# **I-80/Gilman Street Interchange Improvement Project**



# **Visual Impact Assessment**

Caltrans District 04 04-ALA-80-PM 6.38/6.95 EA 04-0A7700 / Project ID 0400020155 August 2018









# **Visual Impact Assessment**

# I-80/Gilman Street Interchange Improvement Project

August 2018

# **California Department of Transportation**

District 04, Alameda County, I-80 04-ALA-80-PM 6.38/6.95 EA 04-0A7700 / Project ID 0400020155

Prepared by: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ S/20/2018

Jeffrey R. Lormano

Parsons

California Landscape Architect License No. 3576
Project Landscape Architect

Approved by: Sydia/lac Date: 8/21/18

California Landscape Architect License No. 5035
Caltrans District Landscape Architect
Office of Landscape Architecture
Caltrans District 4

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.

# **TABLE OF CONTENTS**

1.	PI	JRPOSE OF STUDY	3
2.	PI	ROJECT DESCRIPTION	3
	2.1	Project Alternatives	3
	2.1.1	Roundabout Alternative	3
	2.1.2	No Build Alternative	7
	2.2	Purpose and Need for the Project	7
3.	PI	ROJECT LOCATION AND SETTING	8
	3.1	Project Location	8
	3.2	Regional Setting	8
	3.3	Regulatory Setting	8
	3.3.1	Caltrans	8
	3.3.2	San Francisco Bay Conservation & Development Commission (BCDC)	11
	3.3.3	City of Berkeley	12
4.	A:	SSESSMENT METHOD	13
5.	VISU	JAL ASSESSMENT UNITS AND KEY VIEWS	13
	5.1	Visual Assessment Unit 1 – I-80 Freeway	.13
	5.2	Visual Assessment Unit 2 - Gilman Street	.13
	5.3	Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, W	'B
	On an	d Off-Ramps, and San Francisco Bay Trail	.14
	5.4 Eastsh	Visual Assessment Unit 4 – Eastside Commercial/Industrial, EB On- and Off-Ramps, and ore Highway	
6.	V	SUAL RESOURCES AND RESOURCE CHANGE	17
	6.1	Visual Resources	.17
	6.1.1	Visual Character	17
	6.1.2	Visual Quality	18
	6.2	Visual Character and Quality by Visual Assessment Units	.19
	6.3	Resource Change	.22
	6.3.1	Visual Assessment Unit 1 – I-80	22
	6.3.2	Visual Assessment Unit 2 - Gilman Street	23
	6.3.3 San F	Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, WB on-and off ramps, a rancisco Bay Trail	
	6.3.4	Visual Assessment Unit 4 – Eastside Commercial, EB On- and Off-Ramp, and Eastshore Highway	24

7.1 Types of Viewers       26         7.1.1 NEIGHBORS (Views to the Project)       26         7.1.2 TRANSPORTATION USERS (Views from the Project)       26         7.2 Viewer Response       26         7.2.1 VIEWER EXPOSURE       27         7.2.2 VIEWER SENSITIVITY       30         7.3 GROUP VIEWER RESPONSE       31         8. VISUAL IMPACT       32         8.1 Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1 NO BUILD ALTERNATIVE       33         8.2 Summary of Key Viewpoint Analysis       57         9. PROJECT VISUAL IMPACT SUMMARY       58         9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2 Visual Character       59         9.3 Light and Glare       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64         APPENDIX 'B': TABLE OF CUMULATIVE IMPACT PROJECTS       69	7.		V	IEWERS AND VIEWER RESPONSE	26
7.1.2 TRANSPORTATION USERS (Views from the Project).       26         7.2 Viewer Response.       26         7.2.1 VIEWER EXPOSURE.       27         7.2.2 VIEWER SENSITIVITY.       30         7.3 GROUP VIEWER RESPONSE.       31         8. VISUAL IMPACT.       32         8.1 Visual Impacts by Visual Assessment Unit and Alternative.       33         8.1.1 NO BUILD ALTERNATIVE.       33         8.2 Summary of Key Viewpoint Analysis.       57         9. PROJECT VISUAL IMPACT SUMMARY.       58         9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives.       58         9.1.1 San Francisco Bay Conservation & Development Commission (BCDC).       59         9.2 Visual Character.       59         9.3 Light and Glare.       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT.       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS.       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.1		Types of Viewers	26
7.2 Viewer Response       26         7.2.1 VIEWER EXPOSURE       27         7.2.2 VIEWER SENSITIVITY       30         7.3 GROUP VIEWER RESPONSE       31         8. VISUAL IMPACT       32         8.1 Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1 NO BUILD ALTERNATIVE       33         8.2 Summary of Key Viewpoint Analysis       57         9. PROJECT VISUAL IMPACT SUMMARY       58         9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2 Visual Character       59         9.3 Light and Glare       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.:	1.1	NEIGHBORS (Views to the Project)	26
7.2.1       VIEWER EXPOSURE       27         7.2.2       VIEWER SENSITIVITY       30         7.3       GROUP VIEWER RESPONSE       31         8.       VISUAL IMPACT       32         8.1       Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1       NO BUILD ALTERNATIVE       33         8.2       Summary of Key Viewpoint Analysis       57         9.       PROJECT VISUAL IMPACT SUMMARY       58         9.1       Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1       San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2       Visual Character       59         9.3       Light and Glare       59         9.4       Temporary Construction Visual Impacts       60         10.       CUMULATIVE VISUAL IMPACT       61         11.       AVOIDANCE AND MINIMIZATION MEASURES       61         12.       CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.:	1.2	TRANSPORTATION USERS (Views from the Project)	26
7.2.2 VIEWER SENSITIVITY       30         7.3 GROUP VIEWER RESPONSE       31         8. VISUAL IMPACT       32         8.1 Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1 NO BUILD ALTERNATIVE       33         8.2 Summary of Key Viewpoint Analysis       57         9. PROJECT VISUAL IMPACT SUMMARY       58         9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2 Visual Character       59         9.3 Light and Glare       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.2		Viewer Response	26
7.3       GROUP VIEWER RESPONSE       31         8.       VISUAL IMPACT       32         8.1       Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1       NO BUILD ALTERNATIVE       33         8.2       Summary of Key Viewpoint Analysis       57         9.       PROJECT VISUAL IMPACT SUMMARY       58         9.1       Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1       San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2       Visual Character       59         9.3       Light and Glare       59         9.4       Temporary Construction Visual Impacts       60         10.       CUMULATIVE VISUAL IMPACT       61         11.       AVOIDANCE AND MINIMIZATION MEASURES       61         12.       CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.:	2.1	VIEWER EXPOSURE	27
8. VISUAL IMPACT       32         8.1 Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1 NO BUILD ALTERNATIVE       33         8.2 Summary of Key Viewpoint Analysis       57         9. PROJECT VISUAL IMPACT SUMMARY       58         9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2 Visual Character       59         9.3 Light and Glare       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.	2.2	VIEWER SENSITIVITY	30
8.1       Visual Impacts by Visual Assessment Unit and Alternative       33         8.1.1       NO BUILD ALTERNATIVE       33         8.1.2       BUILD ALTERNATIVE       33         8.2       Summary of Key Viewpoint Analysis       57         9.       PROJECT VISUAL IMPACT SUMMARY       58         9.1       Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1       San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2       Visual Character       59         9.3       Light and Glare       59         9.4       Temporary Construction Visual Impacts       60         10.       CUMULATIVE VISUAL IMPACT       61         11.       AVOIDANCE AND MINIMIZATION MEASURES       61         12.       CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		7.3	3	GROUP VIEWER RESPONSE	31
8.1.1       NO BUILD ALTERNATIVE       33         8.1.2       BUILD ALTERNATIVE       33         8.2       Summary of Key Viewpoint Analysis       57         9.       PROJECT VISUAL IMPACT SUMMARY       58         9.1       Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives       58         9.1.1       San Francisco Bay Conservation & Development Commission (BCDC)       59         9.2       Visual Character       59         9.3       Light and Glare       59         9.4       Temporary Construction Visual Impacts       60         10.       CUMULATIVE VISUAL IMPACT       61         11.       AVOIDANCE AND MINIMIZATION MEASURES       61         12.       CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64	8.		V	ISUAL IMPACT	32
8.1.2 BUILD ALTERNATIVE		8.1		Visual Impacts by Visual Assessment Unit and Alternative	33
8.2 Summary of Key Viewpoint Analysis 57  9. PROJECT VISUAL IMPACT SUMMARY 58  9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives 58  9.1.1 San Francisco Bay Conservation & Development Commission (BCDC) 59  9.2 Visual Character 59  9.3 Light and Glare 59  9.4 Temporary Construction Visual Impacts 60  10. CUMULATIVE VISUAL IMPACT 61  11. AVOIDANCE AND MINIMIZATION MEASURES 61  12. CONCLUSIONS 63  APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT 64		8.:	1.1	NO BUILD ALTERNATIVE	33
9. PROJECT VISUAL IMPACT SUMMARY 58 9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives 58 9.1.1 San Francisco Bay Conservation & Development Commission (BCDC) 59 9.2 Visual Character 59 9.3 Light and Glare 59 9.4 Temporary Construction Visual Impacts 60 10. CUMULATIVE VISUAL IMPACT 61 11. AVOIDANCE AND MINIMIZATION MEASURES 61 12. CONCLUSIONS 63 APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT 64		8.:	1.2	BUILD ALTERNATIVE	33
9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives		8.2		Summary of Key Viewpoint Analysis	57
9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)	9.		PI	ROJECT VISUAL IMPACT SUMMARY	58
9.2 Visual Character       59         9.3 Light and Glare       59         9.4 Temporary Construction Visual Impacts       60         10. CUMULATIVE VISUAL IMPACT       61         11. AVOIDANCE AND MINIMIZATION MEASURES       61         12. CONCLUSIONS       63         APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT       64		9.1		Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives	58
9.3 Light and Glare		9.:	1.1	San Francisco Bay Conservation & Development Commission (BCDC)	59
9.4 Temporary Construction Visual Impacts 60  10. CUMULATIVE VISUAL IMPACT 61  11. AVOIDANCE AND MINIMIZATION MEASURES 61  12. CONCLUSIONS 63  APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT 64		9.2		Visual Character	59
10. CUMULATIVE VISUAL IMPACT		9.3		Light and Glare	59
11. AVOIDANCE AND MINIMIZATION MEASURES		9.4		Temporary Construction Visual Impacts	60
12. CONCLUSIONS	10	).	CI	UMULATIVE VISUAL IMPACT	61
APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT64	11	L <b>.</b>	Α	VOIDANCE AND MINIMIZATION MEASURES	61
APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT64	12	<u>2</u> .	C	ONCLUSIONS	63
	ΔI	PPEN			

# VISUAL IMPACT ASSESSMENT

# I-80/Gilman Street Interchange Improvement Project

#### 1. PURPOSE OF STUDY

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed 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 because of the project, and predicting how the affected public would respond to or perceive those changes.

#### 2. PROJECT DESCRIPTION

This section describes the proposed action and the project alternatives developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The two alternatives include the Roundabout Alternative and the No Build Alternative. The alternatives assessed in this study are detailed below.

# 2.1 Project Alternatives

Two project alternatives are proposed for consideration, as described below. One build alternative, the Roundabout Alternative, was developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The second alternative is the No Build Alternative. The alternatives will be evaluated based upon project cost, including life cycle costs, vehicle miles traveled and other traffic data, and impacts to the environment, such as community and land use impacts, cultural resources, floodplains, wetlands, greenhouse gas emissions, and special-status species. The general project vicinity is shown in Figure 1 and the specific project location is shown in Figure 2 on pages 11 and 12, respectively.

#### 2.1.1 Roundabout Alternative

The Roundabout Alternative includes the reconfiguration of Interstate 80 (I-80) ramps and intersections at Gilman Street. The existing non-signalized intersection configuration with stop-controlled ramp termini would be replaced with two hybrid single-lane roundabouts with multilane portions on Gilman Street at the I-80 ramp terminals. The I-80 ramps and frontage road intersections at each ramp intersection would be combined to form a single roundabout intersection on each side of I-80. Gilman Street would be reconstructed on the west from the parking lots at Tom Bates Regional Sports Complex along Gilman Street to the eastern side of the 4th Street intersection. Work would also include reconstruction of West Frontage Road and Eastshore Highway within the project limits. In addition, the northern and southern legs of the eastern roundabout will be reduced from two lanes to one lane entering the roundabout. The southbound and northbound movements onto Eastshore Highway would instead be made via 2nd Street to Page Street or 2nd Street to Harrison Street.

Improvements associated with installation of the roundabouts would extend approximately 280 feet south on West Frontage Road from the Gilman Street interchange and approximately 250 feet north and 1,010 feet south on Eastshore Highway from the Gilman Street interchange. Work associated with reconfiguration of the eastbound I-80 off-ramp and on-ramp would extend approximately 820 feet south and

280 feet north of the interchange. Work associated with reconfiguration of the westbound I-80 off-ramp and on-ramp would extend approximately 370 feet north and 230 feet south of the interchange. There are no proposed improvements to the freeway mainline. A metering light would be installed on West Frontage Road to regulate the volume of northbound traffic that enters the western roundabout.

The western roundabout intersection would consist of four approaching legs: eastbound and westbound Gilman Street, West Frontage Road, and I-80 westbound off-ramp. The eastern roundabout intersection would include five approaching legs: I-80 eastbound off-ramp, northbound and southbound Eastshore Highway, and eastbound and westbound Gilman Street. A left-turn pocket would be provided on Gilman Street for vehicles traveling eastbound turning onto northbound 2nd Street. Left turns will be restricted from westbound Gilman Street turning onto southbound 2nd Street.

Improvements on 2nd Street north of Gilman Street include reduced crossing distances, new striping, signing, new pavement, additional landscaping, and new light poles. South of Gilman Street, improvements on 2nd Street include a bulb-out on the southeast corner of the intersection and converting the road to one-lane southbound, while the other lane would be used as a designated parking/loading zone for businesses.

All modified roadways including ramps, frontage roads, and arterials would be improved. Improvements would include mill and overlay of pavement, striping, relocation of drainage inlets, lighting, and signage. Several operational improvements would be incorporated in to the project. A metering signal would be installed on the northbound leg of the western roundabout to limit the volume of traffic that is bypassing the freeway using West Frontage Road. A queue cutting signal will be placed on the eastbound leg of the Union Pacific Railroad (UPRR) crossing at 3rd Street to prevent traffic from extending across the UPRR tracks.

#### **Pedestrian and Bicycle Facilities**

A shared-use Class I path consisting of 10-foot-wide travel way with a 2-foot-wide shoulder for pedestrians and bicyclists would be constructed on the south side of Gilman Street from 2nd Street to the eastern roundabout. The shared-use path would extend south along Eastshore Highway, where it would then connect to a proposed bicycle/pedestrian overcrossing. The overcrossing would be constructed over I-80, merging into the existing San Francisco Bay Trail (Bay Trail) that runs parallel to West Frontage Road. The at-grade shared-use path would continue on the south side of Gilman Street under I-80 and terminate at the Bay Trail on the west side of the interchange.

The bicycle/pedestrian overcrossing would be similar to the existing bicycle/pedestrian overcrossing over I-80 at University Avenue. The structure would be located south of Gilman Street and have a minimum of three spans with a maximum span length of approximately 230 feet over I-80. The foundations for the pedestrian bridge would be located on 2-foot diameter Cast-In-Drilled-Hole piles 120 feet below the existing ground surface. There would be two staircases incorporated into the overcrossing, one on each side of I-80. They would be approximately 45 feet long with a height of 25 feet to connect to the overcrossing. There would also be retaining walls on the east and west side of the overcrossing; they would be approximately 6 feet tall at the highest point and taper down to zero. The maximum depth of the retaining wall piles is expected to be 50 feet below the ground surface.

Improvements would be made along 4th Street to Harrison Street to 5th Street to provide bicycle connectivity between the Codornices Creek Path and the two-way cycle track on Gilman Street. These improvements would consist of painted shared-lane markings, also known as sharrows, on the pavement

throughout this corridor. Bicycle signage and pedestrian scale lighting would be constructed as part of the improvements.

Approximately 125 feet of new curb, gutter, and sidewalk beginning at the corner of Harrison Street and 4th Street and ending half-way down the block towards 5th Street would be constructed. Parallel parking would be added along this new section of curb and sidewalk. The bus stop located at the corner of 4th Street and Gilman Street would be removed.

The Build Alternative includes a two-way cycle track on the south side of Gilman Street between the eastern I-80/Gilman Street ramps and 4th Street. The two-way cycle track is separated from vehicle traffic with a minimum 3-foot-wide striped buffer and a parking lane in some locations. The addition of the two-way cycle track would require installation of a traffic signal at the intersection of 4th Street and Gilman Street. The northern curb line on Gilman Street would also be shifted 2 to 5 feet north. Along Eastshore Highway, the sidewalk, curb, and gutter would be replaced between Page Street and Gilman Street.

West of the I-80/Gilman Street interchange, the existing Bay Trail would be extended approximately 660 feet west along the south side of Gilman Street from its current terminus at the intersection of West Frontage Road and Gilman Street to just beyond Berkeley city limits. The proposed Bay Trail extension would be 10 feet wide, unstriped, with 2-foot-wide unpaved shoulders on either side of the trail. Onstreet parking would be reduced by approximately 18 spaces at the end of Gilman Street as a result of the new trail extension.

Additional pedestrian and bicycle improvements include upgrading the 3rd Street/UPRR crossing at Gilman Street to accommodate the cycle track. Improvements would include relocating the gate, flashing beacons, addition of a bicycle signal, installation of medians, and improved striping and signage. All improvements will be approved by the UPRR and the California Public Utilities Commission (CPUC).

#### Utilities, Landscaping, and Drainage

Existing PG&E overhead electric lines along Gilman Street, West Frontage Road, and Eastshore Highway would be relocated as part of the Roundabout Alternative. Some of these overhead lines may be placed underground. Minor drainage modifications would also be required to conform to the new roundabout alignment and drainage improvements associated with the two-way cycle track along Gilman Street would also be required. Utility relocations and new drainage systems may require trenching to a depth of approximately 6 feet.

A separation device would be installed underground along Gilman Street to separate trash, mercury, and polychlorinated biphenyls (PCBs). A tidal flap gate would be installed at the existing headwall of the 60" reinforced concrete pipe at the west end terminus of Gilman Street. Replacement of the existing headwall and associated rip rap may include in-water work. Work below the ordinary mean high-water mark may be required. Dewatering or a coffer dam may also be required.

New light pole foundations and ramp metering poles would be 2 feet in diameter and would range from 5 to 13 feet deep near the roundabout. An existing East Bay Municipal Utility District (EBMUD) recycled water transmission line would be relocated and extended as part of the project. Approximately 1,100 feet of a new 12-inch recycled water transmission pipeline within Eastshore Highway from Page Street to Gilman Street and approximately 1,050 feet of pipeline within Gilman Street from 2nd Street to the Buchanan Street extension are part of the Roundabout Alternative. The maximum excavations for the pipe trench would be approximately 24 inches wide by 60 inches deep. Approximately 1,100 feet of an existing

10-inch EBMUD recycled water pipeline located within California Department of Transportation (Caltrans) ROW along the eastbound Gilman Street off-ramp shoulder would be abandoned in place or removed. A new City of Berkeley sewer line would be installed underneath Gilman Street beginning at a point east of the Interchange and ending on the west side I-80 at the approximate entrance to the Tom Bates Sports Complex parking lots.

Existing vegetation is sparse in the project footprint and consists of ornamental plantings or ruderal vegetation. The Roundabout Alternative would remove existing landscaping and trees on the sidewalk along Eastshore Highway from Page Street to Gilman Street. In addition, trees and/or shrubs would be removed at the I-80 off-ramps, westbound I-80 on-ramp, and along the Bay Trail. Opportunities for new landscaping or aesthetic treatments would be available in the center of each roundabout. Replacement planting would occur near the areas of impact where feasible, as well as within the project limits. Aesthetic treatment of the roundabouts will consider hardscape treatments and possibility of planting. Final determination will occur during the design phase of the project.

#### **Golden Gate Fields Access**

The existing driveway entrance to Golden Gate Fields is located immediately adjacent to the westbound I-80 off-ramp at the end of the curb return on Gilman Street. Construction of the roundabout would expand the ramp intersection to the north and would require relocation of the Golden Gate Fields entrance and exit gate to their stables.

Alternate entrance and exit gate options for Golden Gate Fields were evaluated and discussed with Golden Gate Fields management in a series of meetings.

The Build Alternative would relocate the entrance and exit gate to the Gilman Street Extension. The existing gate would be connected to Golden Gate Fields Access Road allowing for the existing security shed to remain in place. The intersection of Gilman Street Extension with Golden Gate Fields Access Road would be improved, and Gilman Street would be widened to the south to provide space for two – two lane roads separated by a median. The Golden Gate Fields north east parking lot would be re-sized and re-striped to allow room for the Gilman Street Extension/Golden Gate Fields Access Road intersection. The existing security shed leading to the north east and northwest parking lots would be moved north and reconstructed with new gates. The Golden Gate Fields north west parking lot would be restriped to maximize the parking spaces. Both parking lots would be repaved, restriped, and lighting and landscaping elements would be added. Golden Gate Fields internal access road and the Gilman Street Extension would be repaved and restriped between Gilman Street and the north east and north west parking lots. Fifteen new parallel parking spaces would be striped along the Gilman Street access road. There would be no net loss of parking for Golden Gate Fields.

#### **Property Acquisitions**

Partial acquisitions will be required for right-of-way (ROW) from Golden Gate Fields and East Bay Regional Park District (EBRPD). Relocation of the driveway would be required from a property located on the south side of Gilman and 2nd Streets. Additionally, a permit to construct from Golden Gate Fields would be required to complete improvements on their property. Temporary construction easements (TCEs) would be required for construction equipment storage, staging, and laydown from EBRPD and various property owners along Gilman Street, 4th Street, Harrison Street, and 5th Street.

#### **Construction Activities**

Construction work for the Roundabout Alternative would be done primarily during daylight hours from 7:00 a.m. to 6:00 p.m.; however, there may be some work during night-time hours to avoid temporary

roadway closures for tasks that could interfere with traffic or create safety hazards. Work hours along the internal access road in Golden Gate Field property will be limited to after 10:00 am to 5:00 pm. and night work will be restricted within or adjacent to Golden Gate Fields property. Examples of work activities include striping operations, traffic control setup, installation of storm drain crossings, and asphalt pavement mill and overlay.

Temporary lane and ramp closures and detours would occur. It is anticipated that temporary closure of existing bicycle or pedestrian facilities would occur at times and may require temporary rerouting of transit service due to intersection work. A Transportation Management Plan (TMP) would be developed and implemented as part of the project construction planning phase. The TMP would address potential impacts to circulation of all modes of travel (i.e., transit, bicycles, pedestrians, and private vehicles). Roadway and/or pedestrian access to all occupied businesses and respective parking lots would be maintained during project construction. The TMP would include an evaluation of potential impacts because of diverting traffic to alternate routes, and it would also include measures to minimize, avoid, and/or mitigate impacts to alternate routes, such as agreements with local agencies to provide enhanced infrastructure on arterial roads or intersections to deal with detoured traffic. The TMP may provide for contracting with local agencies for traffic personnel, especially for special event traffic through or near the construction zone.

The anticipated construction staging areas available include areas within the existing roadway ROW construction limits. An additional staging area may be required west of the project on Gilman Street in one or two parking lots owned by EBRPD. Staging areas are shown on Figure 3.

The following equipment is anticipated to be used during construction: auger drill rig, backhoe, compactor, concrete pump, crane, dozer, excavator, front end loader, grader, heavy duty dump trucks, jackhammer, vibratory roller, and pavement breaker.

#### 2.1.2 No Build Alternative

Under the No Build Alternative, none of the project elements would be constructed. However, other projects within the area, such as those identified under Section 10: Cumulative Visual Impacts, could be expected to continue forward. The No Build Alternative provides a basis for comparing the build alternatives. Under NEPA, the No Build Alternative can be used as the baseline for comparing environmental impacts; under CEQA, the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began.

# 2.2 Purpose and Need for the Project

The purpose of the project is to simplify and improve navigation, mobility and traffic operations, reduce congestion, vehicle queues and conflicts, improve local and regional bicycle connections and pedestrian facilities, and improve safety at the I-80/Gilman Street interchange. Current conditions, along with an overall increase in vehicle traffic, have created poor, confusing, and unsafe operations in the interchange area for vehicles, pedestrians, and bicyclists.

### 3. PROJECT LOCATION AND SETTING

The project location and setting provide 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 and are used to further describe the visual environment. The project setting is also referred to as the corridor or project corridor which is defined as the area of land that is visible from, adjacent to, and outside the highway ROW, and is determined by topography, vegetation, and viewing distance.

### 3.1 Project Location

The project is located in Alameda County at the I-80/Gilman Street interchange in the cities of Berkeley and Albany (Post Miles [PM] 6.38 to 6.95) (Figures 1 and 2). Within the limits of the proposed project, I-80 is a conventional 10-lane freeway with 12-foot-wide lanes and 11-foot-wide shoulders. Gilman Street is a 4-lane major arterial with 11-foot-wide lanes and 6-foot-wide shoulders that passes underneath I-80. The I-80/Gilman Street interchange is a four-lane arterial roadway (Gilman Street), with two lanes in the east/west direction that are intersected with four I-80 on- and off-ramps, West Frontage Road, and Eastshore Highway. The purpose of the project is to simplify and improve navigation, mobility, and traffic operations; reduce congestion, vehicle queues, and conflicts; improve local and regional bicycle connections and pedestrian facilities; and improve safety at the I 80/Gilman Street interchange. Current conditions, along with an overall increase in vehicle traffic, have created poor, confusing, and unsafe operations in the interchange area for vehicles, pedestrians, and bicyclists.

From a visual standpoint, the proposed project area is in an older, industrialized area characterized by a number of small industrial buildings/uses. I-80 splits the area east/west with the east side of the freeway being primarily the industrial land uses. Further to the east and south (and outside of the project area), the land use turns more residential in character. The western half of the project area is dominated by the Tom Bates Regional Sports Complex in the southwest quadrant of the interchange area and Golden Gate Fields covering the northwest quadrant of the interchange. Adjacent to both of these western uses is located San Francisco Bay; so, there are established views from I-80 to the west.

## 3.2 Regional Setting

Regionally, the visual character of the corridor is dominated by the presence of San Francisco Bay. Views to the bay through this stretch of I-80 are affected by the development patterns established long ago that perpetuate to this day. So, in some location the views are open to the bay, while in other development, either from adjacent land uses or from infrastructure development on the freeway, block views.

## 3.3 Regulatory Setting

#### 3.3.1 Caltrans

**Context Sensitive Solutions:** Context Sensitive Solutions (CSS) is a policy established by Caltrans as an "approach to plan, design, construct, maintain, and operate its transportation system" so that it places

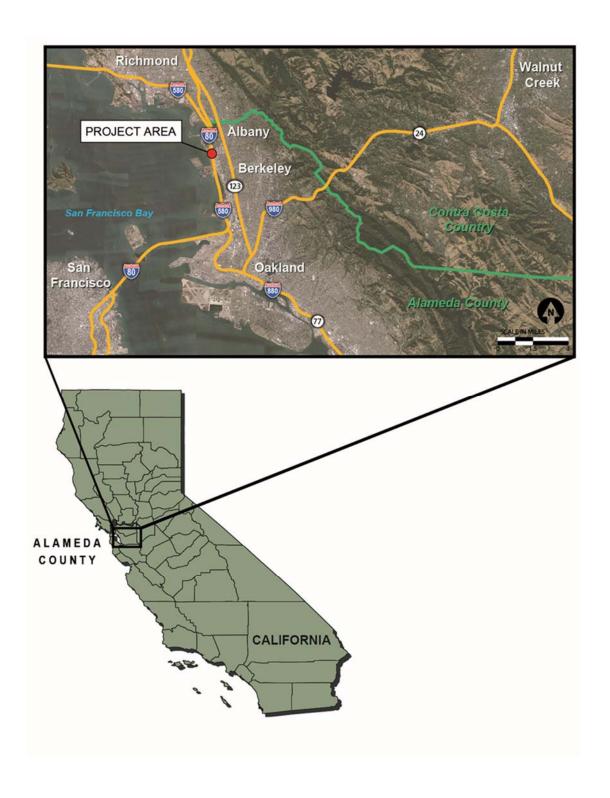


Figure 1: Project Location

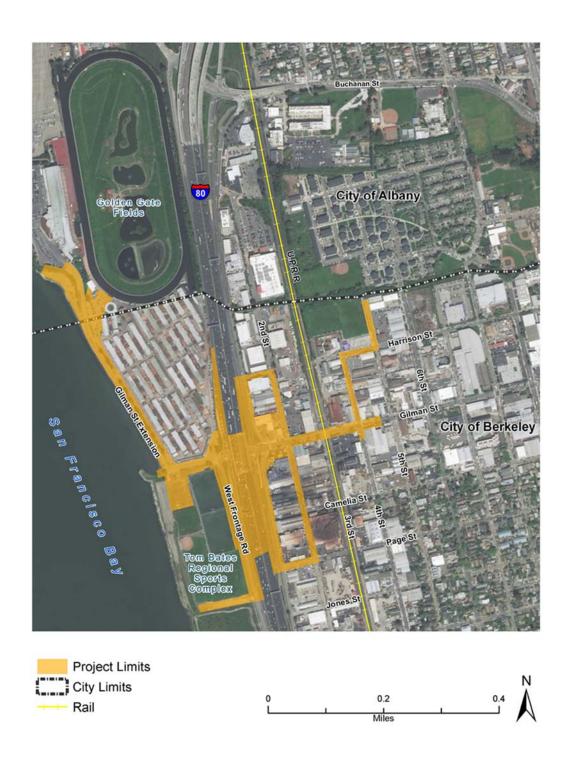


Figure 2: Project Location

preservation of historic, aesthetic, scenic, natural environment, and other community values on an equal basis with transportation safety, mobility, economics, and maintenance. The intended result of employing CSS design on projects is to create transportation projects that are in harmony with a community's values and objectives by allowing community input into the design process.

**Scenic Routes**: There are no Caltrans designated scenic routes, either designated or eligible, within the project area, including both I-80 and Gilman Street.

Caltrans Landscape Regulations: Caltrans has established a plant selection and set-back guide for all new landscape plantings within Caltrans' ROW. In most instances, these guidelines are more limiting than previous requirements. The primary concern of the requirements is the safety of maintenance workers and travelers on the roadway. Under the revised guidelines, new plantings may be restricted in their locations, and it cannot be assumed that new plantings would be in-kind and in-place of the existing plantings, depending on the availability of open areas that meet the current requirements for setbacks and maintenance access. In addition, an increase in disease and insect vectors has limited the species that can be replanted.

Landscape Freeway Classification: The I-80 portion of project area from PM 6.53 to PM 8.04 is a Classified Landscaped Freeway. A freeway can be classified as a Landscaped Freeway if the section of freeway has been planted with ornamental landscape plantings (as opposed functional plantings), with continuous plantings for at least 1,000 feet (with no gaps greater than 200 feet) on at least one side of the freeway and requiring reasonable maintenance. It must also meet the criteria of the State Outdoor Advertising Regulations, Sections 2500-2513. The effect of this classification controls the encroachment of outdoor advertising displays.

### 3.3.2 San Francisco Bay Conservation & Development Commission (BCDC)

The San Francisco Bay Conservation and Development Commission, referred to as the BCDC, is a state planning and regulatory agency with regional authority over the San Francisco Bay, its shoreline band, and the Suisun Marsh. BCDC was created in 1965 and is the nation's oldest coastal zone agency. Its mission is to protect and enhance the San Francisco Bay and to encourage the Bay's responsible and productive use for this and future generations. As part of its work, the BCDC developed a Report on the Bay and a supporting Bay Plan. These documents provide findings and policies for the Bay as a resource as well as for development of the Bay and its shoreline.

These findings and policies include the categories of Appearance, Design and Scenic Views, Public Access, Transportation, and Recreation. In addition to the Plan, the BCDC has produced other reports that might influence the Gilman Street Project, including a Landscape Guide of Shoreline Plantings for the San Francisco Bay. Within the project area, the BCDC's jurisdiction extends 100 feet from the shoreline of the Bay covering the area of proposed work associated with the Bay Trail, Golden Gate Fields parking, and portions of the proposed ramp structure on the west side of I-80.

The report presents findings and policies that are driving factors in the preservation and enhancement of the Bay as a resource for all residents and visitors. As part of both the Appearance, Design and Scenic Views Findings, the report identifies that views of the Bay are one of its most highly valued aspects (Scenic View Findings 'c' and 'd'). The report notes that a Bay view can substantially increase the value of a home or office building. To this end, the BCDC has designated I-80 through the project area as a Scenic Drive, making the maintenance of the views from I-80 an important consideration. Policies that support the

Findings in this section include orienting viewers toward the Bay (Policy 7) and providing structures that create views of the Bay and are designed as landmarks (Policies 7 and 10).

Covered under the topics of Public Access, Transportation, and Recreation, is providing increased access to the Bay, providing views from transportation networks (roads and transit), and creating a continuous network of trails and paths along (as well as to and from) the Bay. Findings and policies that support these goals include Transportation Finding 'I' and Policy 4, which seeks to strengthen pedestrian and bicycle access through trails, Recreation Finding 'I' and Policy 4, and Public Access Finding 'e' and Policy 9.

These findings and policies provide direction for the development and improvement of areas adjacent to the Bay within the BCDC jurisdiction as well as guidelines for areas outside of the immediate jurisdiction, such as the nearby hills with views of the bay with the ultimate goal of utilizing and improving the San Francisco Bay as a critical asset for all.

#### 3.3.3 City of Berkeley

West Berkeley Park Plan: The City of Berkeley has an established Plan for the West Berkeley neighborhood, which includes all of the project area. This Plan was developed as a long-range plan for the area in 1993, with the intent that it would serve as a guide to the development of West Berkeley through "at least" 2005. It has been formally incorporated into the City's General Plan.

There are a number of specific policies and goals established as part of the plan to provide and describe an urban design vision for the neighborhood. The overarching goals in the plan are:

- Enhancement of commercial nodes and corridors: The commercial nodes and corridors are the
  places in West Berkeley used by the most people. It is important to improve the visual character
  and physical layout of key commercial corridors and encourage nodal development along these
  corridors.
- Entry Corridors: The entry corridors are important in setting the tone for West Berkeley. Defining the image and character for the city's major gateway University Ave. and for the other entry corridors which lead into West Berkeley Ashby Ave., and Gilman St., and the northern and southern ends of San Pablo Avenue is a major urban design task.
- Green of the Streets: Trees provide green relief amidst the concrete and asphalt of West Berkeley.
   Expanding street tree planting to additional streets in West Berkeley will further this task. Street tree planting can be designed to address specific needs or conditions, such as enhancing residential areas, visually connecting residential and commercial areas, framing views, or improving the visual appearance of commercial streets and major roadways.
- Connections to existing public parks: West Berkeley's open spaces resources are not used to their fullest extent. Improving the pedestrian, bicycle and vehicular access to existing public parks, especially to the marina area and Aquatic Park, will help West Berkeleyans (and Berkeley residents generally) enjoy their parks and will also help link the area together."

Among the recommended urban design activities in the plan is a proposed I-80 Corridor Visual Improvement Study that would develop a plan to improve the appearance of the freeway both from the standpoint of West Berkeleyans' views into the corridor and views out from the freeway corridor into the community.

#### 4. ASSESSMENT METHOD

This visual assessment was prepared consistent with the methodologies established by the FHWA Visual Impact Assessment for Highway Projects (1981). This methodology divides the views into landscape or character units that have distinct, but not necessarily homogenous, visual character. The view of the motorist is also considered as a separate character unit. Typical views are selected for each unit to represent the views to/from the project. Key Viewpoints are usually selected to represent the typical views within the landscape units or project area for a more in-depth study that can include sketches or simulations to depict changes to the visual environment.

To address the requirements identified in the FHWA methodology, the following seven steps were performed to assess the visual impacts of the proposed project:

- Define the project setting and viewshed;
- Identify the regulatory setting of the project area;
- Identify key views for visual assessment;
- Analyze existing visual resources and viewer response;
- Depict the visual appearance of project alternatives;
- Assess the visual impacts of the project alternatives;
- Propose methods to mitigate adverse visual impacts.

Existing photographs by team members were taken on May 18 and June 8, 2016. Aerial photography provided base information for the existing roadways. In addition, research on the regulatory setting was conducted via online searches of the City of Berkeley, Alameda County, and Caltrans web sites.

#### 5. VISUAL ASSESSMENT UNITS AND KEY VIEWS

The project corridor was divided into a series of "outdoor rooms" or visual assessment units. Each visual assessment unit has its own visual character and visual quality. It is typically defined by the limits of a particular viewshed or by an area of similar visual character and/or land uses. In the case of the I-80 Gilman Street Interchange Improvement Project, four visual assessment units were identified by their distinctive land uses. The Units, and the associated locations for each key viewpoint can be seen in Figure 3 and are described more in detail below. The photos for these key viewpoints can be seen in Section 8 of this report.

## 5.1 Visual Assessment Unit 1 – I-80 Freeway

This first unit covers both east- and westbound I-80 and the views from this roadway for EB and WB travelers. Views from this unit are mostly in the direction of travel and to the outside of the freeway into the other units.

#### 5.2 Visual Assessment Unit 2 - Gilman Street

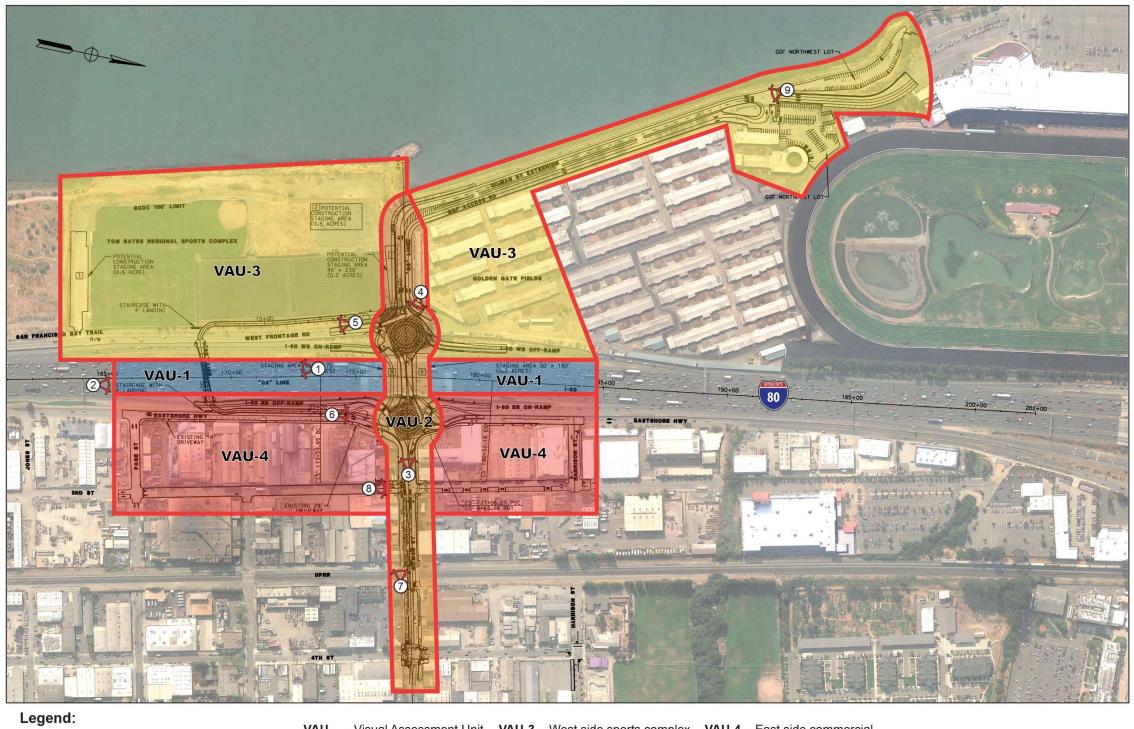
Gilman Street, including the portions under the I-80 undercrossing, makes up the second unit. This unit area also includes the 2 proposed roundabout locations. It was selected to address views along the street, which is an important entrance into the City.

# 5.3 Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, WB On and Off-Ramps, and San Francisco Bay Trail

Unit #3 covers the west side of the interchange area. It includes the sports fields associated with the Tom Bates Regional Sports Complex, portions of Golden Gate Fields Horse Race Track, the WB on-ramp to I-80, and portions of both the West Frontage Road and the San Francisco Bay Trail. Golden Gate Fields is a horse racetrack situated between I-80 and San Francisco Bay and is in the northwest quadrant of the interchange. The portion of the racetrack that abuts the project area is composed primarily of parking areas for workers, stables, barns and other outbuildings while the racetrack itself sits farther to the north. The unit was selected due to its cohesive character as open space/recreation facilities.

# 5.4 Visual Assessment Unit 4 – Eastside Commercial/Industrial, EB On- and Off-Ramps, and Eastshore Highway

This unit comprises the eastern portions of the project area, from approximately Page Street on the south to Harrison Street on the north. The existing Union Pacific Railroad tracks form the eastern boundary and the EB on and off ramps from the western edge. The unit includes portions of the Eastshore Highway and the EB off-ramp from I-80 to Gilman Street. This unit was selected due to its similar development character and land use – commercial and light industrial.



Key View Point (see Section 8 for more information)

VAU - Visual Assessment Unit VAU-3 - West side sports complex VAU-4 - East side commercial, **VAU-1** - I-80

VAU-2 - Gilman Street

West Frontage Road, and San Francisco Bay Trail

EB On & Off Ramps, and Eastshore Hwy

Figure 3: VISUAL ASSESSMENT UNITS —the four visual assessment unit is differentiated from other units both by its dimensions and its visual resources.

This sheet intentionally left blank.

#### 6. VISUAL RESOURCES AND RESOURCE CHANGE

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts (the other is viewer response, discussed below in Section 7: Viewers and Viewer Response). It is important to note that visual character terms are descriptive and non-evaluative, meaning that they are based on defined attributes that are neither good nor bad in themselves. Changes in visual character cannot be described as having good or bad attributes until compared with viewer responses to the change.

#### 6.1 Visual Resources

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor.

#### 6.1.1 Visual Character

Visual character includes attributes such as form, line, color, texture, and is used to describe, not evaluate; that is these 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 identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. For this project the following attributes were considered:

- Form: the visual mass or shape of the project or element
- **Dominance:** the presence of an element as measured between large to small;
- **Line:** edges or linear definition, measured between strong and clear lines to fuzzy or indistinct edges;
- **Color:** reflective brightness, measured between light and bright to dark and receding. Also, descriptive use of color from bold to receding;
- **Texture:** visual appearance of surface texture, from smooth to coarse;
- **Scale:** The proportion or size of an element of elements within a particular view as measured between small to monumental;
- **Continuity:** This term describes how one image flows into the next to create a continuous set of views as a viewer travels along a pathway. Continuity is measured on a scale between harmonious to dissonant;



Figure 4: Typical view of existing University Avenue Pedestrian Crossing from EB I-80, looking north

The existing corridors under consideration have two distinct personalities. The first is I-80, which is a heavily trafficked freeway. The second is Gilman Street, which is a busy local arterial passing through an industrial area which leads to a more residential area several miles to the east. I-80 currently has several overhead structures (both pedestrian and sign) within the immediate area, with the closest POC located at University Avenue, approximately a mile to the south. The presence of these elements establishes similar lines and forms to the new POC, proposed as part of the build alternative. See Figure 4 for a picture of the existing University Avenue crossing.

For Gilman Street, as well as the Eastshore Highway, West Frontage Road and the on/off-ramps associated with the interchange, the character is slightly different than that of I-80. The existing I-80 undercrossing is the most dominant element in the area. The existing interchange area appears quite chaotic to drivers given the number of ramps and roads that enter into the intersection without the presence of traffic lights or other means of traffic control. In addition to the vehicle traffic, bicycles and pedestrians must also traverse the intersection with great caution.

The visual character of the proposed project is anticipated be compatible with the existing character of the project area. The proposed roundabout project proposes elements that are designed to appear similar to existing elements in this portion of I-80 so a repetition of existing form, scale, and ultimately continuity is provided. On Gilman Street, the addition of the roundabouts and other associated islands, while adding new lines and edges not currently present, provides a degree of clarity and order to a currently chaotic intersection. Additionally, the inclusion of street tree replacement plantings and the possible addition of plantings within the roundabout, add an overlay of new enhancing elements to the existing character.

#### 6.1.2 Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined below:

• **Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.

- **Intactness** is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- **Unity** is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

The visual quality of the project area is not anticipated to substantially change with the Roundabout Alternative. For more information on the anticipated effects of the project on the visual quality see Section 6.2 which discusses the visual character and quality for each individual visual assessment unit while Section 6.3 discusses anticipated changes to the visual resources of the project area by visual assessment unit.

## 6.2 Visual Character and Quality by Visual Assessment Units

Visual Assessment Unit 1 - I-80 Freeway: The I-80 Corridor is an older freeway corridor, traveling east-west, within the project area. Figure 5 shows the typical EB traffic near the Gilman Street exit. The adjacent development is primarily older industrial in character and appearance. Traffic is heavy and is often very slow moving, particularly at rush hours, but also to some extent in non-rush hour times. Concrete barriers along portions of the outside edge of the freeway, including on the Gilman undercrossing, as well as the concrete median barrier throughout the project area, restrict outward views for freeway travelers, see Figure 6. These aspects of the corridor tend to reduce the vividness of the corridor. Elements that enhance the vividness are primarily on the west side of the freeway and are associated with the sports fields at the Tom Bates Regional Sports Complex and brief distant views to the fore bay created between the open bay and the Berkeley Marina's manmade island, which occur briefly to WB traffic as the driver descends from the Gilman undercrossing, once past the concrete barriers.



Figure 5: Typical view of existing streetscape along EB I-80, near Gilman Street exit, looking to the north



Figure 6: View from WB lanes towards Tom Bates Sports Complex, looking to southwest

Given the older industrial development of the east side of the freeway, the general intactness of these views is consistently one associated with this land use. There is very little in the way of landscape plantings or other elements which might soften the views, particularly for EB travelers on I-80. Traffic headed WB has less development to contend with – with the open areas associated with Golden Gate Fields (including parking lots and low height horse stalls and other out buildings – which are north of Gilman Street) and the sports fields/undeveloped areas to the south. The intactness for these travelers is more cohesive than for EB travelers. Similar to the description of intactness, the unity of the views from I-80 are associated with the adjacent development and land uses. In general, the unity of the corridor is somewhat low given the dichotomy of views from industrial to open fields.

Visual Assessment Unit 2 -Gilman Street: Similar to what has been described for the I-80 Freeway corridor views, there is a similar dichotomy found in the views along Gilman Street. Areas east of the I-80 Freeway cross through the existing older industrial area. Many of the buildings are set immediately behind the sidewalk or there is a fence which limits the views along the street to that of the streetscape. However, there are also several buildings have parking immediately behind



Figure 7: Typical view of existing streetscape along Gilman Street, east of UPRR Crossing, looking to the west

the sidewalk. One other potentially detracting element is a large, sporadically occupied homeless encampment under the existing Gilman Street overcrossing that is along the sidewalk on both sides of the street. Elements that add to the overall vividness of the street are associated with the streetscape plantings, see Figure 7. These consist of a row of trees (primarily sycamore) in open tree wells along the back of the curb.

One additional element that is visually present and reduces the vividness of the area is the presence of numerous powerlines that both crisscross and parallel Gilman Street.

Gilman Street west of the undercrossing has views to the sports fields at the Tom Bates Center as well as views out to the bay. On the north side of the roadway, views are limited by the existing tall fence/screen associated with the Golden Gate Fields service ar-



Figure 8: Typical view of existing streetscape along Gilman Street, west of the I-80 Crossing, looking to the east

eas; see Figure 8 for an image of the area. On this side of the interchange a formal street-scape of street

trees is not present, and sidewalks are asphalt with chained bollards along the north side of the street and either non-existent or associated with the parking lot for the sports complex on the south. Within the sports complex, there are several fenced fields that have artificial turf. The fields farther to the south of Gilman Street have live grass fields. The presence of utilities and power lines is greatly reduced on this side of the freeway. In general, given the presence of the bay, sports fields, and Golden Gate Fields, and a reduction of detracting elements, the west side of the interchange has a better vividness than the east side.

Both the intactness and unity of Gilman Street is a function of the surrounding development; thus, the west side tends to be higher than the east. The older industrial development and utilities that are so visually present on the eastside tend to reduce the overall intactness and unity of the views. While on the westside, the lack of these same elements tends to increase the overall intactness and unity of the views.

Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, and San Francisco Bay Trail: Both the West Frontage Road and the San Francisco Bay Trail parallel the west side of I-80. The roadway is immediately adjacent to the WB on-ramp and is separated from the ramp by a concrete barrier. The trail is located between the frontage road and the Tom Bates Sports Complex. Currently within the project area, the trail is only partially completed and extends to the south from Gilman Street. Future projects (including a portion proposed as part of this project) would extend the trail around the



Figure 9: Typical view along the San Francisco Bay Trail, south of Gilman Street, looking south

sports complex to the bay and along the bay, to the north, past Golden Gate Fields. The existing built portions of the trail consist of a 10-foot wide asphalt trail with a center yellow strip, as can be seen in Figure 9.

On the east side of the trail there is an approximately 10 foot landscaped area between the trail and the adjacent frontage road, with some shrub plantings in this zone, particularly the closer the viewer is to Gilman Street. On the south side there is a larger planting strip and tall chainlink fence which surrounds the artificial turf fields in the sports complex. Within the planting area between the fence and the trail are located shrubs which help to partially screen the fence. Farther south of the sports complex, the trail is adjacent to an open field with views out to the bay. The vividness of the trail is moderately high, given the planting buffers between distracting elements. In addition the sports fileds and adjacent open fields compliment the trail and add to its intactness and unity.

Visual Assessment Unit 4 – Eastside Commercial, EB off-Ramp, and Eastshore Highway: The Eastshore Highway is located parallel to I-80 and adjacent to the EB off-ramp. The two roadways are separated by either sidewalk paving which is associated with a bus stop near Gilman Street, or a weedy strip and four-foot fence. Within the project area, older industrial type development can be found along the east side of the Eastshore Highway and a retaining wall with a weedy landscape area in front of it along the ramp,

between it and the I-80 mainline; see Figure 10. In general, the vividness, intactness and unity associated with the visual quality of these roadways parallel that of the adjacent I-80 Freeway.

### 6.3 Resource Change

The roundabout alternative for the project can be expected to alter the existing views to some extent, depending on the location of the viewer, but in general the anticipated changes to the existing resources are not anticipated to be extensive, but reflect a further urbanization/buildup of the area. Most of the compo-



Figure 10: Typical view along Eastshore Highway, south of Gilman Street, looking north

nent of the existing I-80 will remain as is, but with the additional overlay of the new POC over the freeway. The existing character of both roads should remain essentially the same -- a heavily trafficked urban freeway and a heavily trafficked urban arterial. However, specific aspects of these roads would be visually different with the addition of the POC over I-80 and the addition of the roundabouts within the interchange with Gilman Street.

In addition, new views would open up for other users, particularly for pedestrians and bicyclists using the new overcrossing.

#### 6.3.1 Visual Assessment Unit 1 - I-80

For travelers on both EB and WB I-80, the most notable changes to the existing visual resources would be the addition of the new POC and its associated ramps. The proposed design of the overcrossing would be similar to that of the existing University Avenue POC, so the two structures, seen in quick succession, would be similar in character, line, color, and scale, thus providing continuity within the I-80 corridor.

The two accesses associated with the POC's ramps touchdown on the south side of Gilman Street and cover a length of approximately 600 feet along I-80. A plan view of the proposed project can be seen in Appendix 'A'. Because the ramps parallel close to the edge of I-80, both the vertical elements of the ramps, created by the supporting columns, and the horizontal elements, created by the supporting beams (girders) and the edge of the deck, would become visual elements to the corridor. While this does not represent any new elements within freeway corridor, this is a new location and these elements would at least partially block some existing views outward from the freeway. In addition to the support structures of the ramp, a see-through chain link fence required for safety would add a detracting element to the new structure.

Viewers on the new structure, as well as on the approach ramps, would have new viewing opportunities that are currently not available. Views out to the bay would expand for these viewers. The design of the POC is such that its layout is directly in line visually with the distant Golden Gate Bridge, which would be visible to westbound users on a clear day.

The overall visual quality along I-80, already moderately low, should slightly decrease, but not to the low category, with vividness, intactness and unity all remaining moderately low.

#### 6.3.2 Visual Assessment Unit 2 - Gilman Street

For viewers traveling on Gilman Street, the proposed roundabouts on either side of the undercrossing would be the most notable addition to the existing views. Other elements of the proposed project that would be visible to these viewers are the addition of a portion of the Bay Trail along Gilman Street, west of the freeway crossing and the extension of bike lanes along Gilman Street east of the freeway crossing. The touchdown points for the 2 access ramps associated with the new structure would be less visible to through travelers along Gilman Street, but would be very noticeable to those turning onto the WB onramp since the structure parallels this closely.

Visual elements found within the new roundabouts include raised directional islands at the approach to the roundabout to direct traffic into the facility and a large center island. Given the tight configuration of Gilman Street, the directional islands would likely be narrow and therefore would not have plantings. The large center island of the roundabouts would include aesthetic treatments of hardscape (decorative paving, rock cobble, etc.) and/or possibly planting (dependent on safety and setback requirements). The final treatment will be developed during the design phase of the project. The design of the center island is usually such that it at least partially blocks views across the roundabout by grading the center to a height of three to four feet. Viewers on Gilman Street could be expected to see all of these elements as they approach the intersections from either the west or east.

In addition to the roundabout islands, a new dedicated bike lane is proposed along the south side of Gilman Street. The bike lane would be striped in the pavement; no vertical elements are proposed. The tangle of existing powerlines over and along the street would potentially be placed underground as part of this project, increasing the visual quality of the views with their absence.

Where Gilman Street crosses under I-80, the existing bridge has five open bays as shown in Figure 11. One potential future design element is that some of these open bays may be closed off by fence or wall. If a wall is selected, the amount of light and visibility through the structure would be limited. Currently the bays that do not include roadways or sidewalks are fenced off.



Figure 11: Schematic of existing I-80 bridge over Gilman Street

The overall visual quality along Gilman Street is currently moderately low. This is due in large part to the visual presence of the older, worn industrial buildings and the presence of so many powerlines along and over the roadway. With the addition of the roundabout, new curb and other project elements, plus the potential undergrounding of the powerlines, the overall visual quality would be expected to increase to a higher degree of moderately low to perhaps moderate, particularly if landscaping and other softening elements can be incorporated into the design.

# 6.3.3 Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, WB on-and off ramps, and San Francisco Bay Trail

Views from Golden Gate Fields to the project area are obscured by a tall fence/screen around the facility. The exception to this is a service entrance located on the northwestern corner of the roundabout. So, to

those going into or out of the facility, which for this access point consist of trainers and vendors but not the general public, the roundabout would be very prominent addition to the existing streetscape.

Viewers in the Sports Complex and along both the West Frontage Road and the Bay Trail would have clear views to the POC and its associated access ramps. These views would be similar to those described for Visual Assessment Unit 1 – comprising ramp elements, base retaining wall from touchdown to 6-foot high, columns, girders, deck, and fencing. From the Sports Complex, the existing views to the freeway would be at least partially blocked by the new access ramp structure. The POC over I-80 would also be highly visible from the fields.

Because the West Frontage Road, WB on-ramp and the Bay Trail all fall between the new access ramp and the Sports Complex, the ramp would partially block views into the fields and the distant bay. These views, to some extent, are already blocked by shrubs planted between the fields and the Bay Trail, but some of this vegetation would be removed by the construction of the ramp. The new ramp elements would be visible without these softening elements. Travelers along these routes would have their views blocked to the west until the ramp reaches a height of approximately 10 feet (for a typical passenger vehicle) when the views to the west would once again begin to open up. This point would occur approximately 120 feet from the touchdown point<sup>1</sup>.

The parking areas associated with Golden Gate Fields parallel the edge of San Francisco Bay. An extension of the Bay Trail is proposed adjacent to the parking access road, and a portion of this would be constructed with this project. The area is currently paved to the edge of the boulders/breakwater that forms the edge of the bay. Views from road are primarily out to the bay and can provide, on clear days, views across the bay.

The overall visual quality for these Westside areas is moderately high, based on the contributing factors associated with the sports fields, trail, and distant views to the bay. Because the new structure falls between these visual resources and the viewers, it is anticipated that the overall visual quality of the unit would drop to moderate, at least through the area between the access ramp touchdown and the POC

# 6.3.4 Visual Assessment Unit 4 – Eastside Commercial, EB On- and Off-Ramp, and Eastshore Highway

The eastern ramp for the new structure would be very prominent to viewers along both the EB off-ramp and the Eastshore Highway, since this ramp falls between these two roadways. Beginning at the point where the EB off-ramp crosses under the new POC, a series of columns at a spacing of 100-foot on-center and supporting a 4-foot thick structure (girder) would parallel the off-ramp, as well as the adjacent Eastshore Highway. Along the lower portion of the pedestrian access ramp, from touchdown to approximately 6 feet in height, the ramp would be supported by a retaining wall on both sides of the ramp. This configuration, while minimizing the portion of the views that are blocked by the ramp, still would block views, both for viewers along the off-ramp and Eastshore Highway and from the businesses along the east side of Eastshore. However, it must also be noted that many of these businesses do not have many windows that front Eastshore Highway. For travelers along both the EB on-and off-ramps, an additional retaining wall, approximately 4-feet in height, maximum, would be located adjacent to these ramps in front

<sup>&</sup>lt;sup>1</sup> Calculated based on a slope of 1-foot rise in 12 feet (typical for ADA access) minus 4-foot depth for the girder, leaving 6 foot of viewing space under the ramp.

of the existing retaining wall associated with I-80. There would still be a landscape area between these two walls in both locations. The walls are approximately 100-feet in length.

In addition to the elements of the ramp that would be visible, the roundabout at the intersection at the base of the ramp would also be visible. The elements of the roundabout would be similar in appearance and function to that described with the Gilman Street views.

The overall visual quality of the off-ramp and Eastshore Highway areas are low, with low vividness, intactness and unity. There are a number of detracting elements, including the older buildings in various states of use or disrepair, the weedy landscape areas associated with the freeway retaining wall and between the off-ramp and Eastshore Highway. The addition of the new pedestrian approach ramp would block some existing views in the area, particularly at the ramp touchdown. However, the addition of the structure would unlikely affect the existing visual quality, either positively or negatively.

#### 7. 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 the proposed 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 would be caused by the construction and operation of the proposed project. The other variable is the change to visual resources discussed earlier in Section 6: Visual Resources and Resource Change.

## 7.1 Types of Viewers

There are two major types of viewer groups for transportation projects: neighbors and transportation 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 which help to predict their responses to visual changes.

### 7.1.1 NEIGHBORS (Views to the Project)

Neighbors are people who have views to the project. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate neighbors or viewer groups with distinct reasons for being in the corridor, and therefore having distinct responses to changes in visual resources. For this project the following neighbors were considered:

- Viewers associated with the businesses east of the project
- Viewers Associated with the Sports Complex
- Viewers Associated with Golden Gate Fields

#### 7.1.2 TRANSPORTATION USERS (Views *from* the Project)

Transportation users are people who have views *from* the project, in this case from either the local roadways or I-80, or from the project itself. They can be subdivided into different viewer groups in two different ways—by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like *bicycling tourists*, for example. For this project the following highway users were considered:

- Viewers traveling along I-80
- Viewers traveling along Gilman Street
- Viewers traveling along Eastshore Highway and the EB off-ramp
- Viewers traveling along the West Frontage Road, WB on-ramp, and the San Francisco Bay Trail
- Pedestrians/Bicyclists using the new overcrossing

### 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 as previously mentioned, viewer exposure and viewer sensitivity.

#### 7.2.1 VIEWER EXPOSURE

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 would have a response to a visual change.

Viewers traveling along I-80: For travelers on the interstate, views to the project elements would be of two types views straight ahead to the proposed overcrossing and to the side to the access ramps. EB travelers would see the proposed POC soon after crossing under the existing University Avenue Overcrossing. An existing sign structure near the EB off-ramp to Gilman Street would partially obscure the views to the proposed POC but not block it out. Travel time between the University Avenue Overcrossing and the proposed POC structure at freeway speed is approximately 1 minute, meaning that the views to the new POC are consistent but short. As the EB traveler crosses under the proposed POC, the ramps would come into view paralleling the freeway. These would run for approximately 600 feet and would start out at the height of the overcrossing and descend to meet grade. At freeway speed (assumed at 65 mph), it would take approximately 6 seconds to traverse the length of the ramp<sup>2</sup>. At the slower speeds associated with heavy traffic, it would take 40 seconds to traverse the same 600-foot distance at 10 miles per hour (mph). In either case, the travel time is anticipated to be short to moderately short in duration, depending on the speed of travel.

For WB travelers, the overcrossing approaches (ramps) would be noticeable and would partially block views out from the freeway to the side, particularly once the WB traveler is past the existing concrete barrier on the Gilman undercrossing. Views to the distant bay would be partially blocked by these ramp elements. The proposed POC itself would also be visually prominent to the WB travelers. As these travelers cross under the proposed POC, the existing University Avenue Overcrossing, with the University Avenue POC behind it, would come into view. The Gilman Street undercrossing forms a high point in the freeway, and while the concrete barriers along the side and in the median may partially block views out to the side, forward views of the proposed POC would be open and unimpeded. As with the EB travelers, it would take WB travelers approximately 6 seconds at freeway speeds to traverse the ramp and POC area and up to 40 seconds for slower travel (assumed at 10 mph), meaning views to the structure would be of short to moderately short duration, depending on travel times.

In summary, for travelers on I-80:

- Location: views to project elements would be prominent (high) to travelers along I-80
- Duration: Views would be of moderately short (moderately low) duration
- Quantity: the number of viewers would be very high, given the large traffic volumes of I-80

**Viewers traveling along Gilman Street**: The primary project elements that would be most noticeable to travelers on Gilman Street (including automobile traffic, pedestrians and bicyclists) would be the proposed roundabouts in the intersection of the on and off-ramps. The POC and ramp elements begin

<sup>&</sup>lt;sup>2</sup> Calculations of distance and time at miles per hour are based on information provided at the following website: <a href="http://www.unitsconversion.com.ar/speedunitsconversion/mileperhour-footpersecond.htm">http://www.unitsconversion.com.ar/speedunitsconversion/mileperhour-footpersecond.htm</a> Figures shown in this report are rounded for the sake of simplicity.

south of Gilman Street, and at the point of intersection with the street, are at an equal elevation to the roadway and off to one side. While the ramps would be noticeable to both EB and WB travelers, they would be off to one side and not directly in view as they travel along the street. But as they swing around the roundabout, these elements would come quickly into and out of view. The roundabouts, and their associated islands, would be a longer duration view as they traveled along Gilman Street.

In addition to the roundabouts, the new two-way cycle track along the south side of Gilman Street (east of the existing undercrossing), and the reconfiguration of the associated parking, would be noticeably different in configuration from the existing layout. Because of their location along the existing curbline, the existing street trees along the north side of Gilman Street would be removed and replaced as part of the project. West of the existing undercrossing, the proposed extension of the San Francisco Bay Trail across the front of the sports complex would also be noticeable to travelers on the street.

In summary, for travelers on Gilman Street:

- Location: views to project elements would be prominent (high) to EB and WB travelers
- Duration: Views would be of moderately short (moderately low) duration
- Quantity: the number of viewers would be moderately high, given the traffic volumes on Gilman Street

Viewers traveling along Eastshore Highway and the EB On and Off-ramp: Viewers traveling along the Eastshore Highway and EB off-ramp would have very clear views to the project elements along the length of their travel through the project area. These elements, due to their height and location along these two roadways would dominate the views. Assuming a speed of 25 miles per hour, it would take approximately 30 seconds to traverse the 1,000-foot length of the project elements along Eastshore Highway (from approximately the Page Street intersection to Gilman Street). However, the POC would be noticeable from much father to the south as the travelers approached the project area.

In addition to the elements of the POC and its associated access ramp, travelers along Eastshore Highway and the EB off-ramp would also have views into the roundabout as the travelers approached the new intersection with Gilman Street. In these views, the roundabout would become more prominent the closer the traveler came to the intersection.

In summary, for travelers on the Eastshore Highway and the EB on- and off-ramps

- Location: views to project elements would be prominent (high) to these travelers
- Duration: Views would be of moderately short (moderately low) duration
- Quantity: the number of viewers would be moderate (on the ramps) to moderately-low (on Eastshore Highway), given the lower traffic volumes

Viewers traveling along the West Frontage Road, WB On-ramp, and the San Francisco Bay Trail: Exposure to the project elements for travelers along the west side is similar to that described for the viewers along Eastshore Highway, and the EB off-ramps. The proposed overcrossing approach is along the west side of the Bay Trail, which is itself west of the West Frontage Road and WB on-ramp. Because of the height and location of the access ramp elements, they would dominate the views to the west and along the roadway/trails, in a similar fashion to that described for the eastside areas. Because of the slower speed expected for trail users, it would take approximately 45 seconds to traverse the distance between Gilman Street to the south side of the proposed POC (assuming a travel rate of 10 miles per hour; most bike trails are often signed at 15 mph maximum).

In summary, for travelers on the West Frontage Road, WB on-ramp, and the Bay Trail:

- Location: views to project elements would be prominent (high) to these travelers
- Duration: Views would be of moderately short (moderately low) duration for roadway travelers and moderate for trail users
- Quantity: the number of viewers would be moderate (on the ramp) to low (on the Bay Trail), given the lower traffic volumes

Pedestrians/Bicyclists Using the New POC: While bike and pedestrian traffic currently exists in the area, this viewer group would expand to cover those using the new facilities. The current bike trail travels along Gilman Street under the I-80. This new group would use both the access ramps and POC. For these viewers, there would be new views that open up to the bay for WB travelers. The height of the POC and open land to the west would provide views out across the Berkeley Marina Island and to the bay proper. In addition, the overcrossing is sighted such that the views along the structure align the viewer to the distant Golden Gate Bridge. For EB viewers, the views would be out to the adjacent industrial area, with distant views possible to the Berkeley hills depending on location and intervening tree cover. Assuming a rate of travel of 10 mph, it would take a viewer approximately 2 minutes to traverse the ramps and POC.

In summary, for travelers on the Pedestrian/Bicyclist Users on the New Facilities:

- Location: views to project elements would be very prominent (high) to these travelers
- Duration: Views would be of moderate duration for trail users
- Quantity: the number of viewers would be moderately low, given the lower traffic volumes

Viewers Associated with the Businesses East of the Project: Of the businesses that front the east side of the Eastshore Highway, only the Berkeley Forge and Tool building has a front door and windows that opens to the roadway. For these viewers, views to the project elements would be brief and associated primarily with exiting the building, since viewers would face the improvements directly once stepping out the door.

In summary, for viewers associated with the businesses along the Eastshore Highway:

- Location: views to project elements would be very prominent (high) to these viewers
- Duration: Views would be moderately short (moderately low)
- Quantity: the number of viewers would be low

Viewers Associated with the Sports Complex: Viewers on the fields and in the bleachers (located on the western side of the fields) would have long duration views to the proposed POC and ramps. It is assumed the typical soccer game is 60 to 90 minutes (for adult players, which given the size of the fields would be a typical age group using the fields).

In summary, for viewers associated with the Sports Complex:

- Location: views to project elements would be very prominent (high) to these viewers
- Duration: Views would be long (high)
- Quantity: the number of viewers would be low

**Viewers Associated with Golden Gate Fields**: The primary way these viewers would experience the changes would be through their approach to and from the service entrance of the racetrack. Golden

Gate Fields is screened by a tall fence/screen around the site which limits views into the project. However, at the point of this service entrance there would be direct views to the roundabout as well as the proposed western POC approach.

In summary, for viewers associated with the Golden Gate Fields:

- Location: views to project elements would be very prominent (high) to these viewers
- Duration: Views would be very short (low)
- Quantity: the number of viewers would be low

#### 7.2.2 VIEWER SENSITIVITY

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—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers would have of changes to visual resources. *Awareness* relates to the focus of view—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 would be more sensitive to visible changes. High viewer sensitivity helps predict that viewers would have a high concern for any visual change.

The Berkeley Park Neighborhood Plan, developed in the mid-1990's indicates a number of critical elements relating to this project – connectivity to parks, gateway enhancements, in particular – that are included as part of the proposed alternative. While the addition of the proposed POC, or its aesthetic character, is not specifically addressed in this plan, the proposed project does fit with the goals established in this plan. Because of this and bolstered by the results from a public meeting (held April 27, 2016), the addition of the proposed project within the community is highly supported and therefore it is anticipated that residents of the neighborhood would have both a high degree of sensitivity, but also a high degree of acceptance to the project.

It is anticipated that non-resident commuters and others travelling through the project area, particularly those travelers on I-80, would be aware of the changes to the visual environment brought on by the addition of the project elements along and over I-80. However, the changes would not be a primary focus, because it is assumed motorists would be focused on the activity of driving. With the aesthetics of the proposed POC matching that of the existing tied-arch POC at University Avenue, the continuity of the I-80 corridor is maintained with this upgraded POC aesthetic. It is anticipated that travelers on I-80 that frequently travel the corridor would have a moderate sensitivity to the project, while tourists or those who infrequently traverse the project area would have a low sensitivity.

For the viewers associated with the sports complex, Golden Gate Fields, and the business along Eastshore Highway, the primary concerns consist of being able to get to these venues quickly and efficiently. They would be most sensitive during the construction phase of the project, but that is anticipated to diminish once the new traffic patterns are established. The overcrossing, ramps, and roundabouts represent new elements in both the I-80 and Gilman Street corridors. However, these also represent typical elements associated with roadways and would likely become background elements to these viewers.

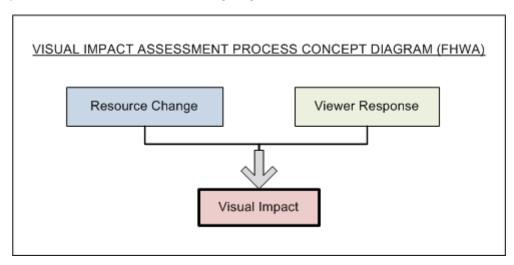
## 7.3 GROUP VIEWER RESPONSE

Merging both the viewer exposure and sensitivity, as described in the previous sections, leads to an overall response anticipated for each viewer group. Table 7-1, below, summarizes the viewer group response discussions and provides the overall anticipated response.

TABLE 7-1 Viewer Group Response Summary							
Viewer Crown		Exposure		Sensitivity			Total
Viewer Group	Location	Duration	Quantity	Activity	Aware	Values	Total
Travelers along I-80	High	Mod Low	High	Mod	Mod	Mod Low	Mod
Travelers along Gilman Street	High	Mod Low	High	Mod	Mod	High	Mod High
Travelers along Eastshore Hwy, EB On- and Off-ramps	High	Mod Low	Mod Low	Mod	Mod	Mod	Mod
Travelers along W. Frontage Rd, WB On-Ramp, San Francisco Bay Trail	High	Mod Low	Mod	Mod	Mod High	Mod High	Mod High
Pedestrians/Bicyclists on New Overcrossing	High	Mod	Mod High	Mod High	Mod High	High	Mod High
Eastside Business Users	High	Mod High	Low	Mod Low	Mod Low	Mod	Mod
Sports Complex Users	High	High	Mod	Mod Low	Mod Low	Mod Low	Mod
Golden Gate Field Users	High	Low	Low	Low	Low	Low	Low

#### 8. 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 due to the contractor's operations are also considered. A generalized visual impact assessment process is illustrated in the following diagram:



The table below provides a reference for determining levels of visual impact by combining resource change and viewer response.

TABLE 7-2 Visual Impact Ratings Using Viewer Response and Resource Change										
	Viewer Response (VR)									
		Low (L)	Moderate- Low (ML)	Moderate (M)	Moderate- High (MH)	High (H)				
(RC)	Low (L)	L	ML	ML	M	М				
Change (RC)	Moderate- Low (ML)	ML	ML	M	M	МН				
	Moderate (M)	ML	M	M	МН	МН				
Resource	Moderate- High (MH)	M	M	МН	МН	Н				
	High (H)	M	МН	МН	Н	Н				

The visual impact of project alternatives is determined by assessing the visual resource change resulting from the project and predicting viewer response to that change. Visual resource change is the total change in visual character and visual quality. The first step in determining visual resource change is to assess the compatibility of the proposed project with the existing visual character of the landscape. The second step is to compare the visual quality of the existing resources with the projected visual quality after the project is constructed. Viewer response to the changes is the sum of viewer exposure and viewer sensitivity to

the project, as described in Section 7. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to react to the change.

The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of visual resource impacts of projects in preparation of environmental documents. The CEQA guidelines (1998) state that a project may have a significant impact on visual quality if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare, which would adversely affect day- or nighttime views in the area.

# 8.1 Visual Impacts by Visual Assessment Unit and Alternative

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key views (KV) associated with visual assessment units that would most clearly demonstrate the change in the project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition to the build alternative (the Roundabout Alternative), this VIA also considers the potential impacts of a No-Build Alternative.

The following section describes and illustrates visual impacts by visual assessment unit, compares existing conditions to the proposed alternatives, and includes the predicted viewer response.

# 8.1.1 NO BUILD ALTERNATIVE

Under the No Build Alternative, no improvements would be made to the project area. It would essentially remain the same visually.

#### 8.1.2 BUILD ALTERNATIVE

Six key views have been identified for the proposed build alternative. The overall locations within the project area for the key views are shown in Figure 3. Key views and their specific locations, along with descriptions for these, follow below. Note that all existing photos used as part of this assessment were taken June 12, 2016.

#### I-80 FREEWAY VISUAL ASSESSMENT UNIT, KEY VIEW #1

This key view was taken from the WB lanes of I-80 approaching the proposed overcrossing and is looking south. See Figure 13 for the before and after views from this vantage point. This view was selected as the key viewpoint because it clearly illustrates the new POC over I-80 as the WB viewer crosses over the Gilman Street undercrossing.

• Existing Visual Character/Quality: The existing character of I-80 through the project corridor is that of an older freeway. Adjacent development is primarily older industrial on the east and sports fields and open space to the west; also, to the west are distant views to the bay. The median barrier partially obscures the views to the east, with only the upper portions of the buildings present in the view. To the west, the barrier along the edge of the shoulder similarly obscures the

views to the sports fields and open space. However, isolated views to the distant bay can be seen, particularly from higher profile vehicles. The overall visual quality of the view is moderate, with moderate vividness and intactness and moderately low unity.

Proposed Project Features: Within this view, the new POC and associated ramp would be prominent to the view. These would be in addition to the existing freeway elements, including the existing overhead sign structure, University Avenue Overcrossing and POC approximately 1 mile to the south. In addition to the two structures, lighting and fencing along both of these would also be notable, with the lights particularly noticeable at night.

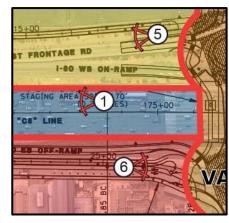


Figure 12: Key View #1 in the I-80 Freeway VAU from WB lanes of I-80, looking south

- Changes to Visual Character: The addition of the POC and its associated ramp are not anticipated to change the overall visual character of the view to a great extent. Views to the west from the WB lanes would be further obscured by the ramp. Views to the bay backdrop would be further limited until the support is above the line of sight of the viewer. At freeway speeds, the travel time along the portion of the ramp that would obscure the existing views is less than 6 seconds<sup>3</sup>, while at slower speeds more typical to this stretch of the interstate, it would take 40 seconds to travel this distance (at an assumed 10 mph). The overall change to the view's visual character and quality are anticipated to be moderate with the presence of the ramp and overcrossing, and the view's existing moderately low visual quality.
- Anticipated Viewer Response: Viewers along I-80 are anticipated to have a moderate response level based on sensitivity, which tends to be higher, and exposure, which tends to moderate to moderately low (see Table 7-1).
- Resulting Visual Impact: The new POC would likely increase the level of existing visual clutter in the corridor, with additional elements exposed to view. The overall impact to the corridor's visual quality is anticipated to be moderate, given the moderate viewer response and the moderate degree of change to the existing visual character and quality.

<sup>&</sup>lt;sup>3</sup> Ibid





Figure 13: Key View #1 from WB I-80, looking south

#### I-80 FREEWAY VISUAL ASSESSMENT UNIT, KEY VIEW #2

This key view was taken from the EB lanes of I-80 approaching the proposed overcrossing and is looking northward. See Figure 15 for the before and after views from this vantage point. This view was selected as the key viewpoint because it clearly illustrates the new structure crossing over I-80 for the EB viewer.

• Existing Visual Character/Quality: The view from the EB lanes is similar to that described for the WB lanes. The existing character of I-80 through the project corridor is that of an older freeway. Adjacent development is primarily older industrial on the east and sports fields and open space to the west. Also, to the west are distant views to the bay. From the EB lanes, the median barrier partially obscures the views to the west, with only taller elements, such as the fence surrounding the soccer fields, visible. The

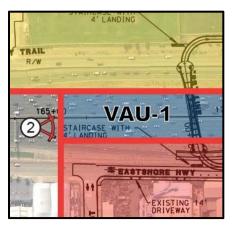


Figure 14: Key View #2 in the I-80 Freeway VAU from EB lanes of I-80, looking north

overall visual quality of the view is moderately low given the appearance of the building and the presence of weeds along the highway.

- Proposed Project Features: Within this view, the new POC would be very prominent to viewers
  approaching it. The associated ramp would be less prominent, but still present in the view, since
  this stretches away from the viewer. In addition, the lighting and fencing along both the overcrossing and ramp would also be noticeable, with the lights particularly prominent at night.
- Changes to Visual Character: The addition of the POC and its associated ramps are not anticipated to change the overall visual character of the view to a substantial degree. The proposed structure would be located approximately 1 mile from an existing similar structure within the I-80 corridor, near University Avenue. Within this view, the overall change to the existing visual character/quality is anticipated to be moderate, given the presence of the new structure in the view and the view's current moderately low visual quality.
- Anticipated Viewer Response: Viewers along I-80 are anticipated to have a moderate response
  level based on sensitivity, which tends to be higher, and exposure, which tends to moderate to
  moderately low (see Table 7-1).
- Resulting Visual Impact: As with the SB views, the new POC would likely increase the level of
  existing visual clutter in the corridor, with additional elements exposed to view. The overall impact to the corridor's visual quality is anticipated to be moderate, given the moderate viewer
  response and the moderate degree of change to the existing visual character and quality.





Figure 15: Key View #2 from EB I-80, looking north toward the proposed POC.

#### **GILMAN STREET VISUAL ASSESSMENT UNIT, KEY VIEW #3**

This key view is located at the center of Gilman Street looking west toward the I-80 undercrossing. See Figure 17 for the before and after views. This location was selected because it illustrates the views anticipated along Gilman Street east of the freeway and, in particular, of the proposed roundabout.

Existing Visual Character/Quality: The view from Gilman Street to the west is dominated by the existing undercrossing. This portion of Gilman Street is dominated by older industrial buildings. Some street tree plantings can be found in the sidewalk along the back of the existing curb. In addition, there are a substantial number of powerlines along and across Gilman Street. These elements all combine to give the view a moderately low visual quality.

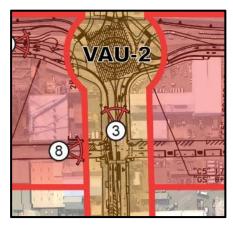


Figure 16: Key View #3 in Gilman Street VAU from the center of Gilman Street, looking west toward the undercrossing

- Proposed Project Features: The new roundabout in the foreground would be the most prominent element in the view. In addition, the new cycle track along the eastbound lanes would also be visible to the travelers along this stretch of Gilman Street. Of the features removed by the project, the possible removal of the powerlines would very noticeably clear up the visual clutter of the view. Another potential feature is the inclusion of cut -off walls under the existing I-80 structure. Since these are not currently part of the project, they have not been included in the simulation. A determination of the inclusion of these would be developed as part of the final design effort associated with the streetscape and urban design. They are only mentioned here to provide an understanding of what the implications of this might mean for the project area.
- Changes to Visual Character: The possible removal of the powerlines and the addition of the roundabout and its associated elements (paving, plantings, and median treatments) would open up views and clear out much of the visual clutter in the existing view. In addition, the intersection would appear somewhat larger than the current, but also more organized with the various ramps and roadways that empty into the existing intersection. The potential cut-off wall would limit views under the existing bridge to those within the center bay or center three bays. This would have the effect of limiting views under the bridge to just the open bays. With the placement of the roundabout in the center of the intersection and the possible removal of the visual clutter created by the powerlines within this view, the overall change to the existing visual character/quality is anticipated to be moderately high.
- Anticipated Viewer Response: Viewers on Gilman Street are anticipated to have a moderately high response level based on sensitivity, which tends to be higher, and exposure, which tends to moderate to moderately high (see Table 7-1).
- Resulting Visual Impact: The overall impact to the corridor's visual quality is anticipated to be
  moderately high, given the moderately high viewer response and the moderately high degree of
  change to the existing visual character and quality.





Figure 17: Key View #3 in Gilman Street VAU from the center of Gilman Street, looking west toward the undercrossing. Note that the treatment of the islands, including the planting and paver etc. designs, are subject to approval and may not represent the final constructed conditions.

#### **GILMAN STREET VISUAL ASSESSMENT UNIT, KEY VIEW #4**

This key view looks from the service entrance to Golden Gate Fields, on Gilman Street, looking southeast toward the undercrossing and the WB on-ramp. See Figure 19 for the before and after views. This location was selected because it illustrates the views associated with the new roundabout on the west side.

• Existing Visual Character/Quality: The entrance overlooks the intersection of the WB on and off-ramps and the west Frontage Road, plus the Bay Trail that parallels the frontage road in this area. The existing I-80 overcrossing dominates the view. The view was chosen to illustrate the potential changes that might be expected with the roundabout in the intersection. The overall visual quality of the view is moderately low due to both the expanse of asphalt within the view as well as the presence of the powerlines which add visual clutter. Weedy growth along the ramp

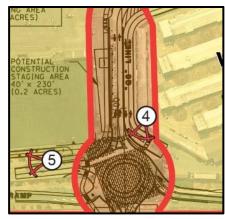


Figure 18: Key View #4 at the Golden Gate Fields Service Entrance at Gilman Street looking southeast toward the Freeway Undercrossing and WB on-ramp

also adds a reducing element, while the presence of the landscaping associated with the entrance adds a positive aspect.

- Proposed Project Features: The new roundabout in the foreground would be the most prominent element in the view. Of the features removed by the project, the possible removal of the power-lines would very noticeably clear up the visual clutter of the view. As with Key View 3, there is a potential feature of cut -off walls under the existing I-80 structure. Since these are not currently part of the project, they have not been included in the simulation. A determination of the inclusion of these would be developed as part of the final design effort associated with the streetscape and urban design. They are only mentioned here to provide an understanding of what the implications of this might mean for the project area.
- Changes to Visual Character: Similar to the changes associated with Gilman Street east of the freeway, the possible removal of the powerlines, the addition of the roundabout and its associated elements (paving, plantings, and median treatments) would open up views and clear out much of the visual clutter in the existing view. The intersection would appear larger than the current, but more organized with clearer direction than the existing large paved area. This would be in large part due to the location of the center island in the roundabout. The potential cut-off wall would limit views under the existing bridge to those within the center bay or center three bays. This would have the effect of limiting views under the bridge to just the open bays. As with the east side view, the overall change to the view is anticipated to be moderately high, given the prominent locations of the project elements.
- Anticipated Viewer Response: Viewers on Gilman Street are anticipated to have a moderately high response level based on sensitivity, which tends to be higher, and exposure, which tends to moderate to moderately high (see Table 7-1).
- Resulting Visual Impact: The overall impact to the visual quality of the view is anticipated to be
  moderately high, given the moderately high viewer response and the moderately high degree of
  change to the existing visual character and quality.





Figure 19: Key View #4 from the Golden Gate Fields Service Entrance looking southeast towards the existing Gilman Street undercrossing and the WB on-ramp. Note that the treatment of the islands, including the planting and paver etc. designs, are subject to approval and may not represent the final constructed conditions.

# WESTSIDE SPORTS AND ENTERTAINMENT, WEST FRONTAGE ROAD, AND SAN FRANCISCO BAY TRAIL VISUAL ASSESSMENT UNIT, KEY VIEW #5

The view is from the perspective of the pedestrian on the Bay Trail, looking south along the trail, which is located between the West Frontage Road and the fencing surrounding the sports fields. See Figure 21 for the before and after views. This location was selected because it illustrates the views from the trail to the new ramp structure associated with the overcrossing.

 Existing Visual Character/Quality: elements in the existing view include the existing fence that surrounds the soccer fields and a row of shrubs planted along the fence. Between the Bay Trail and the West Frontage Road is a narrow landscape area. The visual quality of the view is moderate, with moderate vividness intactness and unity.

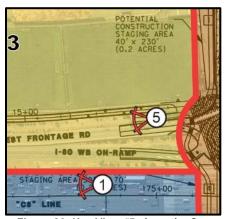


Figure 20: Key View #5 along the San Francisco Bay Trail between the sports fields and the West Frontage Road, looking south along the trail.

- Proposed Project Features: The new access ramp to the proposed POC would be prominent to
  trail and frontage road users, as well as those on the soccer fields on the west side of the ramp.
  The ramp, and its associated railing and lights would begin at the existing grade behind this viewpoint and would quickly climb to meet the height of the overcrossing, approximately 600 feet to
  the south.
- Changes to Visual Character: The location of the ramp along the west edge of the trail would block existing views to the soccer fields to the west, as well as to the distant views of the bay across the fields. While the existing vegetation along the fields currently partially screens these views, the ramp would be a much more solid block. This visual screening would not be for the entire length of the ramp, because portions of the ramp would either be below the viewer near its starting point at Gilman Street, or above the viewer at a point closer to the proposed overcrossing. However, there would be several hundred feet where these views would be effectively blocked. The changes to the existing visual character of the view is anticipated to be moderately high.
- Anticipated Viewer Response: Viewers on the West Frontage Road and the Bay Trail are anticipated to have a moderately high response level with a moderately high sensitivity level and a moderate to moderately high exposure level (see Table 7-1).
- Resulting Visual Impact: The overall impact to the visual quality of the view is anticipated to be
  moderately high, given the moderately high viewer response and the moderately high degree of
  change to the existing visual character.





Figure 21: Key View #5 in Westside Sports and Entertainment, West Frontage Road, and San Francisco Bay Trail VAU from the San Francisco Bay Trail, looking south to the proposed overcrossing. Note the location and type of plantings is subject to approval and may not represent the final constructed conditions.

# EASTSIDE COMMERCIAL, EB OFF-RAMP, AND EASTSHORE HIGH-WAY VISUAL ASSESSMENT UNIT, KEY VIEW #6

Key View 6 was taken along Eastshore Highway adjacent to existing industrial buildings. The view looks to the north, towards the intersection of Eastshore Highway and Gilman Street. See Figure 23 for the before and after views. This location was selected because it illustrates the views from the industrial areas along Eastshore to the project elements.

Existing Visual Character/Quality: Buildings along the existing Eastshore Highway are older industrial buildings and the area between the Highway and the I-80 EB off ramp are weedy. The overall visual quality for this view is low, with low vividness, intactness and unity.

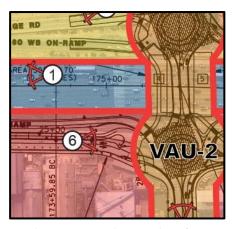


Figure 22: Key View #6, view along Eastshore Highway, looking north towards the Gilman Street Intersection

- Proposed Project Features: The new access ramp to the proposed POC would be prominent to
  drivers along Eastshore Highway and to any businesses that look out onto the roadway. Other
  elements of the project that would be visible include the railing and lighting associated with the
  ramp, and gravel mulch under the ramp in an area that would be fenced off to prevent access. A
  new sidewalk along Eastshore Highway would be located along the east side of the road and the
  existing parking would be maintained.
- Changes to Visual Character: The presence of the ramp would have a large impact to the existing views, by blocking the views to the I-80 freeway for drivers on Eastshore and any businesses that look out to the west. The area would appear more built than the current appearance. In addition, the changes would also clean up the current fence line associated with the area between the EB off-ramp and Eastshore Highway. The extent of this would greatly depend on future maintenance of the area. Overall, it is anticipated that the project would have a moderately high change to the current view.
- Anticipated Viewer Response: Viewers on the Eastshore Highway and those associated with the
  businesses along the highway are anticipated to have a moderate response level due to a moderately high sensitivity and a moderate duration/exposure (see Table 7-1).
- Resulting Visual Impact: The resulting change in views and screening of the existing freeway and
  any distant views, plus the increase in afternoon shadows, will have an impact on the existing
  environment for these viewers. The overall impact to the visual quality of the view is anticipated
  to be moderately high, given the moderate viewer response and the moderately high degree of
  change to the existing visual character.





Figure 23: Key View #6 in Eastside Commercial, EB off-Ramp, and Eastshore Highway VAU from the perspective of the Eastshore Highway users, looking north toward the Gilman Street intersection

#### **GILMAN STREET VISUAL ASSESSMENT UNIT, KEY VIEW #7**

This key view is from the perspective of the bicycle rider on Gilman Street looking west across the railroad tracks towards the interchange area. The view was selected to show the changes to the streetscape along Gilman Street from the perspective of a cyclist.

- Existing Visual Character/Quality: The view from Gilman Street to the west is dominated by both the streetscape trees and parking along the street. The overall visual quality is low with low vividness, intactness and unity.
- Proposed Project Features: The new striping for the rail-road crossing is most prominent in the foreground of the view. In addition, the removal of the parking along the cycle track and the removal and/or replacement of the streetscape plantings are noticeable in the proposed view.
   The new roundabout is visible in the background of the view.

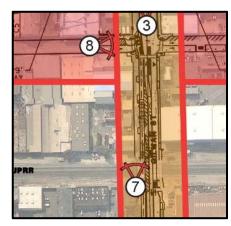


Figure 24: Key View #7 in Gilman Street VAU from the cycle track, looking west, across the railroad tracks, toward the undercrossing

- Changes to Visual Character: The removal of the parking and the removal and replacement of the
  streetscape planting substantially open up the views along the corridor. New streetscape plantings, would over time grow to meet the size and proportions of the existing, but that is likely to
  take at least a decade to achieve. The new striping within the intersection would also prominently
  figure into the view. Overall the anticipated change to the visual character is anticipated to be
  moderately high, given the changes to the streetscape and the speed of travel for cyclists.
- Anticipated Viewer Response: Viewers on the Gilman Street cycle track are anticipated to have a moderately high response level based on moderately high to high sensitivity due to a moderate to moderately high duration/exposure of view (see Table 7-1).
- Resulting Visual Impact: The overall impact to the corridor's visual quality is anticipated to be
  moderately high, given the moderately high viewer response and the moderately high degree of
  change to the existing visual character and quality.





Figure 25: Key View #7 in Gilman Street VAU from the center of Gilman Street, looking west, across the railroad tracks, toward the undercrossing. Note that the streetscape designs are subject to approval and may not represent the final constructed conditions.

#### **GILMAN STREET VISUAL ASSESSMENT UNIT, KEY VIEW #8**

The photo for this key view was taken from the intersection of Second Street and Gilman Street, and is looking north along Second Street. The view is from the perspective of the driver on the roadway and was selected to show the proposed changes to Second Street.

 Existing Visual Character/Quality: The view north along Second Street is typical of an industrial area. There is little streetscape along the street (although there is some along Gilman Street which figures into the view). Second Street is primarily a parking and access area for workers. These elements all combine to give the view a moderately low visual quality.

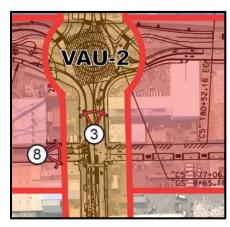


Figure 26: Key View #8 in Gilman Street VAU from the Second Street, looking north

- Proposed Project Features: The most prominent project element in the view would be the proposed striping for the cycle track on Gilman Street that crosses Second Street in this location.
   Restriping of the roadway would also occur north of Gilman Street. However, in general the view does not substantially change from existing.
- Changes to Visual Character: The anticipated changes to the view are minor and primarily associated with the restriping/new striping of both Second and Gilman Streets. Therefore, the change to the visual environment for this view is not anticipated to change much from the existing and would be categorized as very low.
- Anticipated Viewer Response: Viewers on Second Street are anticipated to have a moderately high response level based on moderate to moderately high sensitivity, which is based on duration of view (see Table 7-1).
- Resulting Visual Impact: The overall impact to the corridor's visual quality is anticipated to be
  moderately low, given the moderately high viewer response and the very low degree of change
  to the existing visual character and quality.





Figure 27: Key View #8 in Gilman Street VAU from Second Street, looking north.

# WESTSIDE SPORTS AND ENTERTAINMENT, WEST FRONTAGE ROAD, AND SAN FRANCISCO BAY TRAIL VISUAL ASSESSMENT UNIT, KEY VIEW #9

This key view looks from the parking area associated with the westside of Golden Gate Fields to the south along the edge of San Francisco Bay. The view is from the perspective of a driver on the roadway.

Existing Visual Character/Quality: The view is from the parking access road along the eastern edge of San Francisco Bay, looking south towards Gilman Street. Elements of the view are dominated by the roadway paving and the boulders lining the edge of the bay. The trees in the mid-ground provide a sense of scale the view.



Figure 28: Key View #9 in along San Francisco Bay, looking south towards Gilman Street in the distance.

- **Proposed Project Features:** The existing roadway area walds difficill the distance. would be restriped, and a metal beam guardrail would be placed along the bayside to separate the Bay Trail from the auto traffic. There would be a slight reconfiguration of the entrance way and decorative paving would be added (shown on the left edge of the proposed view). New planting along the road, where trees do not currently exist, would also be provided.
- Changes to Visual Character: The existing visual character of the area would be very similar to
  current conditions since the area of paving would remain approximately the same as the existing.
  The addition of the guardrail would provide a degree of clarity to the current open expanse of
  paving but is generally not a visually pleasing element. The decorative paving at the entrance and
  the addition of trees, where feasible, would provide some enhancement to the existing character.
- Anticipated Viewer Response: Viewers on the access road would likely have a moderate sensitivity to the changes. Much of this traffic is for staff of the track to access parking, not visitors to Golden Gate Fields.
- Resulting Visual Impact: The overall impact to the visual quality is anticipated to be moderately low. The changes to character are small, with the new paving staying within the existing's width and the addition of the guardrail, a somewhat negative element, balanced by the additional planting and decorative paving, which add to the quality. Existing views of San Francisco Bay and the City of San Francisco would remain unaffected.





Figure 29: Key View #9 in Westside VAU from the center of the parking access road on the west side of Golden Gate Fields, looking south. Note that the treatment of the roadway, including the planting and pavement treatments, are subject to approval and may not represent the final constructed conditions.

# 8.2 Summary of Key Viewpoint Analysis

Overall, the addition of the project elements would likely affect the existing visual environment of the project area by varying degrees depending on the viewer and location. While these affects are anticipated to be less than substantial, they would change these existing views. In some cases, this might be a positive effect by increasing the visual quality by removing existing visual clutter, or a negative effect by blocking views or adding to the existing visual clutter.

The table below summarizes and compares the narrative ratings for visual resource change, viewer response and visual impacts between alternatives for each key view:

TABLE 8.1 Summary of Key View Narrative Ratings				
VISUAL	ROUNDABOUT ALTERNATIVE			
ASSESSMENT UNIT	VIEW	Resource Change	Viewer Response	Visual Im- pact
Visual Assessment Unit 1 – I-80	1	Mod	Mod	Mod
VISUAL ASSESSMENT OUT 1 - 1-00	2	Mod	Mod	Mod
	3	Mod	Mod	Mod
		High Mod	High Mod	High Mod
Visual Assessment Unit 2 - Gilman Street	4	High	High	High
	7	Mod High	Mod High	Mod High
	8	Very Low	Mod High	Mod Low
Visual Assessment Unit 3 – Westside Sports and Entertainment, West Frontage Road, WB on-and	5	Mod High	Mod High	Mod High
off ramps, and San Francisco Bay Trail	9	Mod Low	Mod	Mod
Visual Assessment Unit 4 – Eastside Commercial, EB On- and Off-Ramp, and Eastshore Highway	6	Mod High	Mod	Mod High

# 9. PROJECT VISUAL IMPACT SUMMARY

The proposed project alternative would likely change the existing visual character and quality, but to a lesser than substantial degree. The addition of the new POC and its associated access ramps would block both northbound and southbound traveler's views out from the I-80 corridor for a brief period while they traverse the approximately 600 feet between ramp touch down to the overcrossing. To varying degrees, these views, both to the east and west, are partially blocked by the presence of concrete roadside barriers. For EB travelers, these views primarily consist of views to the old industrial buildings that front the Eastshore Highway. For WB travelers, these views are generally to the west across the sports fields and open space along the West Frontage Road. These views can include distant views to a portion of San Francisco Bay. These existing views generally have a moderately low visual quality and the addition of the ramps and overcrossing do not greatly reduce the quality of these views, as illustrated in Key Views 1 and 2.

Along Gilman Street the addition of the roundabouts, and their associated directional islands within what is currently a somewhat chaotic set of intersections, should help provide clarity and therefore a clearer view to the intersections. In addition, the possible removal of the overhead powerlines would be a large improvement over the existing cluttered views. The end result is that views along Gilman Street should improve over the existing conditions. As shown in Key Views 3 and 4, the existing moderately low visual quality of these views could be anticipated to increase to moderate with the addition of the roundabout elements.

Along the west side of the project area, including the Tom Bates Sports Complex, the San Francisco Bay Trail, the West Frontage Road, and the WB on-ramp (i.e. the Westside Sports and Entertainment Visual Assessment Unit), the existing moderate visual quality views would be blocked by the access ramp that parallels the roadways in this area along the west side of the Bay Trail. As shown in Key View 5, the view from the trail and frontage road to the west would be blocked for several hundred feet. As the viewer approaches the overcrossing, the ramp would fall above the viewer, allowing views under the structure. With the addition of the project elements, these views would likely be impacted to a moderately high degree and the existing moderate visual quality, while being maintained, would be very different and more urban than the current view.

Along the Eastshore Highway, the ramp is located along the western edge of the road, between it and the EB off-ramp. The placement of the ramp would block views from along Eastshore Highway and the businesses that line the east side of the road to the existing highway and off-ramp. These views have a low visual quality and the addition of the ramp, while not improving the view, do not lessen an already low visual quality, as illustrated in Key View 6.

# 9.1 Impacts to Scenic Vistas, Scenic Routes, and Scenic Drives

While no Caltrans designated or locally identified scenic vistas or scenic routes are present in the project area, the BCDC has identified the portion of I-80 as a Scenic Drive. For this drive, views to the west towards San Francisco Bay, the distant City of San Francisco, and Golden Gate Bridge add to the visual quality of this drive. The addition of the west side POC access ramp would partially block these views for a varying period, depending on the viewer's rate of travel. At the posted freeway speed of 65 mph, it would take

approximately 6 seconds to traverse the length of the ramp<sup>4</sup> (for the approximately 600 feet of the run of the ramp).

# 9.1.1 San Francisco Bay Conservation & Development Commission (BCDC)

For areas that fall within the BCDC jurisdiction, the changes provided by the project include pluses that are in support of the Findings and Policies of the Commission and minuses that may detract. As discussed above, the new POC would interfere with views to the Bay from I-80 over a stretch of 600 feet, between the beginning and end of the new access ramp along WB I-80. However, the addition of the new POC also provides new views of the Bay, San Francisco, and the Golden Gate Bridge for bicyclists and pedestrians that are not present in the existing environment in keeping with the Policy 7 of Appearance, Design, and Scenic Views, Policy 4 of Transportation, Policy 4 of Recreation, and Policy 10 of Public Access. The construction of the POC would also provide an additional non-motorized access route to shoreline resources in line with Policy Findings d, e and I (See Section 3.3.2 for a description of the BCDC policies, findings and goals).

In addition, Policy 10 of Appearance, Design, and Scenic Views also indicates that the design of the structure should designed as landmarks and the proposed design for the new POC (a Tied-Arch Bridge) is similar in appearance to the existing University Avenue pedestrian overcrossing structure. The placement of these two structures creates a landmark/gateway appearance in the I-80 corridor in the project area through a repetition of a unique form. Finally, the project also includes completing a section of the San Francisco Bay Trail. This also supports the goals of the Commission in the areas of Transportation, Recreation, and Public Access. Overall the proposed project appears to support more of the policies listed in the BCDC San Francisco Bay Plan than it detracts from them.

# 9.2 Visual Character

The addition of the POC and associated ramps along the freeway are not anticipated to change the visual character of the freeway, nor of the two frontage roads that parallel it (West Frontage Road and Eastshore Highway). The proposed overcrossing would match the design of the existing University Avenue POC, approximately 1 mile to the south, maintaining the character of the corridor through this stretch.

For areas along Gilman Street, the addition of the roundabouts would likely change the visual character slightly, but it is anticipated to improve the visual quality by decluttering the existing views and providing clarity to a set of chaotic intersections.

# 9.3 Light and Glare

The proposed lighting on the POC and ramps would add a new source of glare to the project area. This would be most visible to travelers along the roads and the Bay Trail, since these parallel the structure. This can be partially mitigated by providing shielding to the lights so that it is directed onto only the approach ramps and overcrossing walking surface. But it would still be noticeable to the viewer at night. Existing sources of light and glare are associated with the existing street lighting along the local streets (Gilman Street, Eastshore Highway, and West Frontage Road) and the soccer field lights associated with the sports complex. The overcrossing and ramp lighting would be an incremental increase in the area.

<sup>&</sup>lt;sup>4</sup> Calculations of distance and time at miles per hour are based on information provided at the following website: <a href="http://www.unitsconversion.com.ar/speedunitsconversion/mileperhour-footpersecond.htm">http://www.unitsconversion.com.ar/speedunitsconversion/mileperhour-footpersecond.htm</a> Figures shown in this report are rounded for the sake of simplicity.

# 9.4 Temporary Construction Visual Impacts

The project would have a number of temporary impacts associated with the construction of the project elements. Key among these would be the construction/laydown yards necessary to build the project. The potential locations for these are shown in Figure 3 (note that the contractor would only use one or two of these sites, but what is shown represents the potential locations for all of them). In these areas, construction equipment, concrete forms, supplies, and sheds would be located. Given the 18-month construction schedule anticipated for the project, the items in these yards would be visually present to viewers. Other temporary visual impacts would result from the demolition of existing elements of roadways and streetscapes, construction signage, and flaggers.

# 10. 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. For this project, it has been determined that the following cumulative visual impacts may occur.

Within the immediate project area, no additional projects have been identified; however, there are a number of projects within a mile of the Gilman Street Interchange that have been identified. Table 14-1 in Appendix B identifies these recent, current, or future projects.

The projects listed in Table 14-1 represent a trend of upgrading or gentrification in the City of Berkeley within and near the project area. The Albany Beach Restoration Access Project is the only project within the Gilman project's viewshed. The proposed Gilman project would actually support the Albany Beach Restoration Access Project that is under construction summer 2018 because the Gilman project will connect to that project's portion of the SF Bay Trail. The portion of the Bay Trail that is being constructed by the Albany Beach Restoration Access Project would grant better access to the restored beach for bicyclist and pedestrians. The combination of trail access and beach restoration also supports the goals, findings and policies of the BCDC.

In summary, the construction of the proposed project, in combination with the other projects listed in Table 14-1, would have a less than substantial impact to the overall cumulative changes over time for visual character and quality of the project area. The projects listed in Table 14-1, many but not all of which of which fall on private property, reflect the upgrading of older portions of the community that naturally occur over time. The addition of the proposed project elements would not degrade the existing character or quality, but would reasonably enhance these by providing better views to the bay for POC users, and an improved, less chaotic interchange for drivers, pedestrians, and bicyclists along Gilman Street and the I-80 ramps.

### 11. AVOIDANCE AND MINIMIZATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to address visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality due to a project. This approach also results in avoidance and minimization measures that can lessen or compensate for a loss in visual quality. The inclusion of aesthetic features in the project design, discussed in *Section 2*, can help generate public acceptance of a project. This section describes additional avoidance and minimization measures required to address specific visual impacts. These would be designed and implemented with concurrence of the District Landscape Architect.

Table 11.1, below, summarizes the numbered avoidance and minimization measures:

Table 11-1. Avoidance and Minimization Measures			
Measure No.	Description	Responsible Party	
Measures to	Preserve Existing Vegetation		
VA-1	Beginning with preliminary design and continuing through final design and construction, save and protect as many existing trees in the project area as feasible.	ACTC and Caltrans	
Measures fo	r Fencing and Barriers		
VA-2	Fence areas under the ramps to limit access along the adjacent roadways. At a minimum, make the fencing vinyl-clad chain link.	ACTC and Caltrans	
Measures fo	r Light and Glare		
VA-3	For areas associated with an open sky, the design lighting should be dark sky friendly.	ACTC and Caltrans	
Measures fo	r Construction Impacts		
VA-4	Cover/screen construction materials and stockpiles to lessen public views of these elements	ACTC and Caltrans	
VA-5	Limit glare from construction lighting by providing directional lighting and shielding.	ACTC and Caltrans	
Measures for	Wall Aesthetics		
VA-6	Include a texture with a minimum depth of 1-1/2 inches on all retaining walls and a minimum depth of 3/4 inch on all slope paving to help deter graffiti.	ACTC and Caltrans	
Measures to	Preserve Existing Vegetation		
VA-7	Survey exact locations for trees and include in plan set.	ACTC and Caltrans	
Measures fo	r Decorative Paving		
VA-8	Provide decorative paving in all medians and parkway strips too narrow to plant. Decorative paving shall consist of a texture and color that contrasts with adjacent sidewalk or roadway paving.	ACTC and Caltrans	
Measures fo	r Landscape Plantings		
VA-9	To the extent feasible, plant the islands and medians within the roundabout, particularly the center island of the roundabout to soften the hard surfaces of the intersections.	ACTC and Caltrans	
VA-10	Use a minimum 60% California natives as part of the planting palette. All plants should be drought tolerant.	ACTC and Caltrans	
VA-11	To the extend feasible, include low plantings along the sides of the San Francisco Bay Trail to provide a visual break between the hard elements associated with the ramp or the adjacent frontage road.	ACTC and Caltrans	
VA-12	Add plantings between the new retaining walls along the EB on- and off-ramps to soften the freeway elements.	ACTC and Caltrans	
VA-13	Include street tree plantings, and associated tree grates if necessary along Gilman Street to replace those removed by the project. Minimum spacing of trees should be no greater than 35 feet on-center.	ACTC and Caltrans	
VA-14	Provide a permanent irrigation system to all plantings. Make separate systems for Caltrans vs. city owned areas	ACTC and Caltrans	

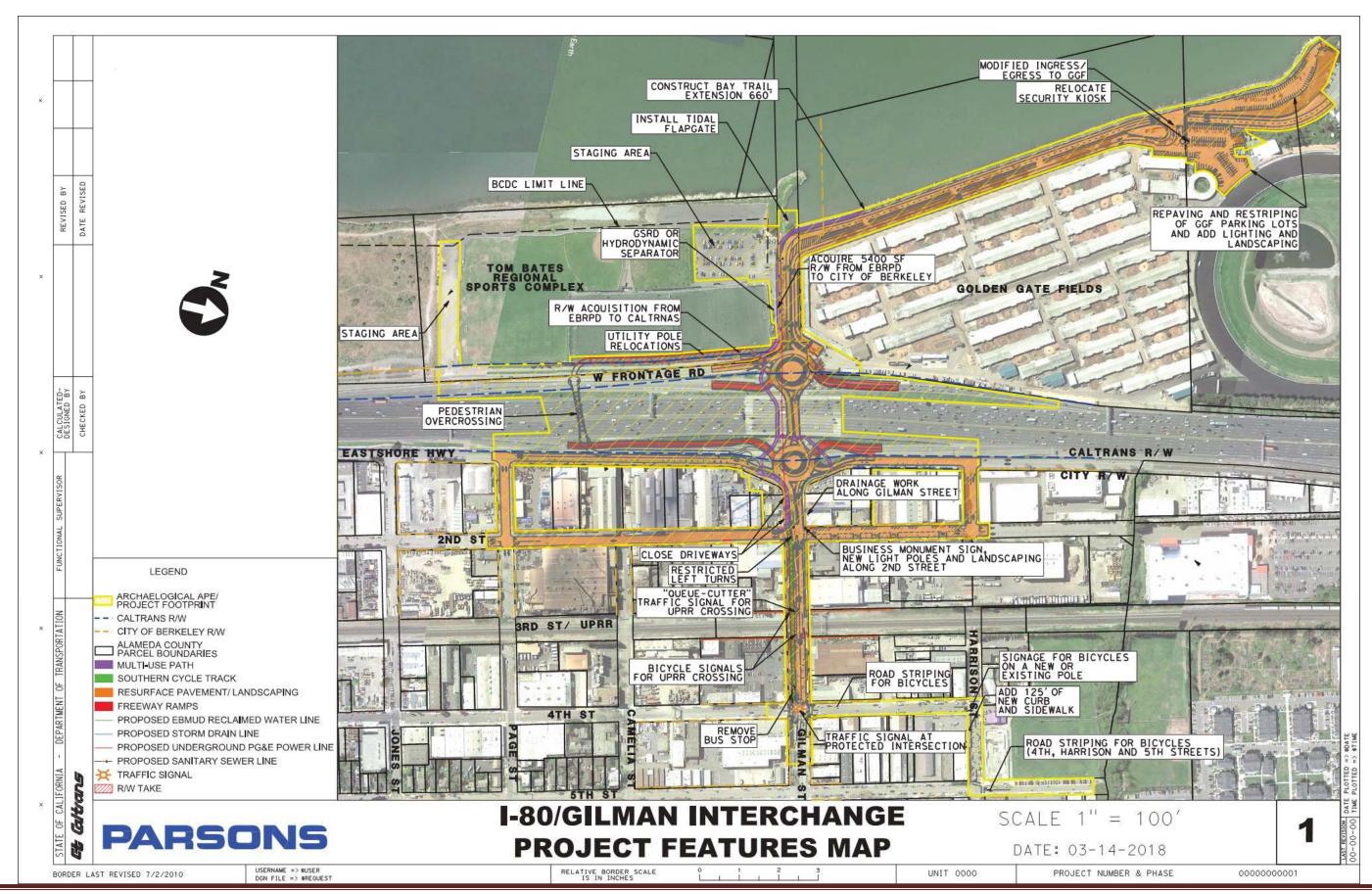
Table 11-1. Avoidance and Minimization Measures			
Measure No.	Description	Responsible Party	
VA-15	For areas of the project that fall within the BCDC jurisdictional area, develop any plantings or revegetation in compliance with the Commission's Landscape Guidelines.	ACTC and Caltrans	
Measures fo	r Stormwater Treatment Facilities		
VA-16	Beginning with preliminary design and continuing through final design and construction, use drainage and water quality elements, where required, that maximize the allowable landscape and works within the landscape aesthetic framework.	ACTC and Caltrans	
Measures for Project Lighting			
VA-17	Lighting for the project, including lighting under the existing structure, should be thematically approached to work with the overall design approach to the project aesthetic design.	ACTC and Caltrans	

# 12. CONCLUSIONS

The result of the construction of the Roundabout Alternative would be a less than substantial change to the existing visual environment. The recommended avoidance and minimization measures would help improve the overall visual quality of the area and help soften the additional hard surfaces created by the project elements.

The presence of the overcrossing and associated ramps would briefly interfere with views out from the freeway, although these are already partially obscured by barriers for a portion of the area traveled on I-80. However, not all changes created by the project would necessarily appear negative. Given the existing generally moderately low to low visual quality of the current area in general, the addition of the roundabouts, along with the possible removal of the existing tangle of overhead powerlines, would provide greater clarity to the current local street intersections and remove a considerable amount of existing visual clutter.

APPENDIX 'A': PLAN VIEW OF PROPOSED PROJECT	



APPENDIX 'B': TABLE O	F CUMULATIVE IM	PACT PROJECTS	

Table 14-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction	Proposed Uses	Status	
Transportation Projects				
University Ave Overcrossing (In- crease Vertical Clearance Project, EA 2K830)	City of Berkeley	This project will increase the vertical clearance at the I-80/University Avenue Overcrossing to current standard (16.5 feet) by either raising or replacing the existing structure. This will require raising or replacing the on- and off-ramps, as well as the adjacent bridge to match the new elevation.	Planning	
Interstate 80/Ashby Avenue (SR-13) In- terchange Improve- ments	City of Berkeley and City of Emeryville	The project will reconstruct the Ashby Avenue interchange, which is bordered by Frontage Road and San Francisco Bay to the west, an industrial/commercial/residential section of Emeryville to the southeast and Berkeley's Aquatic Park to the northeast. This project will provide a direct connection between westbound Interstate 80 (I-80) and Emeryville by way of Shellmound Street and will include:  • A new bridge to replace existing bridges  • A roundabout interchange  • Provision of bicycle and pedestrian access over the I-80 freeway at the Ashby Avenue interchange	Project approval and environmental document to be completed in late 2019/early 2020	
MBGR Replacement Project Between Uni- versity and Ashby in Berkeley (EA 4G230)	City of Berkeley	This project would replace sections of guard rail, temporary railing, and concrete barrier with new concrete barriers with chain link fences on I-80 between Potter Street on-ramp and University Ave off-ramp.	Certificate of Envi- ronmental Compli- ance signed, April 2018	
I-80 Safety Lighting & Median Barrier (EA3J700)	Alameda County	The purpose of this project is to improve nighttime visibility thereby enhancing safety and reducing the potential and severity of collisions along this stretch of I-80. The project would install a median concrete barrier to mitigate glare impact, double luminaire mast arm lighting, and high mast light poles to provide uniform luminosity on I-80 between the Ashby Avenue Overcrossing and the northern boundary of Alameda County.	First administrative draft environmental document review completed	
Park and Recreation Projects				
Aquatic Park Improvement Program	City of Berkeley	The Aquatic Park Improvement Program consists of a series of capital improvements to Aquatic Park that will improve the hydrology and water quality of the lagoons, wetland and upland habitat, and user amenities, such as improved pathways, seating, overlooks, and interpretive signage. Phase I addresses the water quality and some of the habitat improvements by increasing the water circulation and tidal exchange to bring cooler, more saline Bay water into the	Planning and Design Phase (Draft Environ- mental Impact Report 2012, Final Environ- mental Impact Report under preparation)	

Table 14-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction	Proposed Uses	Status
		lagoons, which will improve habitat for invertebrates and fish, and the birds that feed on them.  Phase I also includes removing invasive non-native plant species and replanting with appropriate native plants.  Phases 2 through 4 will further improve the upland habitat and provide user amenities.	
Proposed Fieldhouse at Tom Bates Regional Sports Complex	City of Berkeley	The preliminary vision of the fieldhouse building consists of a restroom, a meeting room, and a storage area, with priority on ease of access from the fields, minimal impact to parking, and good security.	Planning and Design Phase
McLaughlin Eastshore State Park Brickyard Construction	City of Berkeley, East Bay Regional Park District	Plans are in development for walking trails, picnic areas, restrooms, and parking.	Construction begins fall 2018, completion summer 2019
Berkeley Marina Capital Improvement Program	City of Berkeley	Transformative and impactful projects are in progress at the Berkeley Waterfront, and more are on their way. The University Avenue realignment and reconfiguration will improve the road that is the gateway to the Waterfront. Evaluations of the beloved Berkeley Pier are in progress, studying options that would allow this resource to be reopened to the public. A new public restroom, windsurfing area, and landscaped parking lot are under construction at the South Cove Sailing Basin. The Bay Trail is being extended to the Adventure Playground. In fiscal years 2018 and 2019, proposed projects focus on dock and restroom improvements, as well as landscape and real estate planning efforts.	Design and Construction
Albany Beach Resto- ration and Public Ac- cess Project	Cities of Albany and Berkeley	The project involves construction of a 4,983-foot-long (0.94-mile) segment of the Bay Trail between the termini of Buchanan and Gilman streets; expansion of a recreational beach; and improvement of associated park facilities. The project is currently in Phases 2 and 3, which are expected to be completed in 2018. Phase 2 is focused on improving the Albany Beach area, including dune and wetland restoration, restrooms, parking and other improvements. Phase 3 is focused on extending the San Francisco Bay Trail between Buchanan and Gilman streets west of Golden Gate Fields.	Phase 1 (Al- bany Neck improve- ments) com- pleted June 2016; Phase 2 (Albany Beach area) and 3 (Bay Trail exten- sion) permit- ting and con- struction is scheduled to be completed in 2018

Table 14-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction	Proposed Uses	Status	
Residential Projects				
1461-1463 Fifth Street	City of Berkeley	New townhomes	Completed	
600 Addison Street	City of Berkeley	The project applicant is requesting approval of a master use permit to allow redevelopment of the project site with up to 475,000 gross square feet of research and development uses and office uses with associated parking, circulation, utility, and landscaping improvements. In addition, the project is requesting the conversion of approximately 8,000 square feet of protected warehouse space that was previously removed from the site. Two potential development schemes are currently proposed, with a varied number of buildings and parking and circulation improvements; both schemes, referred to as Scheme 1 (which includes seven buildings) and Scheme 2 (includes five buildings) will be evaluated fully in the Environmental Impact Report.	Notice of Preparation review ended November 27, 2017	
Multi-Use Developm	ent Projects			
1900 Fourth Street	City of Berkeley	Redevelopment of the site with a mix of residential and commercial uses totaling 207,590 gross square feet, as well as associated parking and circulation (148,200 gross square feet), open space and landscaping (16,090 square feet), and utility improvements. The proposed uses would be located within two separate buildings, a three-story building at the corner of Fourth Street and Hearst Avenue, and a one- to five-story building on the balance of the site. Approximately 118,370 square feet of residential uses (135 dwelling units) would be located on the second level and above; commercial uses would total approximately 33,080 gross square feet and would be located on the ground level.	Draft Environmental Impact Report (end of review March 2017)	
1320 Ninth Street	City of Berkeley	Create a laboratory/manufacturing facility within existing warehouse.	Permit Issued	
1285 Eastshore High- way	City of Berkeley	Installation of new Verizon cell tower.	Completed	

Table 14-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction	Proposed Uses	Status
2100 San Pablo Avenue Residential Care Facility for the Elderly	City of Berkeley	The project involves demolishing the existing two single-story commercial buildings, and constructing 75,064 square feet, including 96 residential units	Negative Declaration, review ended Novem- ber 13, 2017
		(67 studio suits, 20 one-bedroom suites, and 9 two-bedroom suites), group dining and activity rooms, admission offices, staff lounge, wellness and meditation rooms, caregiver stations, a lobby/great room, and a cafeteria. Outdoor space would include a center courtyard measuring 2,174 square feet and outdoor decks on each floor measuring 5,049 total square feet. The center courtyard would abut and be level with the R-1 residential zoning district at the western property line. The proposed commercial component of the project, which would be on the ground floor fronting San Pablo Avenue, would include a beauty salon (319 square feet), and a geriatric wellness center (853 square feet) intended to serve both residential of the Residential Care Facility for the Elderly and the elderly in general. In addition, a corner restaurant (1,500 square feet) would serve both the Residential Care Facility for the Elderly residents and the general public.  Construction would occur over approximately 18 to 22 months.	
1740 San Pablo Avenue Mixed-Use Project	City of Berkeley	The project would demolish the existing buildings on the project site and construct a new five-story mixed-use building. The proposed building would have the following characteristics: five stories and 59.5 feet in height, 48 dwelling units, 3 live work units, and an approximately 800-square-foot cafe, 42,073 square feet of gross floor area, a parking garage with 53 parking spaces, including 6 electronic vehicle charging ready spaces, and 48 bicycle spaces.	Negative Declaration (January 2018)
University Village Retail Mixed Use Project, 1080 Monroe Avenue		The 6.3-acre project site in University Village is located to the northwest and southwest of the Monroe Street/San Pablo Avenue intersection. The proposed project includes a 27,500-square-foot grocery store, 18,000 square feet of retail space, a 175-unit senior housing project, and associated improvements.	Completed

Source: City of Berkeley Planning Department, 2016 and 2018; ceqanet.com, 2016 and 2018; City of Albany Planning Department, 2018; City of Berkeley Parks Recreation and Waterfront Department, 2018; East Bay Regional Park District, 2018; Caltrans 2018; Alameda CTC 2018, BCDC 2018.