact study area. Therefore, the Build Alternative would generally continue to be consistent with the existing visual setting and would not adversely affect the key elements of visual character within the visual impact study area. The overall visual impacts under the Build Alternative would be moderate. There would be no visual impact and no visual resource change under the No Build Alternative.

9.1 Temporary Construction Visual Impacts

Construction activities required for implementation of the Build Alternative would include but are not limited to: earthwork, paving, pile driving for the bridge structure, concrete/rebar/formwork, utility trenching, and roadway striping. To construct the Build Alternative, an area larger than the permanent project footprint would be used for temporary access, construction staging, and equipment laydown. Additionally, grading work would be within the area of disturbance which occurs beyond the limits of the permanent project footprint.

Grading outside of the permanent, paved project footprint would be required to provide a safe roadbed with a vertical geometry that meets Dublin and the County's engineering and safety standards. Under existing conditions, the grade changes along the proposed alignment – small hills and valleys – are too steep to safely and comfortably accommodate the roadway extension. Therefore, both cut and fill areas have been identified to create a generally more level area for the roadway extension.

All viewer groups in the visual impact study area can expect temporary visual impacts as a result of construction activities. Short-term construction work would introduce visual disturbances to the continuous open space that would slightly reduce the intactness and unity of the visual impact study area. However, construction of the Build Alternative would comply with all applicable construction regulation, standards, and procedures including best management practices. Visual impacts during construction would be temporary in nature. Therefore, construction of the Build Alternative would result in a moderate resource change within the visual impact study area.

Table 7 Temporary Construction Visual Impacts

Viewer Response (VR)						
Resource Change (RC)		Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
	Low (L)	L	ML	ML	M	M
	Moderate-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	MODERATE	MH	MH
	Moderate-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

Source: Circlepoint, 2018.

10.0 CUMULATIVE VISUAL IMPACT

Cumulative impacts are those resulting from past, present and reasonably foreseeable future actions, combined with the potential visual impacts of this project. All components of the Build Alternative are designed so as to not preclude other planned and programmed projects. For the purposes of this analysis, the three jurisdictions within the project footprint were consulted and asked to provide a list of reasonably foreseeable¹⁰ future projects within a 1,000 foot radius of the project. No reasonably foreseeable projects were identified by the County. Projects identified by Dublin and Livermore include the following:

- **City of Dublin**
 - Grand View Project: Construct a new mixed-use town center in the Eastern part of Dublin
- **City of Livermore**
 - 1000 Airway Drive: Demolish an existing Residence Inn and construct a new 122-room Hyatt House as well as a 119-room Hyatt Place
 - 2000 Freisman Road: Construct approximately 244,152 square feet of retail uses in 12 separate buildings on an approximately 24-acre site
 - 5200 Wolf House Drive: Construct a 122-room hotel
 - 5400 Wolf House Drive Project: Construct a 104-room hotel

¹⁰ Consistent with Caltrans' interpretation of FHWA guidance on cumulative analysis, all projects listed here meet the criteria of "[having] applications pending with a government agency"; all five projects have development applications or pre-applications under review with the local agency.

Of the five cumulative projects listed above, the 1000 Airway Drive project would not be located within the visual impact study area. The remaining four projects listed above would occur within, or partially within, the visual impact study area.

The Livermore projects would occur outside the immediate project vicinity. Their implementation in combination with the project would not exacerbate changes to the visual character of the visual impact study area described above, as the developments would be constructed to the south and southeast of I-580 in areas that have similar commercial development and partially obstructed views of the project site. Key views across the project site to the north would be moderately effected by the project, but would be unlikely to be adversely effected under cumulative scenario based on existing commercial development in the areas south of I-580 which interrupts views to the north. Based on the distance between the reasonably foreseeable projects in Livermore and the roadway extension, and existing commercial and residential development in the vicinity of the reasonably foreseeable projects, it's not anticipated that implementation of the project would result in a cumulative impact to the visual environment.

The Grand View project in Dublin would be implemented on parcels adjacent to the roadway extension. The Grand View project would occupy the parcels immediately east of Fallon Road, including parcels on the western and eastern sides of Croak Road both on the north and south sides of the roadway extension. The timing of the Grand View project is not precisely known, however, it is reasonably anticipated based on input from the City of Dublin that the roadway extension would be implemented prior to the Grand View project. In the context of this reasonably foreseeable project, the roadway extension would no longer have a noticeable effect on the visual character of the area in the vicinity of the Grand View project, as the Grand View project would be anticipated to change the visual character of its vicinity much more substantially than the roadway extension. Under the cumulative scenario, key views across the visual impact study area would be dominated by the Grand View project with the roadway extension being a minor element. Therefore, it's not anticipated that implementation of the project would result in a cumulative impact to the visual environment.

Based on the above, with consideration of all reasonably foreseeable projects, no cumulative visual impacts would occur.

11.0 AVOIDANCE AND MINIMIZATION MEASURES

Avoidance and minimization measures have been identified to lessen visual changes and viewer response caused by implementation of the Build Alternative. The inclusion of aesthetic features in the project design and consistency with applicable policies (discussed in **Chapter 2.0, Project Description**, and **Chapter 3.0, Project Location and Setting**) would minimize the changes caused by the Build Alternative. This section describes additional avoidance and minimization measures. The following measures to avoid or minimize visual impacts will be incorporated into the project:

VIS-1: Revegetation Planting Measures

Avoidance of Effects to Classified Landscaped Freeway and Eligible State Scenic Highway during Operation

All landscaping and new plantings along the Dublin Boulevard Extension must be selected and implemented to maintain the eligibility of I-580 as a State Scenic Highway. The final selection of plantings must ensure that new planting would not impede views of memorable landscape that

showcase the natural beauty or agricultural of California. Landscaping plans will be coordinated with Caltrans to ensure compatibility.

Avoidance of Effects to Scenic Hillsides

Construction areas disturbed for equipment access and staging will be returned to their pre-project condition. This may include minor regrading or sweeping and revegetation. Graded areas to the north of the permanent project footprint will be vegetated to minimize the visual change to the hillside and ensure that the graded areas blend with the surrounding natural hillside environment to the extent feasible. Where retaining walls are used, the measures listed under “VIS-2: Retaining Wall Measures” will be implemented.

VIS-2: Retaining Wall Measures

Avoidance and Minimization of aesthetic effects to viewers during operation

Retaining walls constructed on behalf of the project, if deemed necessary, would adhere to the following design components:

- To reduce the visual impact of new retaining walls, aesthetic treatments consisting of color, texture and/or patterning will be applied to reduce visual impacts. The aesthetic treatment shall be context sensitive to the location. If concrete drainage ditches are required along the top of and behind the retaining walls, the ditch shall be stained to match the overall color of the wall. Aesthetic treatments will also reduce glare and deter graffiti, and shall be developed during the final design phases and be approved by Caltrans.
- Where required, retaining wall cable safety railing should have black or brown vinyl cladding to make them less visually obtrusive and help them blend with the setting.
- Concrete safety-shaped barriers should be sand blasted to a medium finish to minimize glare and deter graffiti. Barriers at the bottom of retaining walls are required to be stained or are required to match the overall wall color through techniques such as staining.

VIS-3: Light and Glare Measures

Avoidance and Minimization of aesthetic effects during construction

Appropriate light and glare screening measures, including the use of downward cast lighting, will be used at the construction staging and laydown areas along Doolan Road.

11.1 Summary of Avoidance, Minimization and/or Mitigation Measures by Alternative

Table 8 below summarizes the numbered avoidance, minimization, and/or mitigation measures from above for the Build Alternative and the No Build Alternative.

Table 8 Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative

Alternative	Avoidance and Minimization	Mitigation
Build Alternative	VIS-1: All landscaping and new plantings along the Dublin Boulevard Extension must be selected and implemented to maintain the eligibility of I-580 as a State Scenic Highway. The final selection of plantings must ensure that new planting would not impede views of memorable landscape that showcase the natural beauty or agricultural of California. Landscaping plans will be coordinated with Caltrans to ensure compatibility. Construction areas disturbed for equipment access and staging will be returned to their pre-project condition. This may include minor regrading or sweeping and revegetation. Graded areas to the north of the permanent project footprint will be vegetated to minimize the visual change to the hillside and ensure that the graded areas blend with the surrounding natural hillside environment to the extent feasible. Where retaining walls are used, the measures listed under “VIS-2: Retaining Wall Measures” will be implemented.	N/A
	VIS-2: To reduce the visual impact of new retaining walls, aesthetic treatments consisting of color, texture and/or patterning will be applied to reduce visual impacts. The aesthetic treatment shall be context sensitive to the location. If concrete drainage ditches are required along the top of and behind the retaining walls, the ditch should be stained to match the overall color of the wall. Aesthetic treatments will also reduce glare and deter graffiti, and shall be developed during the final design phases and be approved by Caltrans. Where required, retaining wall cable safety railing should have black or brown vinyl cladding to make them less visually obtrusive and help them blend with the setting. Concrete safety-shaped barriers should be sand blasted to a medium finish to minimize glare and deter graffiti. Barriers at the bottom of retaining walls should be stained to match the overall wall color if deemed appropriate by the Office of Landscape Architecture during the design phase.	N/A
	VIS-3: Appropriate light and glare screening measures, including the use of downward cast lighting, will be used at the construction staging and laydown areas along Doolan Road.	N/A
	No Build Alternative	N/A

Source: Circlepoint

12.0 CONCLUSIONS

Implementation of the Build Alternative would moderately lower the visual character and visual quality of the visual impact study area. Viewers would experience an increased level of roadway dominance where the roadway extension would linearly disrupt the continuity of the open space spanning the visual impact study area. At night, new street lighting would introduce a new source of glare. Together, these visual changes would be moderate. The avoidance and minimization measures listed in **Chapter 11.0, Avoidance and Minimization Measures**, would minimize the project's visual impact. While implementation of the project would include the addition of man-made features, the rolling hills and open space used for grazing land would continue to be the dominant visual feature in the visual impact study area. Therefore, the project would not result in a substantial visual change to the existing setting and would not adversely affect existing key elements of visual character. As a result, the project would not substantially degrade the existing visual character or the quality of the visual impact study area.

13.0 REFERENCES

California Department of Transportation, 2008a. Landscape Architecture Program. Scenic Highway Guidelines. Accessed April 2018.

California Department of Transportation. Visual Character Lesson 10: Viewers. Accessed April 2018. Available at: http://www.dot.ca.gov/hq/LandArch/via_training/mod_2/mod_02_less_10.htm

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