

3.3 TRANSPORTATION, TRAFFIC, CIRCULATION, AND PARKING

This section describes the transportation network in the vicinity of the VA Transfer Parcel and summarizes the transportation impacts projected to result from implementation of the EA Alternatives. Aspects of the transportation system evaluated in this section include traffic operations, parking and loading needs, transit service, and pedestrian and bicycle safety and circulation. A detailed transportation impact analysis is included in Appendix D (Transportation Impact Study).

3.3.1 Regulatory Framework

There are no applicable federal standards related to transportation and parking. The VA Transfer Parcel is located on federal land owned by the Navy and that would be transferred to VA; thus, the proposed development is exempt from local planning regulations of the adjacent jurisdictions, which include the City of Alameda, Alameda County, and the City and County of San Francisco. Although the Proposed Action is not subject to the regulations of regional and local jurisdictions, relevant policies related to transportation, traffic, circulation, and parking are discussed below.

Alameda County Transportation Commission

As the Congestion Management Agency for Alameda County, the Alameda County Transportation Commission (ACTC) plans, funds, and delivers transportation programs and projects throughout Alameda County. The Alameda County Transportation Commission is also responsible for preparation of the Congestion Management Plan (CMP). The CMP is a plan that describes the policies and strategies to address congestion problems in the county. California legislation mandates that a biennial assessment of the CMP roadway network be conducted to assess level of service (LOS) and traffic volumes. The CMP roadway network consists of State routes and principal arterials within Alameda County. The *Congestion Management Plan 2011* (ACTC, 2011) identifies a level of service standard of E for facilities within the CMP network.

Alameda General Plan Element

The City of Alameda General Plan Transportation Element contains goals, objectives, and policies related to transportation and circulation with an emphasis on supporting the development of a multimodal transportation system.

Objective 4.1.1: Provide for the safe and efficient movement of people, goods, and services.

Policy 4.1.1.i: Design transportation facilities to accommodate current and anticipated transportation use.

Policy 4.1.1.o.2: Manage operations to maintain acceptable levels of LOS

- a. Develop and implement a strategy to increase the use of alternative modes of transportation by 10 percentage points by the year 2015.
- b. Reduce the percentage of Alameda traffic made up of single occupant vehicle trips (e.g. based on Census data, or do survey to establish baseline)

- c. Shift 10 % of peak hour trips to less congested times of day
- d. Collaborate with Alameda Unified School District (AUSD) to explore opportunities to reduce congestion during peak school times, for example staggering class times, encouraging parents to carpool, etc.

Objective 4.1.2: Protect and enhance the service level of the transportation system.

Objective 4.1.6: Increase the efficiency of the existing transportation system by emphasizing Transportation System Management (TSM) strategies and Transportation Demand Management (TDM) techniques.

Policy 4.1.6.a: Identify, develop, and implement travel demand management strategies to reduce demand on the existing transportation system.

1. Establish peak hour trip reduction goals for all new developments as follows:
 - 10 % peak hour trip reduction for new residential developments
 - 30 % peak hour trip reduction for new commercial developments.
2. Develop a Transportation Demand Management (TDM) toolbox that identifies a menu of specific TDM measures and their associated trip reduction percentages.
3. Develop a citywide infrastructure assessment using a Systems Engineering approach to determine capital investment needs.
4. Require implementation of ITS infrastructure as part of all new developments.

Policy 4.1.6.b: Identify locations where signal coordination could be employed to improve traffic flow and reduce vehicle emissions.

Objective 4.2.1: Design and maintain transportation facilities to be compatible with adjacent land uses.

Objective 4.2.5: Manage both on-street and off-street parking to support access and transportation objectives.

Objective 4.3.2: Enhance opportunities for pedestrian access and movement by developing, promoting, and maintaining pedestrian networks and environments.

Objective 4.3.5: Assess the impacts on all transportation modes (including auto, transit, bike and pedestrian) when considering mobility and transportation improvements.

Objective 4.4.2: Ensure that new development implements approved transportation plans, including the goals, objectives, and policies of the Transportation Element of the General Plan and provides the transportation improvements needed to accommodate that development and cumulative development.

Alameda Bike Master Plan Update

The Transportation Element addressed bicycling in a general sense, based on how it interacts with other transportation modes. Supplemental and specific policies are included in the Bike Master Plan Update that are applicable to the project:

Goal BP-2: Provide Additional End-of-Trip Facilities

e) Require major developers and businesses to monitor use of existing bicycle parking facilities in their properties and the immediate vicinity to help determine adequate needs for bicycle racks and lockers in the area.

Goal BP-5: Expand the Bicycle Network

a) Establish and maintain bikeways to priority destinations in Alameda, especially for travel to employment centers, commercial districts, transit stations and corridors, institutions, and recreational destinations.

3.3.2 Affected Environment

VA Transfer Parcel

The VA Transfer Parcel is located in the western half of the former NAS Alameda. The location and vicinity of the VA Transfer Parcel are illustrated in Figure 3.3-1. Roadways within the VA Transfer Parcel and the VA Development Area are not publicly accessible, and are old and deteriorating given the closure of NAS Alameda 15 years ago. Panoramic Drive, an unpaved roadway, enters the site north of its intersection with Avenue A.

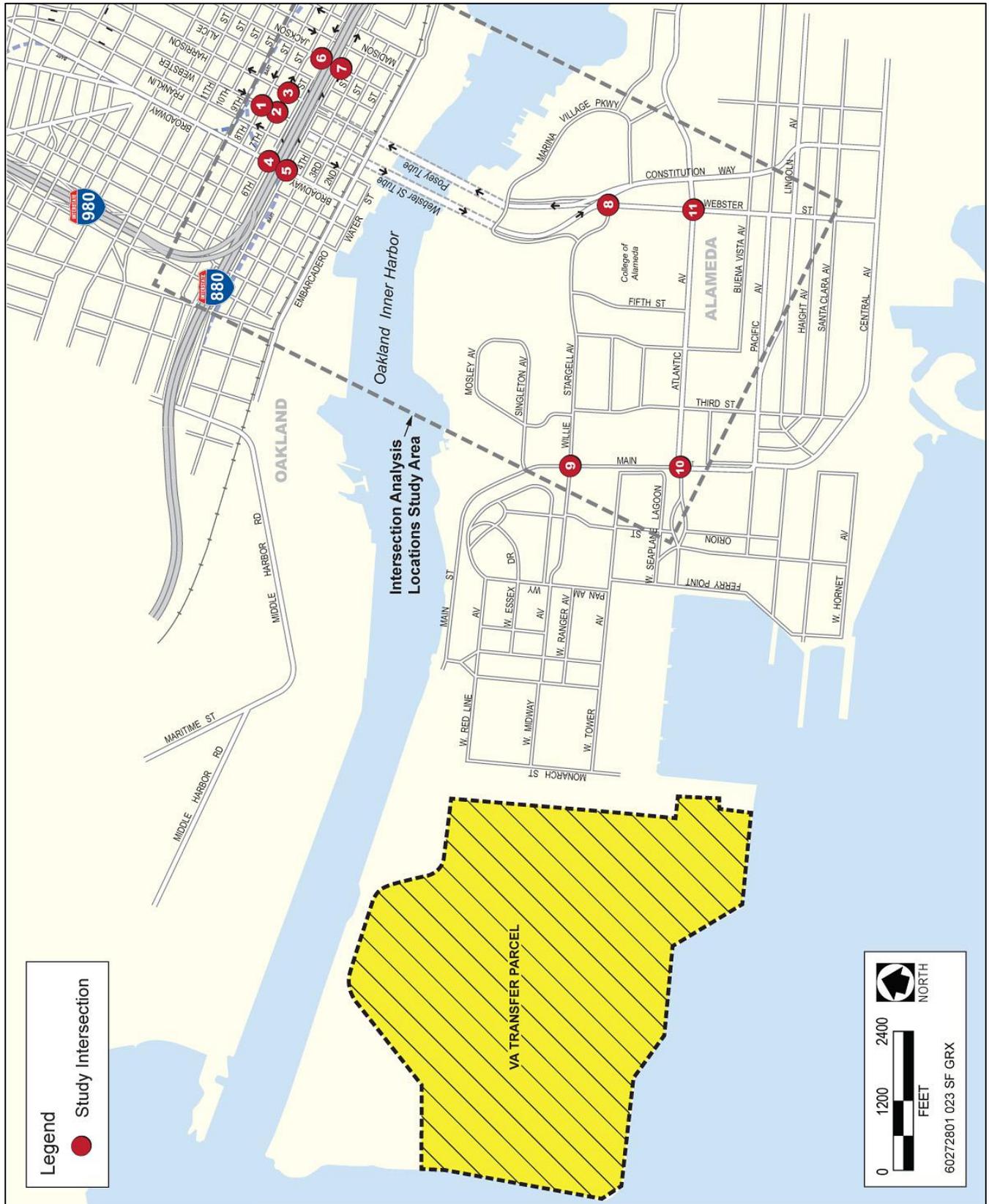
Surrounding Area

Regional Access

Regional access to and from the VA Transfer Parcel is provided by Interstate-880 (I-880), Interstate-980 (I-980), and the Webster Street Tube/Posey Tube (Figure 3.3-1).

- **I-880** provides access to the south and to the north, with connections to Interstate 80 and San Francisco via the Bay Bridge.
- **I-980** provides access to the northeast, connecting with Interstate 580 and State Route (SR) 24.
- **The Webster Street Tube/Posey Tube**, also known as SR-260 and SR-61,¹ are two parallel tunnels operating as a one-way couplet connecting the cities of Oakland and Alameda and running beneath the Oakland Inner Harbor. The Webster Street Tube serves southbound traffic into Alameda, while the Posey Tube operates in the northbound direction. The Webster Street Tube/Posey Tube is designated as part of the network for the ACTC's CMP.

¹ SR 260 and SR 61 share the same roadway alignment along the Webster Street and Posey Tube, which is why there are two State route designations for this couplet.



Source: AECOM, 2012

Figure 3.3-1:

Project Vicinity Map

Local Access

Local access to and from the VA Transfer Parcel is provided by the 11 major arterial streets described below.

- **Atlantic Avenue (Ralph Appezzato Memorial Parkway)** is an east-west arterial in Alameda that runs between Ferry Point and Triumph Drive. Atlantic Street is two lanes wide in each direction, with a curb and gutter along both sides of the roadway. Atlantic Avenue is designated as part of the ACTC CMP network between Webster Street and Main Street. The posted speed limit is 35 miles per hour (mph), or 25 mph in the school zone when children are present. Parking is prohibited along both sides of the roadway. The roadway primarily serves residential and institutional development.
- **Main Street** is a north-south local roadway that begins north of Pacific Avenue and extends north of Willie Stargell Avenue. Main Street is two lanes wide in each direction, with a curb, gutter, and sidewalk along both sides of the roadway between Pacific Avenue and Atlantic Avenue. The posted speed limit is 35 mph, and parking is prohibited along both sides of the roadway north of Atlantic Avenue. Main Street is designated as a roadway of regional significance within the Metropolitan Transportation Commission's (MTC's) Metropolitan Transportation System (MTS). The roadway primarily serves residential and institutional development.
- **Willie Stargell Avenue** is an east-west collector that runs between Main Street and Webster Street. Willie Stargell Avenue is one lane wide in each direction, with a curb and gutter along both sides of the roadway, and sidewalks are provided along the south side. Willie Stargell Avenue becomes West Midway Avenue west of Main Street. The posted speed limit is 25 mph, and parking is prohibited along both sides of the roadway. The roadway primarily serves residential and institutional development.
- **Jackson Street** is a north-south collector that runs between Lakeside Drive and First Street. Jackson Street is one lane wide in each direction, with a curb, gutter, and sidewalk along both sides of the roadway. Parking is allowed on both sides of the roadway. The roadway primarily serves residential development.
- **Harrison Street** is a north-south collector that runs between Monte Vista Avenue and 1st Street. Harrison Street is one-way northbound between 4th Street and 10th Street with three travel lanes and a curb, gutter, and sidewalk along both sides of the roadway. The posted speed limit is 25 mph, and parking is allowed on both sides of the roadway. Harrison Street operates as a one-way couplet, with Webster Street operating in the southbound direction and Harrison Street operating in the northbound direction. The roadway primarily serves retail development.
- **Webster Street** is a north-south arterial that begins at 51st Street in Oakland and continues south into Alameda. Webster Street operates as a one-way southbound roadway between the Webster Street Tube and Broadway in Oakland. In the project vicinity, Webster Street is two lanes wide in both directions, with a curb, gutter, and sidewalk along both sides of the roadway. The posted speed limit is 35 mph, and parking is provided on the west side of the roadway. Webster Street is designated as SR-260 and SR-61, and is part of the CMP roadway network, between the Webster Street Tube/Posey Tube and Central Avenue. The roadway primarily serves retail and residential development.
- **Broadway** is a major north-south arterial stretching from Jack London Square in the south to SR-24 in the north. In the vicinity of the Project, Broadway consists of two lanes in the northbound direction and two lanes in the southbound direction. Broadway is the primary north-south roadway in the downtown area.

- **5th Street** is an east-west collector that runs between Peralta Street and Oak Street in Oakland. The one-way eastbound 5th Street has one to three travel lanes and a curb, gutter, and sidewalk along the south side of the roadway. The posted speed limit is 25 mph, and parking is allowed on both sides of the roadway. As a one-way couplet, 5th Street operates in the eastbound direction, with 6th Street operating in the westbound direction. The 5th Street roadway primarily serves industrial development.
- **6th Street** is an east-west collector that runs between Fallon Street and Market Street. The one-way westbound 6th Street has two to three travel lanes and a curb, gutter, and sidewalk along the north side of the roadway. The posted speed limit is 25 mph, and parking is allowed on both sides of the roadway. As a one-way couplet, 6th Street operates in the westbound direction, with 5th Street operating in the eastbound direction. The 6th Street roadway primarily serves retail and residential development.
- **7th Street** is an east-west arterial that runs between Fallon Street and Navy Roadway, where 7th Street becomes Middle Harbor Road. The one-way eastbound 7th Street is located between Fallon Street and Castro Street with four travel lanes and a curb, gutter, and sidewalk long both sides of the roadway. As a one-way couplet, 7th Street operates in the eastbound direction, with 8th Street operating in the westbound direction. The 7th Street roadway primarily serves retail and residential development and has a posted speed limit of 25 mph.
- **8th Street** is an east-west arterial that runs between Fallon Street and Castro Street. The one-way westbound 8th Street has four travel lanes and a curb, gutter, and sidewalk along both sides of the roadway. As a one-way couplet, 8th Street operates in the westbound direction, with 7th Street operating in the eastbound direction. The 8th Street roadway primarily serves retail and residential development and has a posted speed limit of 25 mph.

Existing Traffic Conditions

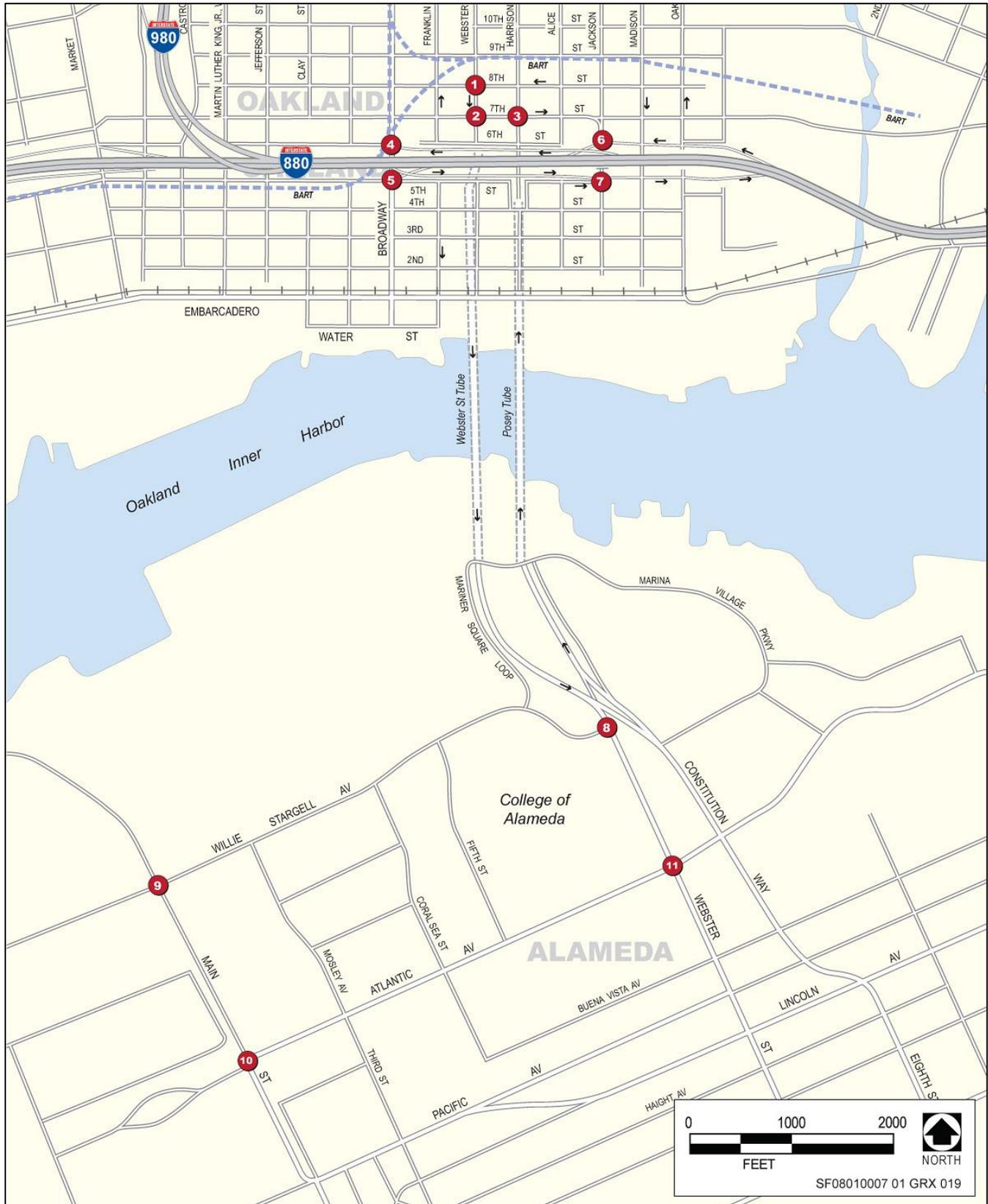
VA Transfer Parcel

Because the public does not have site access, the only traffic on the VA Transfer Parcel is generated by Navy-authorized vehicles providing conservation management services for the existing California Least Tern Colony or assisting ongoing remediation activities.

Surrounding Area (Study Intersections and Existing LOS)

Eleven intersections in Alameda and downtown Oakland were selected for study (see Figure 3.3-2) because these intersections would most likely be affected by the Proposed Action. Traffic counts for these 11 intersections were collected on Wednesday, November 16, 2011, and Saturday, December 3, 2011. Four of the study intersections are in the City of Alameda and the other seven are in City of Oakland. The existing traffic volumes in the vicinity of the VA Transfer Parcel were determined by collecting weekday A.M. and P.M. peak-period turning movement counts (between 7 A.M. and 9 A.M. and between 4 A.M. and 6 P.M.) and Saturday peak-period turning movement counts (between 10 A.M. and noon) at the study intersections. The traffic count data are presented in Appendix D (Transportation Impact Study) to this EA.

The LOS definitions for signalized intersections as presented in the 2000 *Highway Capacity Manual* (HCM) are described below. All study intersections are signalized; as such, the LOS definitions for unsignalized intersections are not presented. The LOS is based on average delay (in seconds per vehicle) for the various movements within an intersection. A combined weighted-average delay and an LOS are identified for an intersection. LOS is a



Source: AECOM, 2012

Figure 3.3-2:

Intersection Analysis Locations in the Study Area

qualitative indication of the level of delay and congestion experienced by motorists. LOS is designated by the letters A through F, with A corresponding to the lowest level of congestion and F corresponding to the highest level of congestion.

The City of Alameda considers an intersection to be operating acceptably at LOS D or better, while the City of Oakland considers an intersection to be operating acceptably at LOS E or better if it is located in the downtown area of Oakland. LOS for signalized intersections are defined in Table 3.3-1. In addition, the CMP legislation requires a LOS standard of LOS E for all CMP roadways. All study roadways are operating at LOS E or better, and therefore currently operate at acceptable levels.

Table 3.3-1: Level-of-Service Definitions for Signalized Intersections

LOS	Description	Average Delay (seconds/vehicle)
A	Little or no delay	< 10.0
B	Short traffic delay	> 10.0 and < 20.0
C	Average traffic delay	> 20.0 and < 35.0
D	Long traffic delay	> 35.0 and < 55.0
E	Very long traffic delay	> 55.0 and < 80.0
F	Extreme traffic delay	> 80.0

Notes: Delay in seconds per vehicle.
For signalized intersections, average delay represents the average of all approaches.
Source: TRB, 2000

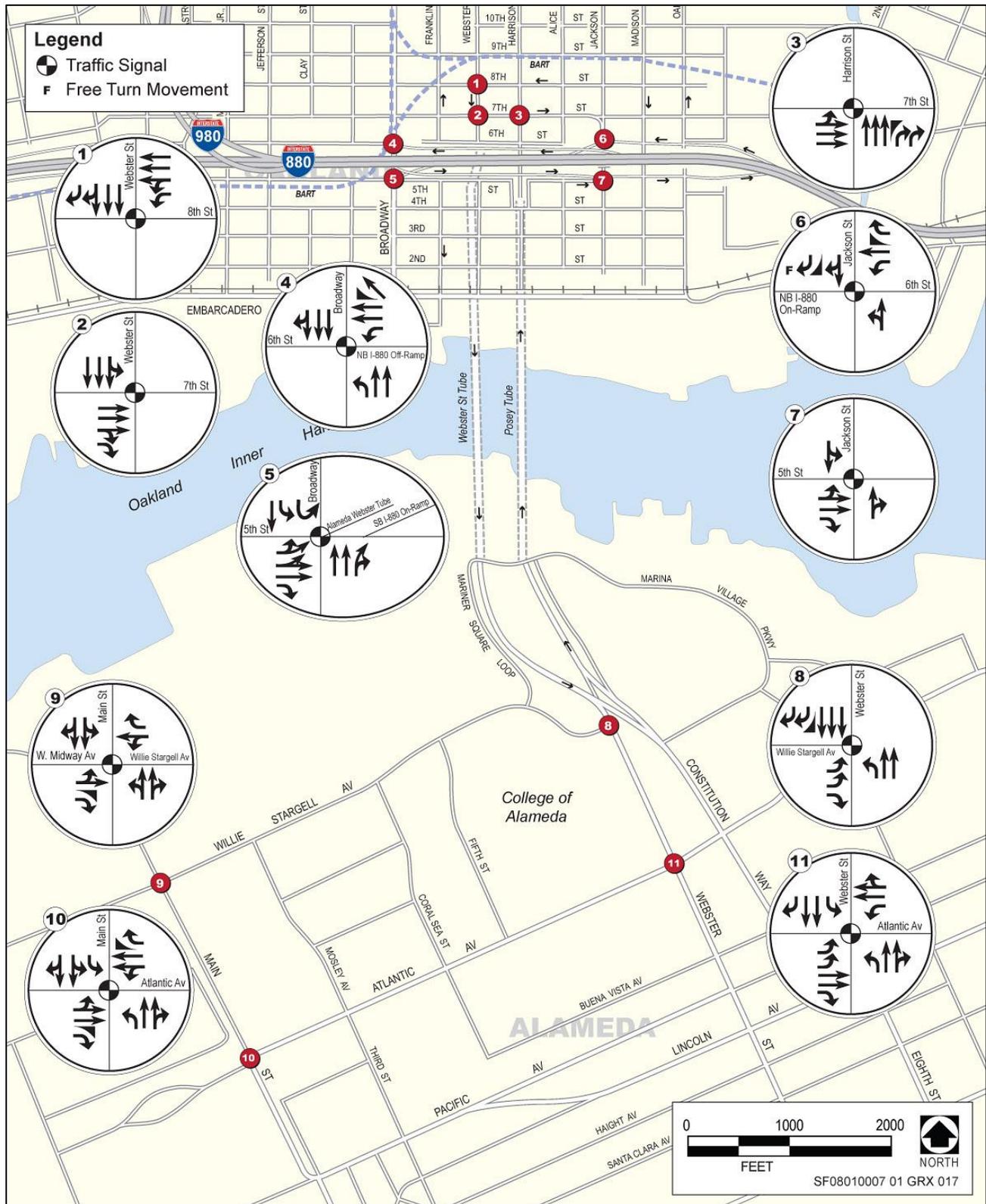
Table 3.3-2 presents the LOS summary of the study intersections under existing (2011) conditions. Lane geometries² for each study intersection are shown in Figure 3.3-3. The existing (2011) weekday A.M. and P.M. peak-hour volumes and Saturday peak-trip volumes of these intersections are presented in Figure 3.3-4. All the study intersections are operating at an acceptable LOS D or better during the weekday A.M. and P.M. peak hours and Saturday peak hour, as defined by the LOS standards of the Cities of Alameda and Oakland. Detailed LOS calculations are provided in Appendix D (Transportation Impact Study).

Table 3.3-2: Level-of-Service Definitions for Roadway Segments

LOS	Volume-to-Capacity Ratio	Description
A	0.00 to 0.60	Represents free flow. Individual users are virtually unaffected by others in the traffic stream.
B	0.61 to 0.70	Stable flow, but the presence of other users in the traffic stream begins to be noticeable.
C	0.71 to 0.80	Stable flow, but the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
D	0.81 to 0.90	Represents high-density, stable flow.
E	0.91 to 1.00	Represents operating conditions at or near the capacity level.
F	>1.00	Represents forced or breakdown flow.

LOS = level of service Source: TRB, 1985

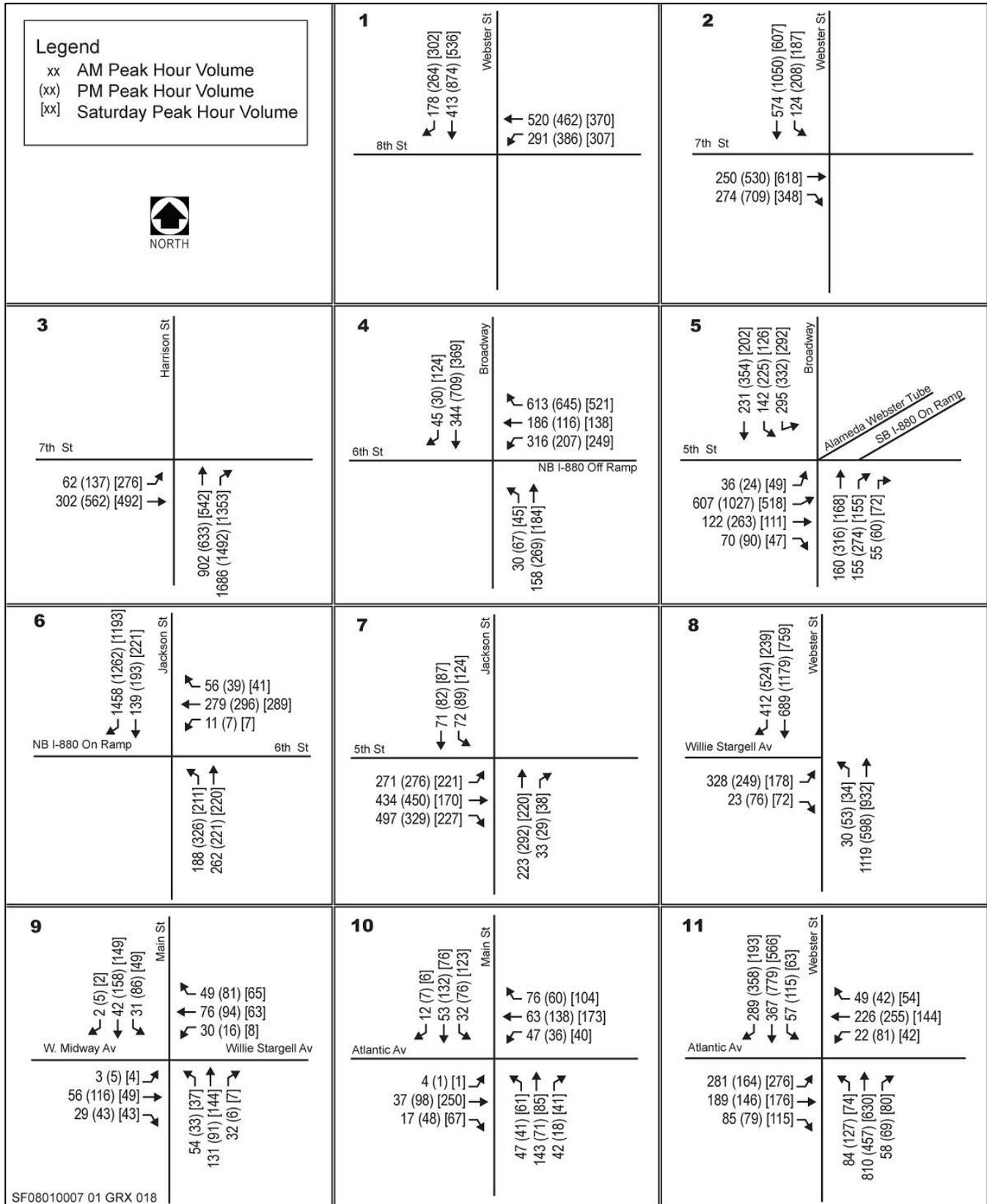
² The lane geometry is the lane configuration at each approach of an intersection (e.g., left-turn lane, through lane, and right-turn lane).



Source: AECOM 2012

Figure 3.3-3:

Lane Geometry of Study Intersections



Source: AECOM 2012

Figure 3.3-4: Existing (2011) Traffic Volumes at Study Intersections

Roadway Segments

Operations of the roadway segments were assessed using a volume-to-capacity (V/C) ratio methodology. For freeway segments, a per-lane capacity of 2,000 vehicles per hour was used, consistent with ACTC's 2011 CMP document. Levels of service for roadway segments are defined in Table 3.3-2.

The existing traffic volumes for roadway segments were collected from the Performance Measurement System Web site operated by the California Department of Transportation (Caltrans). The roadway segment volumes on I-880 were collected for the A.M. and P.M. peak hours during a Wednesday for the peak month of travel in 2011. In addition, weekday roadway volumes for the Webster Street Tube/Posey Tube for 2010 were collected from City of Alameda Department of Public Works staff members. The data from the Performance Measurement System was used to determine the peak month of travel for 2010, and the volumes collected for the Webster Street Tube/Posey Tube from the City of Alameda were adjusted to reflect volumes to be associated with the peak month of travel.

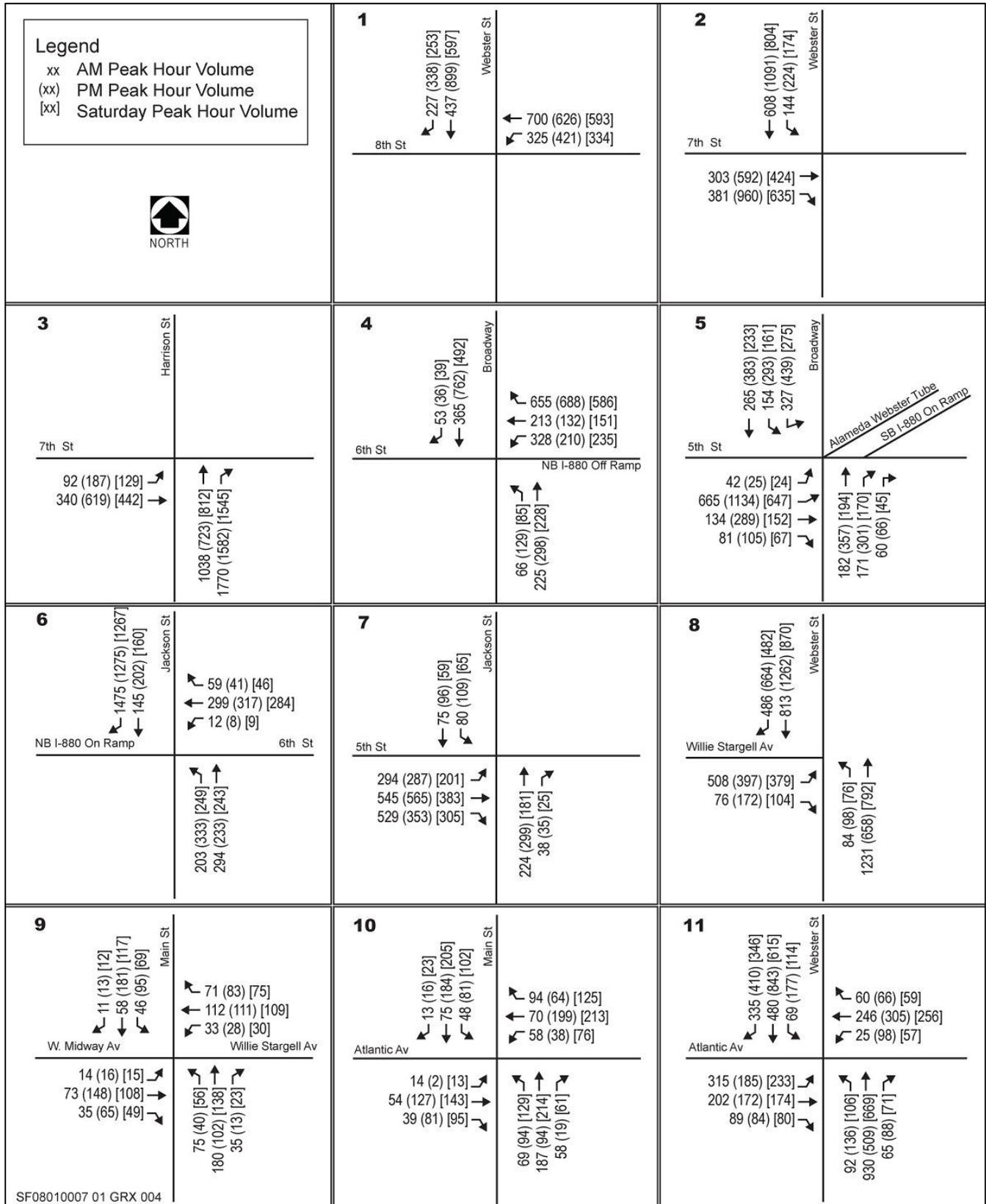
2017 Background Traffic Conditions

The Year 2017 background traffic conditions for LOS and roadway segments are presented, because 2017 represents the start of service of the proposed VHA OPC, VBA Outreach Office, and the first phase of the proposed NCA National Cemetery. The 2017 background traffic conditions include planned and approved developments and transportation network changes in the study area illustrated in Figure 3.3-1. In addition to traffic from known development projects, background traffic growth from throughout Alameda County has been estimated as described below.

Background traffic volumes for the 11 study intersections and ten roadway segments in 2017 were determined by applying growth factors to existing (2011) traffic volumes. Specifically, the future volumes for the four study intersections in Alameda were derived from the City of Alameda's travel demand model, and future volumes for the seven study intersections in Oakland were derived from the ACTC travel demand model. The weekday a.m. and p.m. peak-hour volumes and Saturday peak-hour volumes for the study intersections in 2017 are shown in Figure 3.3-5.

Table 3.3-3 presents the LOS summary for the study intersections under 2017 background traffic conditions. As shown in Table 3.3-3, all study intersections are projected to operate at acceptable levels (LOS D or better in Alameda and LOS E or better in downtown Oakland). Detailed LOS calculations are provided in Appendix D (Transportation Impact Study). The LOS remains unchanged between 2011 existing conditions and future 2017 conditions for four of the study intersections. By contrast, the following intersections would experience a decrease in LOS between 2011 and 2017 conditions:

- 7th Street/Harrison Street from LOS C to LOS D during the weekday P.M. peak hour;
- Broadway/6th Street from LOS B to LOS C during the weekday P.M. peak hour;
- Broadway/5th Street from LOS D to LOS E during the P.M. peak hour;
- Jackson Street/6th Street from LOS A to LOS B during the weekday P.M. peak hour;
- Jackson Street/5th Street from LOS B to LOS C during the weekday A.M. peak hour;
- Willie Stargell Avenue/Webster Street from LOS A to LOS B during the Saturday peak hour; and
- Atlantic Avenue/Webster Street from LOS C to LOS D during the weekday A.M. peak hour.



Source: AECOM 2012

Figure 3.3-5: Background (2017) Traffic Volumes at Study Intersections

Table 3.3-3: Intersection Levels of Service—Existing (2011) and 2017 Conditions

	Intersection	Peak Hour ¹	Existing (2011) Conditions		Near-Term (2017) Conditions	
			LOS	Delay ²	LOS	Delay ²
1	8th Street/Webster Street	Weekday A.M.	C	24.7	C	25.8
		Weekday P.M.	C	26.3	C	27.4
		Saturday	C	24.5	C	25.5
2	7th Street/Webster Street	Weekday A.M.	B	11.6	B	11.8
		Weekday P.M.	B	16.3	B	17.6
		Saturday	A	8.4	A	9.6
3	7th Street/Harrison Street	Weekday A.M.	B	15.3	B	16.1
		Weekday P.M.	C	25.9	D	41.4
		Saturday	B	11.6	B	13.2
4	Broadway/6th Street	Weekday A.M.	B	16.2	B	17.7
		Weekday P.M.	B	18.5	C	21.1
		Saturday	B	16.1	B	17.7
5	Broadway/5th Street	Weekday A.M.	C	30.7	C	33.4
		Weekday P.M.	D	52.4	E	74.9
		Saturday	C	27.0	C	28.2
6	Jackson Street/6th Street	Weekday A.M.	A	7.3	A	8.1
		Weekday P.M.	A	9.3	B	10.1
		Saturday	B	10.6	B	13.4
7	Jackson Street/5th Street	Weekday A.M.	B	18.0	C	31.9
		Weekday P.M.	B	14.0	B	15.1
		Saturday	B	11.8	B	13.5
8	Willie Stargell Avenue/Webster Street	Weekday A.M.	B	12.5	B	16.2
		Weekday P.M.	B	12.5	B	14.5
		Saturday	A	9.4	B	12.2
9	Willie Stargell Avenue/Main Street	Weekday A.M.	A	4.8	A	5.4
		Weekday P.M.	A	5.3	A	5.7
		Saturday	A	4.5	A	5.3
10	Atlantic Avenue/Main Street	Weekday A.M.	B	11.1	B	12.7
		Weekday P.M.	B	11.8	B	14.7
		Saturday	B	12.1	B	15.8
11	Atlantic Avenue/Webster Street	Weekday A.M.	C	29.9	D	43.7
		Weekday P.M.	C	24.7	C	26.7
		Saturday	C	21.0	C	23.7

Notes:

Bold indicates intersection operating at unacceptable levels (LOS F in downtown Oakland and LOS E or F in Alameda).

¹ “Saturday” indicates Saturday peak-trip-generation hour of the project.

² Delay presented in seconds per vehicle.

Source: AECOM, 2012

Despite these decreases in LOS, these seven intersections would still operate acceptably, as noted previously.

Table 3.3-4 presents the LOS summary for the 10 roadway segments under 2017 background traffic conditions. As shown, all roadway segments are projected to operate at acceptable levels as indicated by the City of Oakland’s criteria.

Table 3.3-4: Roadway Segment Levels of Service—Existing (2011) and Near-Term (2017) Conditions

Roadway Segment	Existing (2011) Conditions						2017 Conditions					
	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS
Northbound												
SR 260 Posey Tube	3,161	0.79	C	2,392	0.60	A	3,240	0.81	D	2,452	0.61	B
I-880 between 6th Street and I-980	3,580	0.36	A	4,285	0.43	A	3,766	0.38	A	4,507	0.45	A
I-880 between I-980 and 5th Street	1,943	0.24	A	2,648	0.33	A	2,015	0.25	A	2,746	0.34	A
I-880 between 5th Street and Union Street	4,901	0.82	D	4,712	0.79	C	5,063	0.84	D	4,868	0.81	D
I-880 between Union Street and 7th Street	3,866	0.48	A	3,802	0.48	A	4,004	0.50	A	3,938	0.49	A
I-880 between Embarcadero and 22nd Avenue	3,302	0.55	A	3,515	0.59	A	3,393	0.57	A	3,612	0.60	B
Southbound												
SR 260 Webster Street Tube	1,985	0.50	A	3,231	0.81	D	2,034	0.51	A	3,312	0.83	D
I-880 between 7th Street and Union Street	3,422	0.43	A	3,564	0.45	A	3,604	0.45	A	3,753	0.47	A
I-880 between 5th Street and 10th Avenue	3,818	0.48	A	3,491	0.44	A	3,940	0.49	A	3,602	0.45	A
I-880 between 10th Avenue and Embarcadero	3,221	0.54	A	3,135	0.52	A	3,321	0.55	A	3,233	0.54	A

Notes:
I-880 = Interstate 880; I-980 = Interstate 980; SR = State Route; V/C ratio = volume-to-capacity ratio
Bold indicates a roadway segment operating at an unacceptable level (i.e., LOS F)
Source: AECOM, 2012

Transit

VA Transfer Parcel

No transit service currently accesses the VA Transfer Parcel.

Surrounding Area

The primary transit service in the surrounding area is provided by Alameda–Contra Costa Transit District (AC Transit). AC Transit provides local and regional bus service within Alameda and Contra Costa Counties and between the East Bay and the San Francisco Transbay Terminal. The AC Transit bus routes are summarized in Table 3.3-5 by bus line, frequency, and nearest stop.

Table 3.3-5: AC Transit Service in the Project Vicinity

Line	Route	Frequency (minutes)		Nearest Stop to the VA Transfer Parcel (miles)
		A.M. Peak	P.M. Peak	
31	Alameda Point to MacArthur BART via Midway Avenue (Local)	30 minutes	30 minutes	Saratoga Street and W Midway (1.0 mile)
51A	Rockridge BART to Fruitvale BART (Local)	10 minutes	10 minutes	Webster Street and Atlantic Avenue (3.0 miles)
20	Diamond District to Downtown Oakland (Local)	30 minutes	30 minutes	Webster Street and Atlantic Avenue (3.0 miles)
O	Fruitvale BART to Transbay Temporary Terminal (Transbay)	30 minutes	10–20 minutes	Webster Street and Atlantic Avenue (3.0 miles)
W	Broadway and Blanding Avenue to Transbay Temporary Terminal (Transbay)	20 minutes (Westbound only)	20 minutes (Eastbound only)	Webster Street and Atlantic Avenue (3.0 miles)

Notes:

AC Transit = Alameda–Contra Costa Transit District; BART = Bay Area Rapid Transit; VA = Department of Veterans Affairs.
 Source: Data provided by AC Transit in 2012

Line 851 provides overnight service between downtown Berkeley and the Fruitvale Bay Area Rapid Transit (BART) station. Buses operate every 60 minutes between midnight and 4 A.M. The nearest stop to the VA Transfer Parcel is located approximately 3 miles away at Webster Street and Atlantic Avenue.

The City of Alameda operates two free shuttles: the City of Alameda Paratransit Shuttle for Alameda and the Oakland Inner Harbor Crossing Shuttle. The City of Alameda Paratransit Shuttle, which serves Alameda seniors 55 years and older and individuals with disabilities, makes runs every 60 minutes between 9 A.M. and 3 P.M. on Tuesday, Wednesday, and Thursday. The West Loop route operates on Tuesdays and the nearest stop to the VA Transfer Parcel is located approximately 1.5 miles away at West Midway Avenue and Orion Street. The Oakland Inner Harbor Crossing Shuttle between Alameda’s west end and the Lake Merritt BART station makes runs every weekday between the Lake Merritt BART station and two stops near the College of Alameda every 30 minutes between 7 A.M. and 11:30 A.M. and between 3:30 P.M. and 7 P.M. The shuttle seats 18 passengers and can carry 13 bicycles.

Additionally, VA owns and operates two 12-passenger shuttles and one 6-passenger van. The two 12-passenger vans currently provide shuttle service between the Oakland OPC and Martinez OPC (four trips per day) and between the Oakland OPC and the San Francisco VA Medical Center (two trips per day). The 6-passenger van currently provides local trips between the Oakland OPC and Behavioral Health Clinic, both located in Oakland. The transportation is provided free of charge to accommodate Veterans with scheduled appointments. Veterans must make reservations in advance to schedule shuttle service. Once the proposed OPC at Alameda Point is operational, VA’s Oakland OPC and Oakland Behavioral Health Clinic would be closed. This shuttle service

would be rerouted to serve the VA Development Area and is expected to continue operation between the project site and Martinez and San Francisco.

BART provides local and regional rail service throughout the Bay Area. At approximately 4.5 miles away, the Lake Merritt BART station is the closest station to the Alameda Point area and can be accessed via bus or shuttle. AC Transit bus lines 11, 62, 88, and 611 all have bus stops at the Lake Merritt station. The City of Alameda's Oakland Inner Harbor Crossing Shuttle also has a stop at the Lake Merritt station. Three BART lines serve the Lake Merritt station (Richmond to Fremont, Daly City to Fremont, and Daly City to Dublin/Pleasanton). Service to and from the Lake Merritt BART station generally operates every 15 minutes or less during weekday peak periods.

The Alameda/Oakland Ferry is a public-transit ferry service connecting the cities of Alameda and Oakland to San Francisco across San Francisco Bay. The City of Alameda and Port of Oakland contract with the privately run Blue & Gold Fleet to provide the service. The Alameda (Main Street) ferry terminal is located at 2990 Main Street, approximately 1 mile from the VA Transfer Parcel. Ferries run between Alameda/Oakland and San Francisco approximately every 60 minutes between 6 A.M. and 9 P.M. on weekdays. Every ferry ticket comes with an attached AC Transit bus transfer, allowing ferry riders free AC Transit connections to and from the Alameda (Main Street) or Clay Street (Jack London Square) ferry terminals. An additional charge is required for AC Express buses.³

Pedestrian

VA Transfer Parcel

Access to the VA Transfer Parcel is currently restricted, and no formal pedestrian facilities (i.e., improved sidewalks) exist on the property.

Surrounding Area

All major streets in the surrounding area have sidewalks, and all major intersections have marked crosswalks. Generally, little pedestrian activity was observed in the area immediately adjacent to the VA Transfer Parcel (i.e., Alameda Point area) during the weekday and weekend peak periods. During these peak periods, nearby sidewalk and crosswalks were observed to be operating at free-flow conditions, with pedestrians moving at normal walking speeds and with freedom to bypass other pedestrians.

Bicycle

Caltrans's *Highway Design Manual* defines three types of bikeways:

- *Class I bicycle facilities (bike paths)* provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow minimized. Examples include shoreline bike paths, abandoned railroad rights-of-way, or paths within parks.
- *Class II bicycle facilities (bike lanes)* provide a striped lane for one-way bicycle travel on a street or highway, adjacent to the curb lane.

³ Express buses operate more frequently during peak commute times and have fewer stops along routes than traditional buses.

- *Class III bicycle facilities (bike routes)* provide for shared use with pedestrian or motor vehicle traffic. Bike routes are typically used to provide continuity to other bicycle facilities (usually bike lanes), or to designate preferred routes through high-demand corridors.

VA Transfer Parcel

Access to the VA Transfer Parcel is currently limited, and no formal bicycle facilities or lanes exist on the property.

Surrounding Area

Several bicycle facilities are provided or planned for implementation in the area immediately adjacent to the VA Transfer Parcel (i.e., Alameda Point area), as identified in the *City of Alameda Bicycle Plan Update* (Alameda, 2010). The existing bicycle facilities in the vicinity of the VA Transfer Parcel are as follows:

- Class I bicycle paths:
 - Main Street (east side), between Ralph Appezato Memorial Parkway and Singleton Avenue;
 - Main Street (west side), between the Main Street ferry terminal and north of the Lincoln Avenue/Central Avenue intersection;
 - Willie Stargell Avenue, between Mariner Square Loop and Webster Street; and
 - Constitution Way, between Marina Village Parkway and south of Atlantic Avenue.
- Class II bicycle lanes:
 - Atlantic Avenue, between Constitution Way and Eagle Avenue;
 - Marina Village Parkway, between Mariner Square Drive and Constitution Way;
 - Willie Stargell Avenue, between 5th Street and Mariner Square Loop; and
 - 5th Street, between Ralph Appezato Memorial Parkway and Willie Stargell Avenue.
- Class III bicycle route:
 - Willie Stargell Avenue, between Main Street and Mariner Square Loop.

The *City of Alameda Bicycle Plan Update* also identifies several planned bicycle facilities in the vicinity of the VA Transfer Parcel:

- Extension of the bicycle lanes on Ralph Appezato Memorial Parkway and Willie Stargell Avenue;
- Extension of the Alameda Point and Main Street Bay Trail segments;
- Extension of the bicycle route on Pacific Avenue;
- Addition of a Class III bicycle route on 3rd Street, between Ralph Appezato Memorial Parkway and Central Avenue; and
- Development of bicycle lanes along major streets within the Alameda Point area.

Bicyclists are allowed to use the Oakland Inner Harbor Crossing Shuttle, which operates every weekday between the Lake Merritt BART station and two stops near the College of Alameda. The shuttle runs every 30 minutes between 7 A.M. and 11:30 A.M. and between 3:30 P.M. and 7 P.M. The shuttle seats 18 passengers and can carry 13 bicycles. All AC Transit buses have front-mounted racks that can accommodate two bicycles at a time. Bicycles are permitted on BART trains except as indicated on the BART schedule during weekday-commute peak hours. All ferries are equipped with racks where bicycles can be parked for the duration of the trip.

The *City of Oakland Bicycle Plan Update* (Oakland, 2007) identifies several existing and planned bicycle facilities. The existing bicycle facilities in the vicinity of the VA Transfer Parcel are as follows:

- Class I bicycle paths:
 - Posey Tube/Harrison Street (northbound), between 6th Street and Constitution Way; and
 - Jack London Square Waterfront and Lake Merritt Trail, between the ferry terminal and 1st Street/Embarcadero.
- Class II bicycle lanes:
 - 8th Street, between Jefferson Street and Broadway; and
 - Broadway, between 25th Street and Interstate-580.
- Class III bicycle routes:
 - Broadway, between 2nd Street and 25th Street;
 - 2nd Street, between Oak Street and Brush Street; and
 - Washington Street, between 2nd Street and 10th Street.

The following bikeway projects are under development in the vicinity of the VA Transfer Parcel:

- Broadway Corridor bicycle lane;
- 10th Street (Oak Street to 5th Avenue) bicycle lane;
- Harrison Street/Oakland Avenue Bicycle Lane and Route Project; and
- East 7th Street Bikeway Improvement Project.

Parking and Loading

VA Transfer Parcel

There are no designated parking or loading facilities on the VA Transfer Parcel.

Surrounding Area

In general, on-street parking in the surrounding area consists of time-limited parallel parking. Existing on-street parking conditions were qualitatively assessed through field observations conducted during weekday peak periods. Based on the field observations, it was determined that on-street parking is generally well utilized throughout the day, although particular occupancy percentages can vary depending on location and peak period.

3.3.3 Environmental Consequences

Assessment Methods

Overview of Assessment

The following scenarios were evaluated to identify the potential transportation impacts of the Proposed Action:

- Existing (2011) Conditions.
- After Completion of Initial Construction—2017:
 - No Action;
 - Plus Project Alternative 1; and
 - Plus Project Alternative 2.
- Cumulative Conditions—2035:
 - No Action;
 - Plus Project Alternative 1 (Including subsequent cemetery construction); and
 - Plus Project Alternative 2 (Including subsequent cemetery construction).

Existing (2011) Conditions were analyzed to describe the current conditions in Year 2011. Initial facility (2017) conditions were analyzed to describe conditions when the first phase of construction (i.e., VHA OPC, VBA Outreach Office, Conservation and Management Office, NCA Cemetery [Phase 1], and associated infrastructure) would be complete. The trip generation for the subsequent cemetery expansion was calculated, but no quantitative analysis was conducted for this scenario. The trip generation for the cemetery expansion was needed because each subsequent phase after initial construction would generate the same number of trips. Year 2035 was chosen for analysis because this is the forecast year for the regional travel demand model.

A conservative analysis was completed for Cumulative (2035) Plus Project Alternative Conditions. All trips generated for the complete Proposed Action were added to Cumulative (2035) No Project Conditions, even though the NCA Cemetery would not be fully built out until Year 2116. In addition, this approach for Cumulative Conditions was used to be consistent with other VA documents for cemeteries. See Section 3.15 (Cumulative Impacts) for a discussion of forecast Year 2035.

Intersections

Existing and 2017 overall peak-hour traffic conditions were evaluated at the intersections that would most likely be affected by the EA Alternatives. The assessment methodology consists of estimating travel demand associated with the EA Alternatives and then adding the vehicle trips to the future background conditions in 2017. Next, LOS calculations were performed and compared to the standards of the Cities of Alameda and Oakland. See below for details on the travel demand forecasts.

Transit

Impacts on transit operations and facilities as a result of trips related to the Proposed Action were assessed by comparing the projected transit ridership against the available capacity on transit operators providing access to the surrounding area.

Roadway Segments

Existing and 2017 peak-hour traffic conditions were evaluated only at the regional roadway segments that would generate trips on the CMP network or the MTS. The CMP network is a designated roadway system that includes all interstate highways, State routes, and portions of the street and roadway system operated and maintained by the local jurisdictions. The MTS is a broader designated system that includes the entire CMP network and transit services, rail, maritime ports, airports, and transfer hubs. The entire MTS and the CMP network are defined in the ACTC's CMP. The following roadway segments were selected for analysis:

- 1) SR 260 (Posey Tube) south of I-880;
- 2) SR 260 (Webster Street Tube) south of I-880;
- 3) I-880 between 7th Street and Union Street;
- 4) I-880 between 5th Street and 10th Avenue;
- 5) I-880 between 10th Avenue and Embarcadero ;
- 6) I-880 between 6th Street and I-980;
- 7) I-880 between I-980 and 5th Street;
- 8) I-880 between 5th Street and Union Street; and
- 9) I-880 between Embarcadero and 22nd Avenue.

Traffic conditions at the roadway segments were analyzed during the weekday a.m. and p.m. peak traffic hours. The weekday A.M. peak period is typically between 7 A.M. and 9 A.M., while the weekday p.m. peak period is typically between 4 P.M. and 6 P.M. The Saturday peak traffic period was not analyzed because roadway volumes are typically higher on weekdays than on weekend days, and therefore, more traffic impacts would occur on weekdays. This report focuses on the highest volume traffic hour for each roadway segment during the weekday A.M. and P.M. peak periods.

Pedestrians

Pedestrian conditions throughout the study area were qualitatively assessed, including the number of new pedestrian trips that would be added to the existing pedestrian network. The adequacy of pedestrian connections to nearby transit routes was also determined. Furthermore, potential pedestrian safety issues were identified, including potential conflicts between vehicular traffic and pedestrian circulation. Impacts on pedestrian conditions as a result of activities related to the Proposed Action, including traffic generation, were also qualitatively assessed.

Bicycles

Bicycle conditions throughout the study area, including safety and right-of-way issues, were evaluated qualitatively as they relate to the study area for the Proposed Action as illustrated in Figure 3.3-1. Impacts on bicycle conditions as a result of activities related to the Proposed Action, including traffic generation and driveway movements, were also qualitatively assessed.

Parking and Loading

The Proposed Action's proposed supply of parking and loading spaces was evaluated against the requirements of the City of Alameda Municipal Code.

Proposed Action Travel Demand Methodology

Travel demand refers to the new trips by vehicles, transit, pedestrians, and bicycles and other trips that would be generated by a proposed action. This section provides an estimate of the travel demand that would be generated by the Proposed Action. The travel demand estimates were based on information contained in the 2000 U.S. Census's Journey-to-Work data and the Institute of Transportation Engineers' (ITE's) *Trip Generation* (8th Edition).

Because facilities associated with either Alternative 1 or Alternative 2 would be located on former NAS Alameda property that is currently inaccessible to the public, and because both alternatives propose the same land uses types and sizes, Alternatives 1 and 2 would have the same travel demand characteristics and would affect the same study intersections.

Trip Generation

Trip generation relates land uses to the number of persons or vehicles entering or exiting the site. The trip generation for the Proposed Action was based on the proposed land uses and development program described in Chapter 2.0, (Alternatives, including the Proposed Action). Standard trip generation rates were obtained from ITE *Trip Generation* (8th Edition) and information provided by VA. The ITE rates account for vehicle trips only. For this analysis, trips made by all modes of travel were evaluated. The vehicle trips generated by the Proposed Action were adjusted using the national-average vehicle occupancy rate of 1.08 passengers per vehicle (U.S. Census, 2000) to determine total "person trips."

The person-trip generation for the Proposed Action was developed for Years 2017 and 2027. The following presents the person-trip generation for forecast Year 2017. See Section 3.15 (Cumulative Impacts) for a discussion of forecast Year 2036.

Initial Construction Completion 2017

The 2017 background traffic conditions are used as a future baseline against which to compare 2017 plus Proposed Action Conditions to identify impacts related to implementing Phase 1 of the Proposed Action. In 2017, the VHA OPC and Conservation Management Office would be fully built out and in operation, and the first 18 acres of the NCA National Cemetery providing space for 25,000 niches would be completed and in operation. The trip generation for the OPC and Conservation Management Office was based on ITE trip generation rates (ITE land use

code 630 and 710). The OPC would have approximately 250 staff members and would include 10,000 square feet of office space for the VBA Outreach Office and NCA in the building. A 2,500-square-foot Conservation Management Office would be constructed to support the management of the California Least Tern Colony.

A cemetery is a unique land use and has unique operating characteristics, and thus, information from VA’s NCA was used in this analysis instead of trip generation rates from ITE’s *Trip Generation* manual. Vehicle trips to and from the cemetery would come from staff members, visitors, delivery people, and corteges. The following information was used to develop the trip generation for the cemetery:

- Memorial or inurnment services would occur Monday through Friday between 9 A.M. and 3 P.M. (based on NCA statistics);
- Approximately six services would take place Monday through Friday, with up to 15 vehicles per service, and would last approximately 15–30 minutes (based on NCA statistics);
- Seven cemetery staff members would work in the OPC building Monday through Friday between 8 A.M. and 5 P.M.;
- One delivery would occur in the weekday a.m. peak hour and p.m. peak hour;
- Visitors would amount to 40 vehicles each weekday and 60 vehicles each weekend day (based on NCA statistics); and
- Buildout of the cemetery would occur in 10-year increments providing space for 25,000 niches (based on NCA projections).

Trip generation associated with the VHA OPC, Conservation Management Office, VBA Outreach Office, and cemetery employees was converted to person trips using the 1.08 occupancy factor. Cemetery visitors and deliveries were assumed as one person per vehicle. According to VA, funeral corteges average three persons per vehicle. Table 3.3-6 presents the person-trip generation for Year 2017 for Alternatives 1 and 2.

Table 3.3-6: Year 2017 Person-Trip Generation for Alternatives 1 and 2

Land Use	Size	Weekday Daily	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour of Generator		
			In	Out	Total	In	Out	Total	In	Out	Total
Office	12,500 SF	149	19	2	21	4	16	20	2	2	4
Clinic	250 employees	2,093	239	93	332	136	196	332	10	10	20
Cemetery											
Employees	7 employees	30	8	0	8	0	8	8	0	0	0
Visitors		80	4	4	8	4	4	8	7	7	14
Corteges		540 ¹	0	0	0	0	0	0	0	0	0
Deliveries		8	1	1	2	1	1	2	0	0	0
Total		2,900	271	100	371	145	225	370	19	19	38

Notes: SF = square feet; While the number of employees is used as the independent variable to calculate the trip generation for the clinic, the number of trips generated are from both employees and patients.

¹ The total number of daily person trips associated with corteges is 540 for each phase.

Source: U.S. Census, 2000; AECOM, 2012

The Proposed Action would generate 2,900 person trips during the weekday, of which 371 would occur during the weekday a.m. peak hour, 370 would occur during the weekday p.m. peak hour, and 38 would occur during the Saturday peak hour.

Subsequent Cemetery Expansion 2027

As discussed previously, the NCA Cemetery would be built in 10-year increments. The person trips associated with the additional 25,000 niches to meet the projected burial needs for Phase 2 was estimated for Alternatives 1 and 2. The number of person-trips generated by the Proposed Action including the subsequent cemetery phases would be the same as that generated by the complete facility. The only new person trips that would be generated in Year 2027 under Alternatives 1 and 2 would be from cemetery visitors and corteges. The number of OPC, Conservation Management Office, and cemetery staff members and deliveries would remain the same as those from Year 2017. Table 3.3-7 presents the person-trip generation for Year 2027 (Alternatives 1 and 2).

Table 3.3-7: Year 2027 Person-Trip Generation for Alternatives 1 and 2

Land Use	Weekday	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour of Generator		
	Daily	In	Out	Total	In	Out	Total	In	Out	Total
Cemetery										
Visitors	80	4	4	8	4	4	8	7	7	14
Corteges	540 ¹	0	0	0	0	0	0	0	0	0
Total	620	4	4	8	4	4	8	7	7	14

Notes:

¹ The total number of daily person trips associated with corteges is 540 for each phase.

Source: AECOM, 2012

See Chapter 4 (Cumulative Impacts) for a discussion of forecast Year 2035.

Trip Distribution

Initial Construction Completion 2017

To evaluate the traffic-related effects of the Proposed Action, the trips that would be generated by the Proposed Action were distributed onto the roadway network. Trip distribution simulates the geographical pattern of travel, and was based on the residence zip codes of the employees who currently work at the existing Oakland OPC and Behavioral Health Clinic and the residence zip codes of the Veterans who currently receive treatment at the existing Oakland OPC and Behavioral Health Clinic as provided by VA. The zip code information of employees and patients would best represent the trip distribution patterns for the Proposed Action because staff members and patients would now work and receive treatment, respectively, at the new site. The estimated approach and departure directions and traffic distribution percentages for the Proposed Action are presented in Table 3.3-8.

Table 3.3-8: Trip Distribution for Alternatives 1 and 2, Phase 1

From/To	Percentage
I-880 North	19%
I-880 South	19%
I-980	7%
City of Oakland (Local)	49%
City of Alameda (Local)	6%
Total	100%

Notes: I-880 = Interstate 880; I-980 = Interstate 980
Source: AECOM, 2012

Subsequent Cemetery Expansion 2027

The person trips that would be generated for Year 2027 were not distributed onto the roadway network to obtain trip distribution numbers for Alternatives 1 and 2 from subsequent cemetery expansion. Rather, the trip distribution scenario in Year 2027 was qualitatively analyzed based on the person trips generated during the weekday, of which eight would occur during the weekday a.m. peak hour, eight would occur during the weekday p.m. hour, and 14 would occur during the Saturday peak trip hour. The trip distribution to and from the roadway network identified in Table 3.3-8 would be minimal. Consequently LOS calculations for study area intersections were not performed.

Transportation Mode Choice

The person trips associated with the Proposed Action were assigned to travel modes to determine the number of automobile, BART, AC Transit, and “other” trips. “Other” trips include those by motorcycles, taxis, bicycles, and pedestrians.

Given the close proximity and somewhat similar development pattern within the Broadway Auto Row/Medical Center neighborhood in Oakland, the *Downtown Transportation and Parking Plan* (Dowling Associates, 2003) provides empirical mode splits for commute trips by employees working in various parts of downtown Oakland. Adjustments were made to the mode split to account for Alameda Point’s more auto-oriented, suburban, and isolated location (on an island with limited transit service and limited connectivity with the existing regional roadway network). Differences in visitor mode choice between a general employment generator (such as an office building) and a VA clinic were also considered.

Table 3.3-9 shows the mode split for the Proposed Action. It was assumed that persons taking BART to the VA Development Area would then take a VA shuttle that would operate between the 12th Street Oakland City Center BART station (the closest BART station to Alameda Point) and the VA Development Area.

The trip generation by mode for the Proposed Action under both Alternatives 1 and 2 in Year 2017 is summarized in Table 3.3-10. Only OPC staff members and visitors, office staff members, and cemetery staff members were assumed to use all modes of transportation, whereas the major mode of transportation for cemetery corteges, deliveries, and visitors was assumed to be personal vehicles.

Table 3.3-9: Mode Split for Alternatives 1 and 2

Mode	Percentage
Car, truck, van (includes carpool)	91%
AC Transit	2%
BART	5%
Motorcycle	0%
Bicycle	0%
Walk	2%
Amtrak	0%
Total	100%

Notes: AC Transit = Alameda–Contra Costa Transit District; BART = Bay Area Rapid Transit
 Source: AECOM, 2012

Table 3.3-10: 2017 Trip Generation by Mode—Alternatives 1 and 2

Direction	Person Trips						Total	Vehicle-Trips ^{2,3}
	Auto	AC Transit	BART	Walk	Bike	Other ¹		
Weekday A.M. Peak Hour								
Inbound	248	5	13	5	0	0	271	230
Outbound	92	2	5	2	0	0	101	85
Total	340	7	18	7	0	0	372	315
Weekday P.M. Peak Hour								
Inbound	133	3	7	3	0	0	146	124
Outbound	203	4	11	4	0	0	222	188
Total	336	7	18	7	0	0	368	312
Saturday Peak Hour								
Inbound	18	0	1	0	0	0	19	17
Outbound	18	0	1	0	0	0	19	17
Total	36	0	2	0	0	0	38	34

Notes: AC Transit = Alameda–Contra Costa Transit District; BART = Bay Area Rapid Transit

¹ “Other” mode includes motorcycles and taxis.

² An average vehicle occupancy of 1.08 from the 2000 U.S. Census Summary File 3 QT-PT23 was used to convert person trips to vehicle trips.

³ Includes vehicle trips from cemetery visitors, corteges, and deliveries.

Sources: U.S. Census, 2000; AECOM, 2012

Trip Assignment

Trips generated by the various phases of the Proposed Action were assigned to the roadway network and study intersections based on the trip distribution pattern presented in Table 3.3-8.

Alternative 1

Construction

Traffic

Construction activities for Alternative 1, would take approximately 18 months to complete. Construction would generally occur Monday through Friday between 7 A.M. to 7 P.M. which are within City-designated construction hours per the City of Alameda Noise Ordinance Number 2712. Construction is not anticipated to occur on Saturdays, Sundays, or major legal holidays.

Construction activities would include import of fill/grading/excavation and below-grade concrete, above-grade structure, paving, and painting. The paving and painting activities would occur concurrently with the above-grade structure activity. Construction under Alternative 1 is expected to begin in July 2015, with an approximate completion date of December 2017. Details regarding the various construction activities (maximum daily trips, daily trucks, and daily personal vehicles) are included in Appendix D (Transportation Impact Study).

Throughout the construction period, construction-related trucks would flow into and out of the VA Development Area. It is anticipated that construction-related trucks would use I-880 and designated truck routes in Oakland and Alameda to access the VA Development Area. Because there are a limited number of intersections that can be used to access the VA Development Area from I-880, construction-related truck trips and Personnel Occupied Vehicles (POV) were assumed to travel through those intersections providing the most direct connection between I-880 and the VA Development Area. The details of construction traffic are summarized in Table 3.3-11.

Table 3.3-11: Estimate of Construction Traffic—Alternatives 1 and 2

Construction Activity	Approximate Start–End Date	Duration (Months)	Maximum Daily Trips (One-Way) by Activity			Peak-Month ¹ Daily Trips (One-way) for All Activities		
			Trucks	POV	Total	Trucks	POV	Total
Access Road	7/2015–12/2015	6	6	10	60	6	10	16
Cemetery Support	7/2015–12/2015	6	16	62	78	16	62	78
Conservation Management	7/2015–6/2016	12	16	62	78	6	10	16
Outpatient Clinic	7/2015–12/2016	18	16	62	78	6	10	16

Notes:

POV = Personnel Occupied Vehicles

¹ Peak month of construction occurs in December 2015

Source: AECOM, 2012

Construction associated with Alternative 1 would generate a maximum of 406 truck trips (one-way) and 92 POV (one-way) trips during the peak month of construction (Table 3.3-11). All construction staging areas would be located within the VA Development Area. It is anticipated that no regular travel lanes or AC Transit bus stops would need to be closed or relocated during the construction period, because the nearest AC Transit bus stop is a mile away from the VA Development Area (Table 3.3-5). As described above, a low level of pedestrian activity

was observed during the weekday and weekend peak periods in the Alameda Point area. Given the low volume of pedestrian activity, and because the VA Development Area is currently restricted, construction activities would not affect pedestrian circulation. Any temporary sidewalk or traffic lane closures would be coordinated with the City of Alameda to minimize impacts on traffic.

The construction-related truck trips and POV were assumed to travel through the study intersections identified for the Proposed Action. Thus, it is likely that the construction-related traffic for Alternative 1 would travel along Willie Stargell Avenue or Atlantic Avenue going to and from the VA Development Area. Some of the 406 truck trips (one-way) and 92 POV (one-way) trips during construction would travel along Willie Stargell Avenue, which is identified as a Class III bicycle route. With current bicycle and traffic volumes on the Alameda Point streets near the VA Development Area, bicycle travel generally occurs without major impedances or safety problems. Construction activities are not expected to substantially affect bicycle circulation.

Construction traffic for Alternative 1—both construction truck traffic and additional vehicular traffic from construction workers—would not substantially affect vehicular, pedestrian, and bicycle circulation and would be temporary. Intersection traffic operations were analyzed with the peak-month Phase 1 construction traffic added to Year 2017 background traffic. All study intersections are forecast to operate at acceptable levels according to the criteria of the Cities of Alameda and Oakland for the weekday a.m. and p.m. peak hours. Overall, construction-related transportation impacts would be temporary and would not have an adverse effect on weekday peak-hour traffic conditions. Accordingly, construction-related traffic impacts of Alternative 1 would not be significant.

Parking

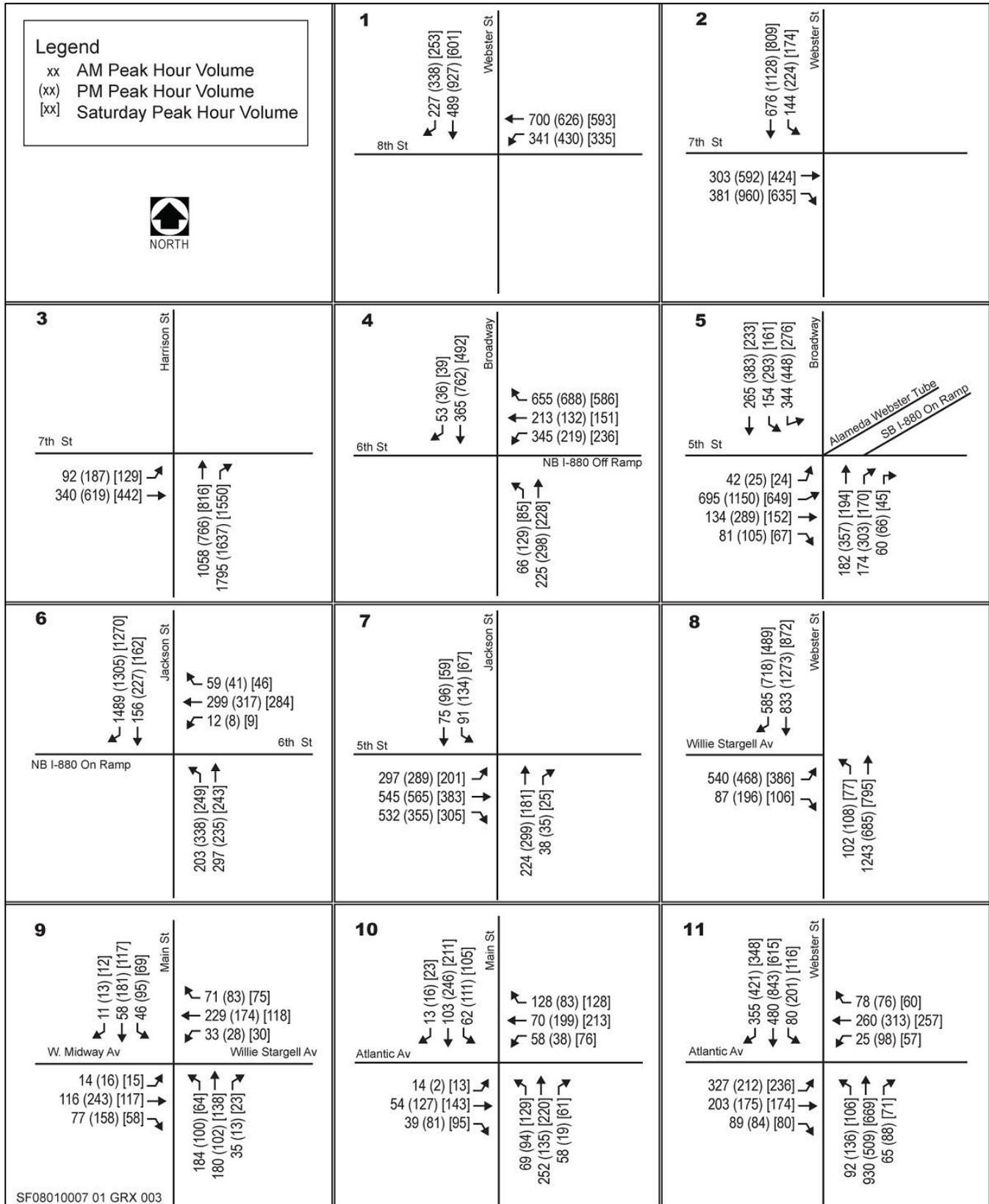
Construction workers who drive to the VA Development Area would generate temporary demand for parking. Parking demand generated by construction workers' personal vehicles is expected to be accommodated in the portions of the VA Development Area that are not under construction at any given time and/or that have already been developed with internal roadways or runways. Construction-related parking demand would be short-term and would not result in spillover parking demand onto neighboring properties. As a result, construction-related impacts of the various phases of Alternative 1 on parking demand would not be significant.

Operation

Traffic

Traffic volumes generated by operation under Alternative 1 were added to 2017 background traffic volumes to obtain the 2017 plus Proposed Action traffic volumes (Figure 3.3-6). The 2017 plus Alternative 1 conditions would not adversely affect any of the 11 study intersections during the weekday a.m. peak hour, weekday p.m. peak hour, and Saturday peak hour (Table 3.3-12). All study intersections would operate at LOS D or better. Therefore, operational impacts of Alternative 1 on traffic operations at intersections would not be significant.

The 2017 plus Alternative 1 conditions would not adversely affect any of the 10 study roadway segments during the weekday a.m. peak hour, weekday p.m. peak hour, and Saturday peak hour (Table 3.3-13). All study roadway segments would operate at LOS D or better. Therefore, operational traffic impacts of Alternative 1 on traffic operations on roadway segments would not be significant.



Source: AECOM 2012

Figure 3.3-6: 2016 Plus Proposed Action Intersection Traffic Volumes—Alternatives 1 and 2

Table 3.3-12: Intersection Levels of Service—2017 plus Alternatives 1 and 2 Conditions

Intersection	Peak Hour ¹	2016 Conditions		2017 plus Proposed Action Conditions	
		LOS	Delay ²	LOS	Delay ²
1 8th Street/Webster Street	Weekday A.M.	C	25.8	C	25.9
	Weekday P.M.	C	27.4	C	27.5
	Saturday	C	25.5	C	25.5
2 7th Street/Webster Street	Weekday A.M.	B	11.8	B	12.1
	Weekday P.M.	B	17.6	B	18.3
	Saturday	A	9.6	A	9.6
3 7th Street/Harrison Street	Weekday A.M.	B	16.1	B	16.3
	Weekday P.M.	D	41.4	D	50.7
	Saturday	B	13.2	B	13.2
4 Broadway/6th Street	Weekday A.M.	B	17.7	B	17.8
	Weekday P.M.	C	21.1	C	21.1
	Saturday	B	17.7	B	17.7
5 Broadway/5th Street	Weekday A.M.	C	33.4	D	35.3
	Weekday P.M.	E	74.9	E	78.3
	Saturday	C	28.2	C	28.3
6 Jackson Street/6th Street	Weekday A.M.	A	8.1	A	8.1
	Weekday P.M.	B	10.1	B	10.4
	Saturday	B	13.4	B	13.4
7 Jackson Street/5th Street	Weekday A.M.	C	31.9	C	32.4
	Weekday P.M.	B	15.1	B	15.5
	Saturday	B	13.5	B	13.5
8 Willie Stargell Avenue/Webster Street	Weekday A.M.	B	16.2	B	17.0
	Weekday P.M.	B	14.5	B	15.2
	Saturday	B	12.2	B	12.2
9 Willie Stargell Avenue/Main Street	Weekday A.M.	A	5.4	A	7.9
	Weekday P.M.	A	5.7	A	7.1
	Saturday	A	5.3	A	5.3
10 Atlantic Avenue/Main Street	Weekday A.M.	B	12.7	B	13.7
	Weekday P.M.	B	14.7	B	15.3
	Saturday	B	15.8	B	15.9
11 Atlantic Avenue/Webster Street	Weekday a.m.	D	43.7	D	49.5
	Weekday p.m.	C	26.7	C	27.4
	Saturday	C	23.7	C	23.8

Notes:

LOS = level of service

Bold indicates intersection operating at unacceptable levels (LOS F in downtown Oakland and LOS E or F in Alameda).

¹ "Saturday" indicates Saturday peak trip generation hour of the Proposed Action.

² Delay presented in seconds per vehicle.

Source: AECOM, 2012

Table 3.3-13: Roadway Segment Levels of Service—2017 plus Alternatives 1 and 2 Conditions

Roadway Segment	2017 No Project Conditions						2017 Plus Project (Alternatives 1 and 2) Conditions					
	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	Volume	V/C ratio	LOS	Volume	V/C ratio	LOS	Volume	V/C ratio	LOS	Volume	V/C ratio	LOS
Northbound												
SR 260 Posey Tube	3,240	0.81	D	2,452	0.61	B	3,285	0.82	D	2,551	0.64	B
I-880 between 6th Street and I-980	3,766	0.38	A	4,507	0.45	A	3,780	0.38	A	4,537	0.45	A
I-880 between I-980 and 5th Street	2,015	0.25	A	2,746	0.34	A	2,026	0.25	A	2,769	0.35	A
I-880 between 5th Street and Union Street	5,063	0.84	D	4,868	0.81	D	5,074	0.85	D	4,891	0.82	D
I-880 between Union Street and 7th Street	4,004	0.50	A	3,938	0.49	A	4,015	0.50	A	3,961	0.50	A
I-880 between Embarcadero and 22nd Avenue	3,393	0.57	A	3,612	0.60	B	3,423	0.57	A	3,628	0.60	B
Southbound												
SR 260 Webster Street Tube	2,034	0.51	A	3,312	0.83	D	2,153	0.54	A	3,377	0.84	D
I-880 between 7th Street and Union Street	3,604	0.45	A	3,753	0.47	A	3,634	0.45	A	3,769	0.47	A
I-880 between 5th Street and 10th Avenue	3,940	0.49	A	3,602	0.45	A	3,951	0.49	A	3,627	0.45	A
I-880 between 10th Avenue and Embarcadero	3,321	0.55	A	3,233	0.54	A	3,332	0.56	A	3,258	0.54	A

Notes: I-880 = Interstate 880; LOS = level of service; SR = State Route; V/C ratio = volume-to-capacity ratio
Bold indicates a roadway segment operating at an unacceptable level (i.e., LOS F)
 Source: AECOM, 2012

Transit

As shown in Table 3.3-10, operation under Alternative 1 would generate the following numbers of transit trips:

- 25 transit trips (seven on AC Transit and 18 on BART) during the weekday A.M. peak hour;
- 25 transit trips (seven on AC Transit and 18 on BART) during the weekday P.M. peak hour; and
- Two transit trips (zero on AC Transit and two on BART) during the Saturday peak hour.

In addition, the VA shuttle that would operate between the 12th Street Oakland City Center BART station and the VA Development Area would accommodate all BART riders traveling to the VA Development Area. The 18 additional BART riders during the A.M. and P.M. peak hours associated with Alternative 1 could be AC Transit bus line 31 is the closest bus line to the VA Development Area, with a bus stop approximately 1 mile from the

eastern edge of the VA Development Area. Line 31 provides service by two buses each in the northbound and southbound directions, with approximately 30-minute headways during the peak commute periods (A headway is the scheduled time interval between any two buses operating in the same direction on a route). In the future, after buildout of the proposed VHA OPC, the route of bus line 31 could be realigned to be closer to or extend into the VA Development Area, but that decision would be made by AC Transit. Assuming that the existing transit service for line 31 would remain the same, approximately two more transit riders per bus would use the bus stop during the weekday A.M. and P.M. peak hours with implementation of Alternative 1 (It was assumed that on Saturday, no new AC Transit riders would be associated with implementation of Alternative 1). These new riders could be accommodated by the current available ridership capacity of the bus service in the area accommodated by the current capacity of BART service in the area. The VA shuttle would operate 7 days a week with 30-minute headways and a capacity of up to 24 passengers. The transit trips generated by Alternative 1 would not adversely affect transit. Therefore, operational impacts of Alternative 1 on transit operations would not be significant.

An additional 25,000 cemetery niches would be provided in 2027 under Alternative 1. As described previously, it was assumed that cemetery corteges, delivery people, and visitors would travel by personal vehicles. Therefore, it is not likely that this phase of this alternative would result in any additional transit trips. Operational impacts of subsequent cemetery expansion phases under Alternative 1 on transit operations would not be significant.

Pedestrian

Pedestrian trips generated by Alternative 1 would include walk trips to and from the VA Development Area. Pedestrian walk-ins as a mode of transportation to the VA Development Area are anticipated to be infrequent, and pedestrian volumes are expected to be very low. As shown in Table 3.3-10, Alternative 1 would generate the following number of pedestrian trips to and from the VA Development Area:

- Seven walk trips (five inbound trips and two outbound trips) during the weekday A.M. peak hour;
- Seven walk trips (three inbound trips and four outbound trips) during the weekday P.M. peak hour; and
- No walk trips during the Saturday peak hour of generation.

The nearby existing Alameda Point sidewalks and crosswalks and the proposed VA Development Area sidewalks could accommodate the new pedestrian trips associated with Alternative 1. Thus, these new pedestrian trips would not adversely affect pedestrian operations along the existing sidewalks and crosswalks. The volume of pedestrians near the VA Development Area is relatively low. Thus, no conflicts between traffic from Alternative 1 and pedestrians are expected, and public sidewalks would not become substantially overcrowded and create potentially hazardous conditions for pedestrians. Operational impacts of Alternative 1 on pedestrians would not be significant.

Bicycle

Alternative 1, Phase 1 is not expected to generate bicycle trips (Table 3.3-10). Bicycle travel generally occurs without major impedances or safety problems in the Alameda Point area. As a result, implementing Alternative 1, Phase 1 would not affect the demand and use of existing and proposed bicycle facilities in Alameda and Oakland. Alternative 1, Phase 1 would generate 311 weekday A.M. and 311 weekday P.M. peak-hour vehicle trips (Table 3.3-10). The vehicle trips would be distributed onto the roadway network as shown in Table 3.3-8 and

would not interfere with, impede, or create safety concerns for bicycle facilities. Therefore, operational impacts of Alternative 1 on bicycles would not be significant.

Parking and Loading

The following parking and loading requirements in the City of Alameda Municipal Code applicable to Alternative 1:

- *Office use:* 2.5 spaces for each 1,000 square feet of occupied floor area;
- *Clinic use:* 4.0 spaces for each 1,000 square feet of occupied floor area; and
- *Other uses:* 1.0 loading space for every nonresidential building in excess of 12,500 square feet.

Based on these requirements, VA would be required to provide 623 parking spaces (31 spaces for the office use and 592 spaces for the clinic use) and one loading space under Alternative 1.

Under Alternative 1 VA would provide a total of 640 parking spaces for employees, visitors, and patients, and two full-size truck bays to accommodate a typical semi-truck (approximately 55 feet in length). The total proposed parking supply consists of 630 parking spaces adjacent to the VHA OPC building and approximately 10 spaces adjacent to the Conservation Management Office. The total proposed parking supply (640 spaces and two loading spaces) would satisfy the City of Alameda Municipal Code's requirements of 623 parking spaces and one loading space for Alternative 1. VA also would provide approximately 30 parking spaces in the proposed NCA Cemetery adjacent to each committal service shelter. Two committal service shelters (including 60 parking spaces) would be built by 2017. Thus, adequate parking would be provided under Alternative 1, Phase 1. Operational impacts of Alternative 1 related to parking and loading would not be significant.

Site Access and Circulation

Access to the VA Development Area would be provided via Main Street, Navy Way, and West Redline Avenue (Figure 3.3-1). The intersection of West Redline Avenue and Monarch Street would connect with the proposed main access road serving the VA Development Area.

Other internal roads would connect to the main access road and would provide access to the VHA OPC building, Conservation Management Office, and NCA Cemetery (see Figure 2-2). In addition, a cortege assembly area would consist of one or more lanes for vehicles to queue before proceeding to a committal service shelter. The cemetery road would be developed in accordance with VA design and construction standards and specifications for national cemeteries. The main access road would be developed in accordance with the design and construction standards of the American Association of State Highway and Transportation Officials (AASHTO).

Taxis, private vehicles, and emergency vehicles would use the new main access and internal roadways. An additional emergency vehicle access point would be provided on the eastern perimeter of the VA Transfer Parcel. Implementation of Alternative 1 would not adversely affect site access and circulation or access by emergency vehicles; access to and from the VA Development Area, as well as internal circulation within the VA Development Area, would adequately serve travel demand and would be designed in accordance with accepted VA and AASHTO standards. Accordingly, operational impacts of Alternative 1 related to site access and circulation would not be significant.

Traffic Safety Impacts

The utility corridor would be built to City of Alameda design standards. The internal main access roadway would be built to the AASHTO standards, as this would be a federal roadway. The internal roadways that would provide circulation within the cemetery would be built in compliance with Section 12.7, “Road Width and Road Minimum Radius,” in Section 5.1, “Site Development Design Criteria for National Cemetery Projects, Department of Veterans Affairs,” of VA’s *National Cemetery Administration (NCA) Facilities Design Guide* (VA, 2010). The design guide specifies the road widths and minimum radius for the various types of roads (i.e., entrance road, primary road, secondary road, service roads, and committal service shelter drives). The design of the NCA Cemetery’s roads should accommodate anticipated traffic volume at a maximum design speed of 24 kilometers per hour (15 mph) (VA, 2010). Because the access and internal circulation roads would conform to the City of Alameda, AASHTO, and VA NCA roadway design standards, impacts of Alternative 1 on traffic safety would not be significant.

Alternative 2 (Preferred Alternative)

Construction

Traffic

Construction activities and their level of intensity under Alternative 2 would be the same as those described for Alternative 1. These activities would include import of fill/grading/excavation and below-grade concrete, above-grade structure, paving, and painting. For the same reasons as cited for Alternative 1, the effect of construction traffic associated with Alternative 2—both construction truck traffic and additional vehicular traffic from construction workers—would not substantially affect vehicular, pedestrian, and bicycle circulation. Therefore, as under Alternative 1, construction-related traffic impacts of Alternative 2 would not be significant.

Parking

Construction-related parking impacts of Alternative 2 would be the same as those described for Alternative 1 because parking demand would be accommodated in the portions of the VA Development Area that are not under construction at any given time. As a result, construction-related parking demand under Alternative 2 would be short term and temporary and would be minor. As with Alternative 1, construction-related parking impacts of Alternative 2 would not be significant.

Operation

Traffic

Vehicle trips generated under Alternative 2 would be the same as those generated under Alternative 1 (Table 3.3-10). The resulting traffic volumes for 2017 plus Proposed Action Alternative 2 operations are the same as for Alternative 1 (Figure 3.3-6). The LOS results for all 11 study intersections and 10 roadway segments under Alternative 2 are the same as those presented previously for Alternative 1. Operational impacts of Alternative 2 on traffic operations would not be significant.

Transit

Transit trips generated under Alternative 2 would be the same as those generated under Alternative 1 (Table 3.3-10). As under Alternative 1, the transit trips generated by Alternative 2 would be accommodated by the current available ridership capacity of the area's AC Transit bus service and of BART. In addition, the VA shuttle that would operate between the BART station and the VA Development Area would accommodate all BART riders traveling to the VA Development Area. As a result, the operational impact of Alternative 2 on transit operations would not be significant.

Pedestrian

Pedestrian trips generated under Alternative 2 would be the same as those generated under Alternative 1 (Table 3.3-10). The nearby existing Alameda Point sidewalks and the proposed VA Development Area sidewalks could accommodate the new pedestrian trips associated with Alternative 2. Thus, these new pedestrian trips would not adversely affect pedestrian operations along the existing sidewalks and crosswalks. The volume of pedestrians near the VA Development Area is relatively low. Thus, no conflicts between traffic from Alternative 2 and pedestrians are expected, and public sidewalks would not become substantially overcrowded and create potentially hazardous conditions for pedestrians. Operational impacts of Alternative 2 on pedestrians would not be significant.

Bicycle

Bicycle trips generated under Alternative 2 would be the same as Alternative 1 and summarized in Table 3.3-10. Bicycle impacts under Alternative 2 would be the same as Alternative 1 and discussed above. The negligible increase in bicycle trips under Alternative 2 within the area would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, bicycle impacts would not be significant under Alternative 2.

Parking and Loading

Under Alternative 2, VA would need to meet the same parking and loading requirements of the City of Alameda Municipal Code as described above for Alternative 1. The total proposed parking supply would consist of 640 parking spaces and two loading spaces, satisfying the City of Alameda Municipal Code's requirements for 623 parking spaces and one loading space. Thus, adequate parking would be provided under Alternative 2. Operational impacts of Alternative 2 related to parking and loading would not be significant.

Site Access and Circulation

Site access and circulation under Alternative 2 would be similar to site access and circulation under Alternative 1, except that the internal roadways would have a slightly different alignment than under Alternative 1. The proposed internal main-access roadway for the VHA OPC building and the NCA Cemetery would tie into Alameda's existing roadway system. This roadway would be located along the northern boundary of the VA Development Area. Taxis, private vehicles, and emergency vehicles would use the new main access and internal roadways.

The VHA OPC building would be located farther north under Alternative 2 and would have a different building orientation than under Alternative 1. The cemetery would be developed within one 80-acre area west of the OPC building, rather than in two separate areas on both the west and east sides of the OPC building as under Alternative 1. For the same reasons as described for Alternative 1, implementing Alternative 2 would not have an adverse effect on site access and circulation or emergency access. Operational impacts of Alternative 2 related to site access and circulation would not be significant.

Traffic Safety Impacts

Traffic safety impacts of Alternative 2 would be the same as those of Alternative 1. The utility corridor would be built to City of Alameda design standards. The main internal access road along the northern boundary of the VA Development Area would be built to AASHTO standards. The internal roadways that would provide circulation within the cemetery would be built in compliance with Section 12.7, “Road Width and Road Minimum Radius,” in Section 5.1, “Site Development Design Criteria for National Cemetery Projects, Department of Veterans Affairs,” of VA’s *National Cemetery Administration (NCA) Facilities Design Guide* (VA, 2010). As a result, as with Alternative 1, impacts of Alternative 2 on traffic safety would not be significant.

No Action Alternative

Construction

Under the No Action Alternative, the fed-to-fed transfer would not take place, and no VA facilities would be constructed. Therefore, no significant construction-related impacts to transportation, traffic, circulation, or parking would occur.

Operation

Under the No Action Alternative, no new vehicle, transit, bicycle, or pedestrian trips or new parking demand would be generated because no new facilities or uses are proposed. Thus, no operational impact on study intersections, existing transit services, existing roadways, parking, loading, site access/circulation, or traffic safety would occur under the No Action Alternative.

Under the No Action Alternative, the fed-to-fed transfer would not take place, and no VA facilities would be operated on the property. The property would be retained by Navy in caretaker status until another action on the property is taken. Therefore, no significant operational-related to transportation, traffic, circulation, or parking impacts would occur.

3.3.4 References

AECOM. 2012. *Alameda Point Transfer, Clinic, and Cemetery Environmental Assessment Transportation Impact Study*.

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Transportation Research Board (TRB). 1985 (August). *Highway Capacity Manual*. Washington, DC.

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U.S. Department of Veterans Affairs (VA). 2010 (March). *National Cemetery Administration (NCA) Facilities Design Guide*. Published June 1999, Section 5 revised March 2010. National Cemetery Administration, Office of Facilities Management, Facilities Quality Office. Washington, DC. Section 5, “Design Criteria.”

3.4 CULTURAL RESOURCES

This section describes the historical setting and existing physical and regulatory setting related to archaeological and historic resources and addresses the potential effects of the EA Alternatives on such resources.

3.4.1 Regulatory Framework

Section 106 of the National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (Title 36 of the Code of Federal Regulations [CFR], Part 800 [36 CFR 800]) require that federal agencies take into account the effects of their actions (referred to as “undertakings” under Section 106) on properties that may be eligible for or listed in the National Register of Historic Places (NRHP), and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (i.e., archaeological, historical, and architectural properties) that could be affected by the undertaking must be inventoried and evaluated for inclusion in the NRHP.

Consistent with 36 CFR 800.3(a)(1), VA and the Navy have determined that the proposed fed-to-fed transfer of property from Navy to VA—as a transfer of property from one federal agency to another, with the property remaining in federal ownership—is not an undertaking that has the potential to affect historic properties. Therefore, the following analysis focuses on the potential impacts of VA’s project: the construction and operation of the VHA OPC, VBA Outreach Office, Conservation and Management Office, NCA Cemetery, off-site utility/road corridor, and associated infrastructure.

The regulations implementing Section 106 require consultation with the State Historic Preservation Officer (SHPO), tribal governments, and interested members of the public throughout the process. The four principal steps are:

1. Initiate the Section 106 process, including a plan for public involvement (36 CFR 800.3);
2. Identify historic properties, consisting of those resources within an Area of Potential Effect (APE) that are eligible for inclusion in the NRHP (36 CFR 800.4);
3. Assess the effects of the undertaking on historic properties in the APE (36 CFR 800.5); and
4. Resolve adverse effects (36 CFR Part 800.6).

Adverse effects on historic properties may be resolved through preparation of a memorandum of agreement or a programmatic agreement developed in consultation between the lead federal agency, the SHPO, tribal governments, and interested members of the public. The ACHP is also invited to participate.

National Register of Historic Places Evaluation Criteria

The NRHP is a register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. The NRHP is maintained by the Secretary of the Interior. A property may be listed in the NRHP if it meets criteria for evaluation defined in 36 CFR 60.4:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- That are associated with events that have made a significant contribution to the broad patterns of our history; or
- That are associated with the lives of persons significant in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That have yielded, or may be likely to yield, information important in prehistory or history.

Under Section 106 of the NHPA, only cultural resources that have been determined to be eligible for listing in the NRHP or that are listed in the NRHP need to be considered when evaluating an action's effects on cultural resources.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 U.S. Code 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or tribal lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and tribal lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

3.4.2 Affected Environment

Background Research Efforts

Existing conditions were identified through pre-field research at and a review of existing information for the former NAS Alameda. Research efforts included a request to the Northwest Information Center (NWIC) of the California Historical Resources Information System to conduct a records and literature search of the VA Transfer Parcel and a surrounding one-quarter-mile area. The NWIC responded with comments on March 26, 2012 (NWIC File No. 11-1036). The search identified no known historic properties within the VA Transfer Parcel or within the surrounding one-quarter-mile area. The records search report compiled by the NWIC included several historic-era maps: the maps of the 1871 San Antonio Ranch Plat, the 1895 San Francisco 15-minute Quadrangle, the 1899 San Francisco 15-minute Quadrangle, the 1915 San Francisco Quadrangle, and the 1942 San Francisco 15-minute

Quadrangle. The maps indicate that no portion of the land later occupied by former NAS Alameda existed before 1871. By 1895 the Southern Pacific Railroad (narrow gauge), consisting of a narrow finger of filled land, had been constructed north of the present-day VA Transfer Parcel. The 1915 San Francisco 15-minute Quadrangle map indicates that additional landfill work had been done north and east of the VA Transfer Parcel, and that a deep-water channel leading to Oakland's inner harbor had been constructed. Other sources reviewed (cited as appropriate in the text below) include previous studies conducted by the Navy for NAS Alameda, documentation of prior Section 106 consultations conducted by the Navy, and overviews of previous archaeological research in the region. The results of the investigation are summarized later in this section.

Previous Studies and Documentation

Two previous Navy studies have analyzed the low potential of encountering archaeological resources at the former NAS Alameda. In 1996, an archaeological evaluation of the former Fleet Industrial Supply Center – Alameda Annex and Family Housing Areas was prepared for the Navy (PAR, 1996). Evaluation of that project area, located to the east of the present project area and Main Street, included a pedestrian survey and analysis of historic maps. The report concluded that the project area had been an undeveloped natural marshland before 1918, when it was filled. The map analysis also demonstrates that the majority of the former NAS Alameda (and all of the VA Transfer Parcel) was built on artificial fill, filled in multiple phases between 1892 and 1960 (PAR, 1996).

In 1999, the Navy prepared an Environmental Impact Statement (EIS) concerning the disposal and reuse of the former NAS Alameda, which also analyzed the potential for archaeological resources at the former NAS Alameda (Navy *et al.*, 2009). Based upon the fill history of the former NAS Alameda and the manner in which the fill was placed during construction of the installation, the EIS concluded that the potential for buried cultural resources, either prehistoric or historic, is considered to be extremely low. The EIS examined the possibility of historic-period archaeological resources beneath the Navy's fill. These potential resources included remnants of historic land uses of portions of the property that would become the NAS Alameda, such as the former South Pacific Coast Railroad Terminal, Alameda Municipal Airport, Pan Am airline facilities, Alameda Yacht Basin, ship hulls used in land creation, and the Army's Benton Field (see the Historic Context section below). However, the EIS concluded that the potential to encounter these remnants or historic period archaeological resources is considered low due to the manner in which the Navy's artificial fill was placed. The EIS states that the Twelfth Naval District was reportedly responsible for the acquisition, dredging, filling, and construction of NAS Alameda. Prior to infilling, construction debris (e.g., concrete, asphalt, and building rubble) was removed, and scarification of the area occurred. By removing all pilings and submerged objects from the water before fill was introduced, the fill material was allowed to settle more evenly and to prevent potential future construction obstructions (Navy, 1999; PAR 1996).

Additional studies and Section 106 consultation address the known historic properties identified at the former NAS Alameda. The NAS Alameda Historic District is located immediately adjacent and to the east of the VA Transfer Parcel Area. Based on the study *Historic Architectural Resources Inventory for Naval Air Station, Alameda* (Woodbridge, 1992), the Navy determined in 1992 that the historic district was eligible for listing in the NRHP. That same year, the SHPO concurred with the Navy's conclusion. The NAS Alameda Historic District was determined eligible for the NRHP under Criterion A for its significance as a World War II-era naval air station (1938 to 1945) under the contextual theme of the development of Navy bases in the San Francisco Bay Area in World War II; and under Criterion C because of its master planning and architecture in the Moderne style.

The NAS Alameda Historic District initially included 85 resources. The number of district contributors was increased to 87 through the Navy's consultation with the SHPO, but subsequently was reduced to 86 contributing resources after a fire damaged one building.

In 1997, the *Guide to Preserving the Character of the Naval Air Station Alameda Historic District* was prepared for the Navy to identify character-defining elements of the NAS Alameda Historic District (JRP, 1997). The study also defined significant vistas, viewsheds, open spaces, streetscapes, and landscape elements that contributed to the historic district.

In 1999, the Navy entered into a Section 106 Memorandum of Agreement (MOA) titled *Memorandum of Agreement Among the United States Navy, the Advisory Council on Historic Preservation and the California State Historic Preservation Regarding the Layaway, Caretaker Maintenance, Leasing, and Disposal of Historic Properties on the Former Naval Air Station, Alameda, California*. The MOA identified the NAS Alameda Historic District and the south jetty of the "Oakland Inner Harbor Jetties and Federal Channel Historic District" (Alameda Training Wall) as historic properties. The Alameda Training Wall is located outside the project area. The 1999 MOA did not identify any archaeological sites eligible for the NRHP (Navy et al., 1999). To support transfer of portions of the former NAS Alameda to the City of Alameda, the Navy prepared additional evaluation reports and a NRHP Nomination for the NAS Alameda Historic District in 2011 and 2012. These reports (a) completed the identification of historic properties on NAS Alameda through the evaluation of buildings and structures constructed before 1989; and (b) nominated the NAS Alameda Historic District to the NRHP. Two evaluation reports were prepared: the *Combined Specific Buildings Survey and Evaluation Report/Cold War Era Historic Resources Survey and Evaluation Report* (Combined Evaluation Report) (JRP, 2011) and *Cultural Landscape Report of Naval Air Station Alameda* (CLR) (JRP and PGA, 2012).

The Combined Evaluation Report concluded that no buildings and/or structures at the former NAS Alameda met the criteria for listing in the NRHP or the California Register of Historical Resources individually under World War II or Cold War-era contexts. The report found no Cold War-era buildings eligible for NRHP listing. The report also identified 13 additional contributing elements to the NAS Historic District (JRP, 2011).

In 2012, the CLR identified a historic-designed landscape as a contributing element of the NAS Alameda Historic District. The CLR concluded that no NRHP-eligible cultural landscapes or landscape features occur outside the boundary of the historic district (JRP and PGA, 2012).

The SHPO concurred with the findings of the Combined Evaluation Report in 2011 (OHP, 2011) and with the findings of the CLR in 2012 (OHP, 2012a).

The Navy has also prepared a NRHP nomination for the NAS Alameda Historic District. This nomination was submitted to the Keeper of the National Register in December 2012. The NAS Alameda Historic District is expected to be listed on the NRHP in early 2013.

Cultural and Historical Contexts

Prehistoric Archaeological Context

There is no archaeological context specific to the VA Development Area or VA Transfer Parcel, because the area was built on fill and no resources have been identified. As discussed above and as discussed in more detail below in the Historic Context section below, the majority of the former NAS Alameda was built on artificial fill and filled in multiple phases between 1892 and 1960. Therefore, the culture history discussed here focuses on the original Alameda Peninsula (to the southeast of the current project area) and the San Francisco Bay Area as a whole.

The earliest well-documented entry and spread of native peoples into the San Francisco region occurred at the beginning of the Paleo-Indian Period (12,000–8000 years Before Present [B.P.]¹). Social units are thought to have been small and highly mobile. Known sites have been identified in the contexts of ancient pluvial lakeshores and coastlines, as evidenced by such characteristic hunting implements as fluted projectile points and flaked stone crescent forms. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by numerous researchers working in the Bay Area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984).

Few archaeological sites have been found in the Bay Area that date to the Paleo-Indian Period or the subsequent Lower Archaic (8000–5000 B.P.) time period, probably because of high sedimentation rates and sea level rise. Archaeologists have, however, recovered a great deal of information from sites occupied during the Middle Archaic Period (5000–2500 B.P.). By this time, broad regional subsistence patterns gave way to more intensive procurement practices. Economies were more diversified, possibly including the introduction of acorn-processing technology. Populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (2500–1300 B.P.). Exchange systems became more complex and formalized, and evidence of regular sustained trade between groups began to appear.

Several technological and social changes characterized the Emergent Period (1300–200 B.P.). Territorial boundaries between groups became well established. It became increasingly common for distinctions in an individual's social status to be linked to acquired wealth. In the latter portion of this period (500–200 B.P.), exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit, and specialists arose to govern various aspects of production and material exchange.

The Middle Archaic, Upper Archaic, and Emergent Periods can be broken down further according to additional cultural manifestations that are well represented in archaeological assemblages in the Bay Area:

- *Windmill Pattern* (5000–1500 B.P.) peoples placed an increased emphasis on acorn use and on a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay

¹ By convention, “present” is defined as 1950 A.D. The year 1950 A.D. is the baseline date from which age of certain materials are calculated when using carbon-14 dating techniques. “A.D.” refers to the number of years after the death of Jesus Christ.

artifacts, and worked shell and bone were hallmarks of Windmill culture. Widely ranging trade patterns brought goods in from the Coast Ranges and trans-Sierran sources as well as closer trading partners.

- The *Berkeley Pattern* (2200–1300 B.P.) exhibited an increase in the use of acorns as a food source compared to what was seen previously in the archaeological record. Distinctive stone and shell artifacts differentiated this period from earlier or later cultural expressions. Burials were most often placed in a tightly flexed position and frequently included red ochre.
- The *Augustine Pattern* (1300–200 B.P.) reflected increasing populations resulting from more intensive food procurement strategies, as well as a marked change in burial practices and increased trade activities. Intensive fishing, hunting and gathering, complex exchange systems, and a wider variety in mortuary patterns were all hallmarks of this period.

Before European contact, the original Alameda Peninsula (to the southeast of the project area) was occupied by a small Penutian-speaking group that was part of the larger Ohlone cultural affiliation. Members of this tribelet were largely dependent on the resources (waterfowl, fish, and shellfish) derived from the bayshore areas and from streams, creeks, and tributaries (Navy, 1999; Page and Turnbull, 2005; PAR, 1996). Examples of such Archaic Period sites were excavated in the early part of the 20th century. In the early 1900s, Captain Clark, an amateur archaeologist, excavated a prehistoric midden known as Sather Mound where flaked stone tools and a reported 450 burials were identified. The mound site closest to the project area, however, was the Emeryville Shellmound, excavated in 1902. It extended to approximately 30 feet in depth and contained 700 flexed burials and a large number of associated artifacts (PAR, 1996). An additional five Ohlone village sites have been reported within the city of Alameda. These mounds and sites were located on the high ground of the Alameda Encinal area on the original Alameda Peninsula, approximately 4 miles to the southeast of the project area (Navy, 1999; Page and Turnbull, 2005; PAR, 1996). The arrival of Spanish settlers, however, negatively impacted the traditional Ohlone cultural system, and exposure to European-borne diseases, a declining birth rate, and the enforced mission system resulted in the near-eradication of Ohlone peoples in the vicinity.

Historic Context

The earliest documented Euro-American expeditions into the San Francisco Bay region occurred in 1776 with the settlement of the Mission San Francisco de Asis and the Presidio of San Francisco. In August 1820, Governor Pablo Vicente de Solá² issued the Rancho San Antonio land grant to Luís María Peralta. This large land grant encompassed the city of Alameda, among other cities. The rancho became the first permanent settlement after Mission San Jose, which was established in 1797 (Kyle et al., 1990). In 1850, California became a state and portions of the rancho known as Bolsa de Encinal were sold off and eventually developed into agricultural land. Later, a commercial center (present-day Alameda) was established (Alameda, 1980).

Alameda continued to grow and prosper, particularly after 1864 when the San Francisco & Oakland Railroad built the first alignment from eastern Alameda to the Alameda Point area.³ During that same period, a ferry system was established, providing citizens the means to live in Alameda and commute to work in San Francisco. The City of Alameda was incorporated in 1872 and became a charter city in 1884. Between the 1880s and early 1900s, the City of Alameda witnessed a steady population increase associated with industrial and commercial enterprises. The City

² Colonial governor (1815–1822) of Spanish Alta California, which was a province and territory in the Viceroyalty of New Spain and later a territory in independent Mexico.

³ “Alameda Point” is used here as the historic name of the western end of the Alameda Peninsula.

continued to prosper through the 1940s with World War II and the creation of the former NAS Alameda (Alameda, 1980).

Development of the Alameda Point area began in the 1880s with oil refinery operations in a small area known as Woodstock, a community bounded by today's Lincoln Avenue, Third Street, San Francisco Bay, and Atlantic Avenue. It occupied what would become the southeastern section of NAS Alameda. Woodstock was absorbed into the City of Alameda in 1872. Railroad development returned to Alameda Point; and a kerosene refinery was located at the intersection of Pacific Avenue and Main Street, along the southeastern border of former NAS Alameda. Industrial development of Alameda Point area remained confined to this small area and continued into the early 1900s (Page and Turnbull, 2005).

During World War I, the Alameda Point area became a focal point for the aviation industry after a military study determined that the area would be advantageous to the military's efforts. While Congress delayed approval of a Navy base, development efforts moved forward by the City of Alameda, private groups, and the Army. The Alameda Municipal Airport opened in 1929, as did the San Francisco Bay Aerodrome. That same year, the Army started construction of its own airfield (Benton Field) between the San Francisco Bay Aerodrome and the municipal airport.

The former NAS Alameda consists almost entirely of engineered, artificial fill that was installed on marshlands or shallow waters within San Francisco Bay. The first documented filling occurred in the 1890s to construct a mole, or bermed railroad track, by the Southern Pacific Railroad. By the late 1920s, the northern part of what is now the former NAS Alameda had been filled by the Alameda Municipal Airport and Benton Field. The Navy acquired Benton Field and the Alameda Municipal Airport in 1936. Then, in 1938, the Navy began construction of former NAS Alameda focusing on erecting buildings on the eastern half of the installation and filling the southern and western parts of the facility for the bulk of the runway areas (Navy, 1999; JRP, 2011).

Completed under the direction of the Navy's Bureau of Yards and Docks, the original design for NAS Alameda was part of a master-planning approach that improved efficiency and functions for naval operations. With the start of U.S. involvement in World War II, former NAS Alameda was enhanced to accommodate increased military demands during wartime. Throughout World War II, former NAS Alameda played a critical role in the U.S.'s naval success with its primary mission of aircraft assembly and repair (JRP, 2011).

After World War II, former NAS Alameda witnessed a reduction in workforce as the Navy consolidated its efforts. The contributions of former NAS Alameda changed starting in 1950, with the onset of the Korean War. Operations at former NAS Alameda expanded and the number of military and civilian personnel peaked in 1951, making former NAS Alameda the largest naval air station in the U.S (JRP, 2011).

Former NAS Alameda served a critical role in Navy operations during the Korean War. The base grew and altered its existing facilities to accommodate changes in military technology. Former NAS Alameda was used to perform aircraft assembly, overhaul, and repair which continued into the 1960s as the U.S. entered the Vietnam War (JRP, 2011).

Historically, the VA Transfer Parcel and VA Development Area were used by former NAS Alameda as its airfield. Runways were completed in 1942, and after World War II, they were heavily altered to accommodate jet

aircraft. Support structures and buildings, including some for magazine and ordnance storage, were constructed to support the operation of the runways and the overall functions of the fleet during the Cold War era (JRP, 2011).

At the end of the Vietnam War in the 1970s, a reduction at former NAS Alameda took place. During the 1970s and 1980s, former NAS Alameda accommodated the changes in the Navy's fleet and remained open. By 1985, former NAS Alameda was identified for possible closure. The base remained in operation until 1997, when it officially closed after 57 years of continued operation (JRP, 2011).

Known Cultural Resources

Archaeological Resources

No archaeological resources have been identified within in the VA Transfer Parcel, including the VA Development Area (for either Alternative 1 or 2). No archaeological resources have been identified within the proposed off-site road/utility corridor.

Historic Resources

VA Development Area

No historic resources have been identified within the VA Transfer Parcel, including the VA Development Area (for either Alternative 1 or 2). Under each alternative, the VA Transfer Parcel is located on a portion of the former NAS Alameda airfield and contains former ammunition storage bunkers, former runways, and other infrastructure built to support airfield operations. The Navy previously evaluated the airfield and related structures and SHPO has concurred that they are not eligible for the National Register. As discussed in the Navy's Combined Evaluation Report, the built resources in the VA Transfer Parcel do not qualify as contributing resources to the NAS Alameda Historic District because previous alterations to the former airfield generally impacted the airfield's ability to convey any historical significance associated with World War II (JRP, 2011; OHP, 2011). Further, the Combined Evaluation Report concluded and SHPO has concurred that the airfield area and its structures are not eligible for the National Register based upon associations with the Cold War (JRP, 2011; OHP, 2011). Therefore, the VA Transfer Parcel, including the VA Development Area does not contain historic resources.

Off-site Utility/Road Corridor

No historic resources have been identified within the proposed off-site utility/road corridor. The off-site utility/road corridor would be constructed within a corridor along West Redline Avenue and Main Street, which runs directly adjacent to the northern boundary of the NAS Alameda Historic District. The two roads are not contributing resources to the historic district. Therefore, no historic resources are located within this corridor.

NAS Alameda Historic District

The NAS Alameda Historic District is located immediately adjacent to and east of the VA Transfer Parcel. This historic district is eligible under NRHP Criterion A for its association with the strategic development of naval air stations in the 1930s, development of naval facilities in the Bay Area during World War II and the Navy's role in

Pacific theater naval operations during World War II. The NAS Alameda Historic District also is eligible under Criterion C for its distinctive characteristics of type, period, and method of construction (Moderne style) in its design and planning.

The NAS Alameda Historic District was identified as eligible for listing in the NRHP in 1992. In 2011, the historic district was reassessed, and its boundary was expanded to include 13 additional contributing resources. In 2012, a historic designed landscape was also identified as a contributing element of the NAS Alameda Historic District (JRP, 2011; JRP and PGA, 2012; OHP, 2011; OHP, 2012b). Presently, the NAS Alameda Historic District contains 100 contributing resources: 99 buildings and structures, and 1 site (the historic designed landscape) and 57 noncontributing buildings/structures with a period of significance of 1938 to 1945.

No NRHP-eligible historic properties are present within the VA Transfer Parcel or the off-site utility/road corridor; however, construction activities proposed in these areas have the potential to affect the setting of the adjacent NAS Alameda Historic District, which is eligible for listing in the NRHP.

3.4.3 Environmental Consequences

Assessment Methods

This section assesses effects on cultural resources that meet the eligibility criteria for listing in the NRHP. When evaluating the significance of project impacts under NEPA, the following analysis applies the NHPA Section 106 criteria for adverse effect. 36 CFR Part 800.5 defines an undertaking (action) as having an adverse effect on historic properties if the effect would alter the characteristics that qualify a property for inclusion in the NRHP. Examples of adverse effects include:

- Physical destruction of or damage to all or part of the property;
- Alteration of the property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (36 CFR 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change in the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's character-defining features;
- Neglect of the property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Native American tribe or Native Hawaiian organization; or
- Transfer, lease, or sale of the property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

The following analysis considers the potential effects resulting from the construction and operation of the VHA OPC, VBA Outreach Office, Conservation Management Office, NCA Cemetery, and associated infrastructure

within the VA Development Area and the off-site utility/road corridor. No development would occur within the remaining portion of the VA Transfer Parcel, which would remain undeveloped open space.

Alternative 1

Construction

Archaeological Resources

No known archaeological resources would be directly or indirectly affected by construction, because no such resources are located within the boundary of the VA Transfer Parcel for Alternative 1 or within the off-site road/utility corridor. In addition, the likelihood of encountering unknown archaeological resources within the VA Development Area or the off-site road/utility corridor is very low because of the fill history and destructive nature of the construction efforts (dredging, scarification, and filling) used during the construction of former NAS Alameda (Navy, 1999). No development would occur within the remaining VA Transfer Parcel.

In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, will occur and the following management measure will be followed.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the Proposed Action, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the evaluation criteria of the NHPA and will develop appropriate mitigation. If human remains are encountered, the Alameda County Coroner will be notified immediately upon their discovery. If the coroner determines that the remains are of Native American origin, the provisions of NAGPRA will apply.

Implementation of this management measure would reduce potentially adverse impacts of Alternative 1 resulting from inadvertent damage or destruction of presently undocumented archaeological resources and human remains during construction. Therefore, no significant adverse impact from construction impacts on archaeological resources would be expected.

Historic Resources

VA Transfer Parcel

No known historic resources would be directly affected by construction within the VA Development Area because no such resources are present in that area. No development would occur within the remaining VA Transfer Parcel. Therefore, Alternative 1 would not have a direct significant adverse impact on historic resources.

Indirect impacts on historic districts have the potential to occur if changes to the visual setting, atmospheric intrusions, or other features of a proposed action outside the historic district's boundaries would diminish the district's ability to convey its significance. The proposed development includes the construction of buildings and

structures for the VHA OPC, VBA Outreach Office, Conservation Management Office, NCA Cemetery, associated infrastructure, and some new landscaping on a portion of the VA Development Area, all of which would introduce subtle new visual elements to the setting of the NAS Alameda Historic District. Proposed buildings would be approximately one to two stories tall and between 40 and 54 feet in height, and planned landscaping would be a maximum 20 feet in height. This development would be visible from certain locations within the boundary of the NAS Alameda Historic District and from more distant locations with views of the overall historic district (see Figure 3.5-8 in Section 3.5 [Visual Resources]). However, the planned construction would occur nearly one half mile from the boundary of the historic district; this distance would allow it to become part of the light industrial setting that already exists to the northwest. The planned construction would not obstruct current views directly to the west or to the southwest, because construction would take place at the north end of the former runway area. Views from within the NAS Alameda Historic District would remain similar to current views, with the minor difference that some low buildings would be added to the middle ground in front of the port's industrial structures in the background. Likewise, external views of the row of hangar buildings along the western boundary of the NAS Alameda Historic District would not be obscured or diminished by the proposed development. The scale of the construction planned under Alternative 1 is roughly similar to the scale of buildings/structures currently on the site, and the existing scale and character of the historic district would not change. The proposed development would not detract from location, design, character, setting, materials, workmanship, and feeling of the NAS Alameda Historic District, and the historic district would still be able to convey its significance as a naval station dating to the 1930s and World War II designed in the Moderne style. Therefore, there would be no significant, indirect impacts on the NAS Alameda Historic District as a result of the visual introduction of the Proposed Action.

Construction-related activities for the proposed undertaking would introduce groundborne vibration, and would result in noise effects on the surrounding area, including the adjacent NAS Alameda Historic District. However, because of the distance between the proposed development and the historic district (nearly one half mile), the potential for these activities to cause structural and cosmetic damage to the historic district and its contributing resources through vibration would be negligible. Any construction-related sounds would be temporary and would dissipate over the distance between the VA Development Area and the NAS Alameda Historic District; thus, noise effects on the historic district would be minimal. Therefore, there would be no significant, indirect impacts on the NAS Alameda Historic District associated with vibration or noise. More information on the projected levels of construction noise and vibration is provided in Section 3.12 (Noise).

Offsite Utility/Road Corridor

No known historic resources would be directly affected by construction within the off-site utility/road corridor because no such resources are present in that area.

Planned infrastructure for the VA facilities would be constructed within a utility corridor along West Redline Avenue and Main Street that would tie into existing infrastructure lines east of the VA Transfer Parcel. The new infrastructure line would be located directly north of the NAS Alameda Historic District; however, because the existing roadway would be paved over the new line once installed, the proposed infrastructure would not alter the viewshed of the historic district, the district's character-defining features, or its ability to convey its significance. Any construction-related sounds or vibrations in the offsite road/utility corridor would be temporary and are not anticipated to be at levels that could cause damage to the NAS Alameda Historic District (See Section 3.12

[Noise]). Therefore, the construction of planned infrastructure in the off-site utility/road corridor would not have significant, indirect impacts on historic resources.

NAS Alameda Historic District

The Proposed Action would take place adjacent to and outside the boundary of the NAS Alameda Historic District, which is eligible for the NRHP. Because the planned construction would take place outside the boundary of the historic district, no direct construction-related impacts on historic properties would occur. Potential indirect effects from construction within the VA Development Area have been addressed above. There would be no significant, indirect impacts on the NAS Alameda Historic District.

Operation

Archaeological Resources

Operation of the proposed VA facilities would not involve ground disturbance or vibration, and no known archaeological resources are located within the boundary of the VA Transfer Parcel or within the off-site road/utility corridor. Therefore, no significant operational impacts on archaeological resources would occur under Alternative 1.

Historic Resources

VA Transfer Parcel

Proposed operational activities would not cause direct impacts on known historic resources within the VA Transfer Parcel because no such resources are present in that area and the proposed operational activities would not have a significant impact on the NAS Alameda Historic District.

Off-site Road/Utility Corridor

Proposed operational activities would not cause direct impacts on known historic resources within the offsite road/utility corridor because no such resources are present in that area and the proposed operational activities in the corridor would not have a significant impact on the NAS Alameda Historic District.

NAS Alameda Historic District

As discussed above, proposed operational activities (outside of the NAS Alameda Historic District) would not have a significant impact on the NAS Alameda Historic District.

In summary, the construction and operational activities described in Alternative 1 would not have significant impact on cultural resources.

Alternative 2 (Preferred Alternative)

Construction

Archaeological Resources

No known archaeological resources would be directly or indirectly affected by construction, because no such resources are located within the boundary of the VA Transfer Parcel for Alternative 2 or within the off-site road/utility corridor. In addition, similar to Alternative 1, the likelihood of encountering unknown archaeological resources within the VA Development Area or the off-site road/utility corridor is very low because of the fill history and destructive nature of the construction efforts (dredging, scarification, and filling) used during the construction of former NAS Alameda (Navy, 1999). No development would occur within the remaining VA Transfer Parcel. In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, will occur and the following management measure will be followed.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the Proposed Action, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the evaluation criteria of the NHPA and will develop appropriate mitigation. If human remains are encountered, the Alameda County Coroner will be notified immediately upon their discovery. If the coroner determines that the remains are of Native American origin, the provisions of NAGPRA will apply.

Implementation of this management measure would reduce potentially adverse impacts of Alternative 2 resulting from inadvertent damage or destruction of presently undocumented archaeological resources and human remains during construction. Therefore, no significant adverse construction impacts on archaeological resources would occur.

Historic Resources

Alternative 2 would involve development similar to that of Alternative 1, except that the proposed construction and the VA Development Area would be located farther north. Therefore, the construction-related impacts of Alternative 2 on historic resources would be similar to those discussed for Alternative 1. No known historic resources would be directly affected by construction within the VA Development Area because no such resources are present in that area. No development would occur within the remaining VA Transfer Parcel.

As with Alternative 1, views from within the NAS Alameda Historic District would remain similar to current views, with the minor difference that some low buildings would be added to the middle ground in front of the port's industrial structures in the background (see Figure 3.5-8 in Section 3.5 [Visual Resources]). The proposed development would not detract from location, design, character, setting, materials, workmanship, and feeling of the NAS Alameda Historic District, and the historic district would still be able to convey its significance as a naval station dating to the 1930s and World War II designed in the Moderne style. Therefore, no significant adverse construction-related impact on historic resources would occur under Alternative 2.

Any construction-related sounds would be temporary and would dissipate over the distance between the VA Development Area and the NAS Alameda Historic District; thus, noise effects on the historic district would be minimal. Therefore, there would be no significant impact on the NAS Alameda Historic District associated with vibration or noise. More information on the projected levels of construction noise and vibration is provided in Section 3.12 (Noise).

Operation

Archaeological Resources

Operation of the VA facilities proposed under Alternative 2 would be similar to that under Alternative 1. No significant operational impacts on archaeological resources would occur under Alternative 2. Therefore, no significant adverse operational impacts on archaeological resources would occur.

Historic Resources

Operation of the VA facilities proposed under Alternative 2 would be similar to that under Alternative 1. Therefore, no significant operational impacts on historic resources would occur under Alternative 2. In summary, the construction and operational activities described in Alternative 2 would not have a significant impact on cultural resources.

In accordance with NHPA requirements, VA has initiated consultation under Section 106 of the NHPA with the California SHPO and has invited parties with a demonstrated interest in historic preservation or in the former NAS Alameda to participate as consulting parties. Pursuant to NHPA Section 106, 36 CFR 800.5, VA has determined that the Proposed Action, as described in this EA as Alternative 2 (Preferred Alternative), at the former NAS Alameda will have no adverse effects on historic properties. No historic properties are located in the VA Development Area or the off-site road/utility corridor. The proposed development and its construction-related and operational activities will have no adverse effects on the adjacent NAS Alameda Historic District and the district will still be able to convey its historical significance. A Section 106 Finding of Effect (FOE) document is also being prepared and will be submitted to the SHPO with a request for concurrence that the proposed undertaking would have no adverse effect on historic properties. The public will be provided an opportunity to comment on the Section 106 process and the FOE during the public review period for this Draft EA. Documentation of California SHPO's eventual concurrence with the FOE, which would conclude the Section 106 process for VA's Proposed Action, and any relevant documentation supporting the ongoing Section 106 consultation will be included in the Final EA.

Materials and documents supporting the analysis of potential effects on cultural resources and the ongoing Section 106 consultation process, including the FOE, are located in Appendix E (Cultural Resources Supporting Information).

No Action Alternative

Construction

Under the No Action Alternative, the fed-to-fed transfer would not take place and the proposed development (e.g., VHA OPC, VBA Outreach Office, NCA Cemetery, etc.) would not be built. Therefore, no significant construction impacts on cultural resources would occur.

Operation

Under the No Action Alternative, the fed-to-fed transfer would not take place and the proposed development and operations (e.g., VHA OPC, VBA Outreach Office, NCA Cemetery, etc.) would not occur. Therefore, no significant operational impacts on cultural resources would occur.

3.4.4 References

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3.5 VISUAL RESOURCES AND AESTHETICS

This section describes the aesthetics setting, visual resources and relevant regulatory framework. Within this context, potential effects on views, visual character, and in relation to light and glare are assessed.

3.5.1 Regulatory Framework

There are no applicable federal standards that relate to visual resources or aesthetics.

3.5.2 Affected Environment

Views and Visual Character

The VA Transfer Parcel is located at the west end of Alameda Island and is bordered by the Oakland Inner Harbor and the Port of Oakland to the north, San Francisco Bay to the west and south, and the City of Alameda to the east. The topography is flat, and bordered by urban and industrial land uses and open water of the San Francisco Bay.

The VA Transfer Parcel consists primarily of former Navy (now abandoned) runways and taxiways that do not include any substantial vertical elements. Throughout the site there are views of the surrounding Bay Area and the San Francisco skyline (see Figure 3.5-1A). Heavy-industrial uses associated with the Port of Oakland including large shipping cranes are visible across the Oakland Inner Harbor north of Alameda Point. Other industrial and urban development is also immediately visible. The downtown Oakland skyline is noticeable farther to the northeast (see Figure 3.5-1B). The East Bay Hills are seen to the northeast and east.

View Aesthetics

Views are considered sensitive when they have high scenic quality and are experienced by relatively large numbers of people (i.e., views from publicly accessible areas). Scenic quality is a measure of the overall impression or appeal of an area created by the physical features of the landscape, such as natural features (landforms, vegetation, water, color, adjacent scenery, and scarcity) and human-made features (roads, buildings, railroads, and agricultural patterns).

Views Outward from the VA Transfer Parcel

The VA Transfer Parcel is primarily a flat open area and does not contain vertical structures (see Figure 3.5-2A). Depending on weather and air quality conditions (e.g., fog, smog), views outward from the VA Parcel Transfer extend in all directions. Unobstructed views are available from the edge of most shoreline locations along the perimeter of the VA Transfer Parcel. Important regional features viewed from the area include San Francisco Bay (to the west and south), Downtown San Francisco (to the west), the San Francisco Bay Bridge (to the northwest), and Mt. Tamalpais (far to the northwest). Views of the Oakland Inner Harbor are available from the edge of the northern portion of the VA Transfer Parcel. The Port of Oakland and the former Fleet Industrial Supply Center Oakland, both industrial lands, occupy an area along the north shore of the Inner Harbor, directly opposite the VA Transfer Parcel. These facilities provide an industrial waterfront character that includes docking facilities for large oceangoing cargo vessels and large, mechanized loading and unloading cranes. There are expansive storage areas for cargo containers, numerous warehouses, and several rail lines in this area. Short- and mid-range views to the east include a row of former hangars (see Figure 3.5-2B) that are now a part of the NAS Alameda Historic



A: View to the Northwest of San Francisco Skyline and San Francisco–Oakland Bay Bridge from the VA Transfer Parcel



B: View to the Northeast of Port of Oakland Facilities, Oakland Skyline, and East Bay Hills from the VA Transfer Parcel

Figure 3.5-1:

Representative Views from the VA Transfer Parcel



A: View to the East of the Former NAS Alameda Runway from within the VA Transfer Parcel



B: View to the East of Former NAS Alameda Hangars from within the VA Transfer Parcel

Figure 3.5-2:

Representative On-Site Views of the VA Transfer Parcel

District, while long-range views include portions of the East Bay Hills. The East Bay Hills provide a visual backdrop to the urban foreground depicting former military uses.

Outward views might be considered sensitive. Currently the VA Transfer Parcel is not publicly accessible; hence these outward views are not available to the public.

Views into the VA Transfer Parcel

Publicly accessible views of the VA Transfer Parcel and VA Development Area are found between the former NAS Alameda hangars east of the VA Transfer Parcel (see Figure 3.5-3 Point B and Figure 3.5-4 B), and from Middle Harbor Shoreline Park across the Oakland Inner Harbor in the City of Oakland to the north (see Figure 3.5-3 Point A and Figure 3.5-4 A). Publicly accessible views are also available from more distant land points such as the Oakland Ferry Terminal; elevated locations (i.e., hills or tall buildings) in Oakland; and from a portion of Yerba Buena Island, across which the San Francisco Bay Bridge traverses halfway between San Francisco and Oakland. In addition, boats passing through the Oakland Inner Harbor, including the Alameda–Oakland Ferry, and cars traveling eastward on the San Francisco Bay Bridge or along Interstate-880 have temporary fleeting views of the VA Transfer Parcel and VA Development Area.

Views into the VA Transfer Parcel from the San Francisco Bay Bridge, San Francisco, the East Bay Hills, and any other publicly accessible locations would not be considered sensitive because these views are only distantly visible consisting primarily of abandoned runways and deteriorated outbuildings with low scenic quality.

Views to the southeast of the VA Transfer Parcel and VA Development Area from Middle Harbor Shoreline Park include open fields characterized by bunkers interspersed among grassy areas (see Figure 3.5-4A). Views to the northwest of the VA Transfer Parcel and VA Development Area from the former NAS Alameda hangars include flat open areas and do not contain vertical structures (see Figure 3.5-4B). This view is characterized by the former NAS Alameda airfield, which contains abandoned runways interspersed with grassy areas. The Port of Oakland cranes, the San Francisco Bay Bridge, and Yerba Buena Island provide a visual backdrop to the primarily flat foreground, which is the developed former airfield.

Light and Glare

VA Transfer Parcel

The VA Transfer Parcel consists of large expanses of abandoned runways and few small support buildings that were used when the site functioned as the airfield for NAS Alameda. No nighttime lighting or daytime glare emits from these sources.

The VA Transfer Parcel is located within viewing distance of surrounding urban areas such as the more developed eastern portion of Alameda Island, industrialized areas of West Oakland, the San Francisco waterfront and hills, and the San Francisco Bay Bridge. Limited nighttime light spillage from these sources does reach the VA Transfer Parcel.

Light-sensitive receptors also may include wildlife. An existing colony of the CLT, a bird species that is federally and State listed as endangered, is located on the VA Transfer Parcel 1,430–1,766 feet south of the



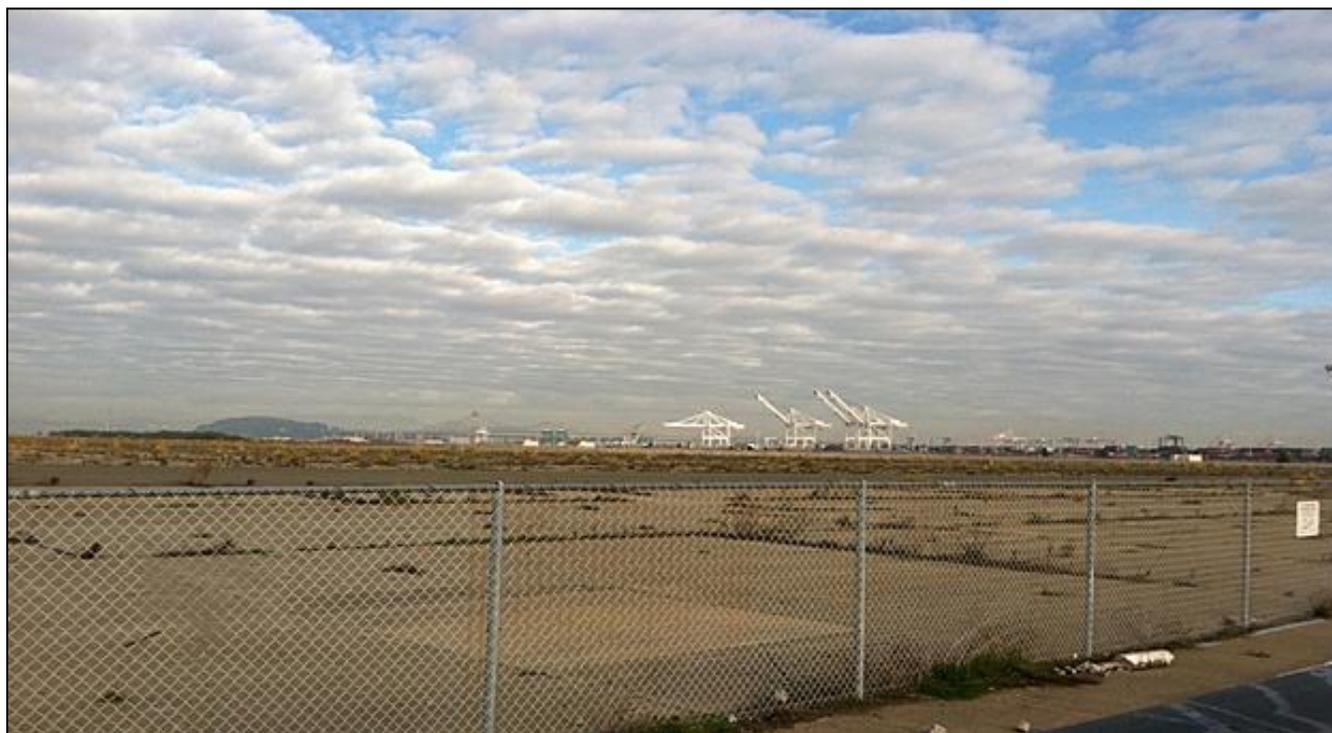
Source: Compiled by AECOM

Figure 3.5-3:

Photograph Viewpoints from Publicly Accessible Locations



A: View to the Southeast toward the VA Development Area from Middle Harbor Shoreline Park in Oakland



B: View to the Northwest toward the VA Development Area from between Former NAS Alameda Hangars

Figure 3.5-4: Publicly Accessible Views of the VA Development Area

VA Development Area. See Section 3.1 (Biological Resources) for a complete discussion of how light may affect the existing CLT colony.

The VA Transfer Parcel does not contain buildings with reflective materials or windows, and is therefore not a substantial source of glare. No glare-sensitive receptors are located near the VA Transfer Parcel.

3.5.3 Environmental Consequences

Assessment Methods

This section describes the visual impacts of the EA Alternatives and the area surrounding the VA Transfer Parcel. Several variables affect the degree of visibility, visual contrast, and ultimately project impacts: the scale and size of facilities, viewer types and activities, distance and viewing angle, and the influences of adjacent scenery or land uses. Viewer response and sensitivity vary depending on viewer perceptions and expectations. Viewer sensitivity is distinguished among various project viewers depending upon identified scenic corridors and types of use such as recreational, residential, office, and industrial areas. Recreational areas and scenic corridors are considered to have relatively high sensitivity, residential areas have moderate sensitivity, and office and industrial areas typically have low sensitivity.

As part of this analysis, various areas in the City of Alameda and City of Oakland were screened as potential view locations. These areas were screened based on whether the VA Transfer Parcel is visible from those locations, and the degree to which viewers would be sensitive to proposed physical changes at the VA Transfer Parcel during construction and operation of the proposed VA facilities.

A set of locations constituting a representative cross section of views experienced by typical observers was chosen for the analysis. Views from these locations were photographed and are included in this EA to illustrate existing conditions and to facilitate determination of project impacts. Conceptual design drawings and information about height and massing of the proposed project were used in conjunction with the photographs to identify whether and when construction and operation of the proposed VA facilities would result in a potential visual impact.

Alternative 1

Construction

Visual Character

Alternative 1 would involve construction of the VHA OPC, VBA Outreach Office, Conservation Management Office, NCA Cemetery, an off-site utility/road corridor, and associated infrastructure within the VA Development Area. No development would occur within the remaining VA Transfer Area. Construction staging areas would be established within the VA Development Area and large construction equipment and vehicles would be present during construction activities.

Because the VA Development Area would still be restricted from public access during construction, the construction staging areas would not need to be screened. The construction contractor would implement

management measures to screen construction staging areas during construction of the subsequent cemetery expansion phases, thus limiting the frequency and prominence of views of construction equipment, vehicles, and materials. Therefore, this construction-related impact of Alternative 1 related to visual character would not be significant.

Light

Construction activity under all phases of Alternative 1 would take place during daytime hours; therefore, no construction equipment lighting would be needed. Some low-level security lighting would be required in construction staging areas, which would have a small effect on the area's ambient light levels. However, the construction contractor would use lighting features that would be shielded and directed downward, as required by management practices to minimize light spillover to neighboring undeveloped land on the VA Transfer Parcel. Therefore, this construction-related impact of Alternative 1 related to light would not be significant.

Operation

Visual Character

Under Alternative 1, VA would operate the VHA OPC, VBA Outreach Office, Conservation Management Office, the first 18 acres of the NCA Cemetery, and associated infrastructure. The OPC building (158,000 gsf) would be two stories tall and the majority of the building would be less than 40 feet tall. Only a small portion of the building may extend up to 54 feet tall to allow for mechanical equipment or a roof element at the building entrance; however, no more than 25% of the total roof area would exceed 40 feet in height. Materials used for the VHA OPC building would include concrete masonry units, glass fiber reinforced concrete, metal panels, precast concrete, and cement plaster. A parking area with 632 parking spaces would be located adjacent to the OPC building. The Conservation Management Office building (2,500 gsf) would be a one-story structure with a maximum height of 25 feet; this building would have a small adjacent parking area with up to 10 parking spaces.

The proposed NCA Cemetery would consist of several wall-like structures (columbarium walls) with niches to house cinerary urns containing cremated remains, up to three committal service shelters for interment or memorial services, and a staging area for vehicles in a funeral procession (known as the Cortège Assembly Area). The columbarium walls would be up to 10 feet tall; the pavilion-like committal shelters would be about 25 feet by 36 feet in size and up to 25 feet tall, and would provide seating for approximately 10 to 20 people and standing room for others. The Cortège Assembly Area would be located adjacent to the west side of the VHA OPC, could accommodate up to 30 vehicles, and would include a memorial walkway, a flagpole, and a carillon (bell tower) that plays bells or tones.

The VA Development Area would include fencing along its perimeter, signage, landscaping, an irrigation system, benches, trash receptacles, and flower containers for floral offerings. Landscape planting in the VA Development Area would prioritize native shrub and herbaceous species over nonnative species and would consist primarily of drought-tolerant plant species and open hardscape areas. Development within the VA Development Area has incorporated various measures to minimize and avoid potential impacts to the existing CLT colony. These measures include standards for the height of landscaping, landforms, and permanent barriers (see Section 3.1 [Biological Resources] for more information) for the proposed VA Development Area. Among these measures are the following:

- Within 2,132 feet of the CLT colony, landscaping shall not exceed 4 feet in height. In areas more than 2,132 feet from and within the line of sight of the colony, landscaping shall not be greater than 6 feet. In areas more than 2,132 feet from the CLT colony, tree species shall not be greater than 20 feet and be light limbed with a density not to exceed 5 trees per 10,000 square feet of VA developed/improved area (USFWS, 2012).
- Within 2,132 feet of the CLT colony, landforms (landscape berms) shall not exceed 6 feet in height. Beyond 2,132 feet from the colony, the landforms may be a maximum of 12 feet in height. On portions of berms within line of sight of the CLT colony, vegetation shall not exceed 6 inches in height. On portions of berms out of the line of sight of the colony, vegetation shall not exceed 30 inches in height (USFWS, 2012).
- The barrier along the southern perimeter of the VA Development Area shall be a minimum of 8 feet and a maximum of 10 feet in height. The barrier south of the cemetery entrance road shall be a minimum of 6 feet and a maximum of 10 feet in height. These barriers may be phased with the VA development and may be architecturally treated (USFWS, 2012).

Implementing these landscaping, landform, and perimeter barrier measures would not add any substantial vertical elements, but they would serve to reduce the amount of new development visible from surrounding areas. In addition, the landscaping, landform, and perimeter barriers would blend the development into the surrounding open field characterized by the former NAS Alameda airfield which is interspersed with grassy areas.

The VHA OPC, Conservation Management Office, and committal shelter structures proposed under Alternative 1 would be located in the central and/or inner portions of the VA Development Area that are less visible from outside the boundary than locations along the perimeter. For the most part, the buildings proposed for central and inner portions of the VA Development Area would not be visually dominant relative to the flat foreground portions of the site, given the distance to the proposed VA facilities from publicly accessible viewing locations at the end of Main Street and Middle Harbor Shoreline Park. In addition, views of these new buildings from outside the VA Development Area would be set back sufficiently from the boundaries to render them visually subordinate to other visible features. Therefore, buildings proposed for the central and inner portions of the VA Development Area would have a small effect on views and would minimally affect the visual character of the VA Transfer Parcel.

The new roadway and eastern half of the cemetery proposed for the eastern VA Development Area under Alternative 1 would be visible in some views from the end of Main Street. From areas where views are less obstructed, people could observe the proposed VA facilities located at the eastern edge of the VA Development Area. The VA facilities may be noticeable from some publicly accessible locations but would be consistent with the existing buildings in the area.

The rendering shown in Figure 3.5-5 provides an aerial perspective conceptually illustrating the proposed facility massing at buildout of the development of Alternative 1 combined with the existing layout of the VA Development Area. The view is toward San Francisco Bay to the northwest. As shown, the VA facilities would not substantially alter Bay views. Rather, the location of the VHA OPC building would take advantage of the panoramic views of the Bay to the west. In addition, the visual character of the VA Development Area would be improved compared to the former NAS Alameda airfield, which contains abandoned runways and taxiways that are no longer in use. In addition, the cemetery portion of the development is lower in height and allows for views through the site in any direction. Finally, accessible views toward the VA Development site from several locations is distant and due to shifting weather conditions prevalent in the Bay Area, including heavy fog and air



Source: Image provided by SmithGroup in 2008

Figure 3.5-5: Aerial Perspective (Looking Northwest) toward the Proposed VA Alameda Facilities at Buildout of Alternative 1 in 2117

quality, it is hard to distinguish new development within the proposed project setting. Therefore, the operational impacts related to visual character under Alternative 1 would not be significant.

Light and Glare

Most proposed operations under Alternative 1 would take place during daytime hours. Nighttime lighting would consist primarily of shielded and downward-directed low-level security lights used around the VHA OPC and CMO buildings and parking facilities. Because the proposed VA facilities would generally be set back from the eastern and southern boundaries of the VA Transfer Parcel, low-level night lighting would not be substantially noticeable to distant residents to the east or to the CLT colony to the south. The operational impact of Alternative 1 related to nighttime lighting would not be significant.

No substantial increase in glare would result from operation of the VHA OPC, NCA Cemetery, and Conservation Management Office under Alternative 1. The windows of the VHA OPC and Conservation Management Office buildings in the VA Development Area may reflect the sun's rays at times, but these occurrences would be intermittent. Therefore, the operational impact of Alternative 1 related to daytime glare would not be significant.

Alternative 2 (Preferred Alternative)

Construction

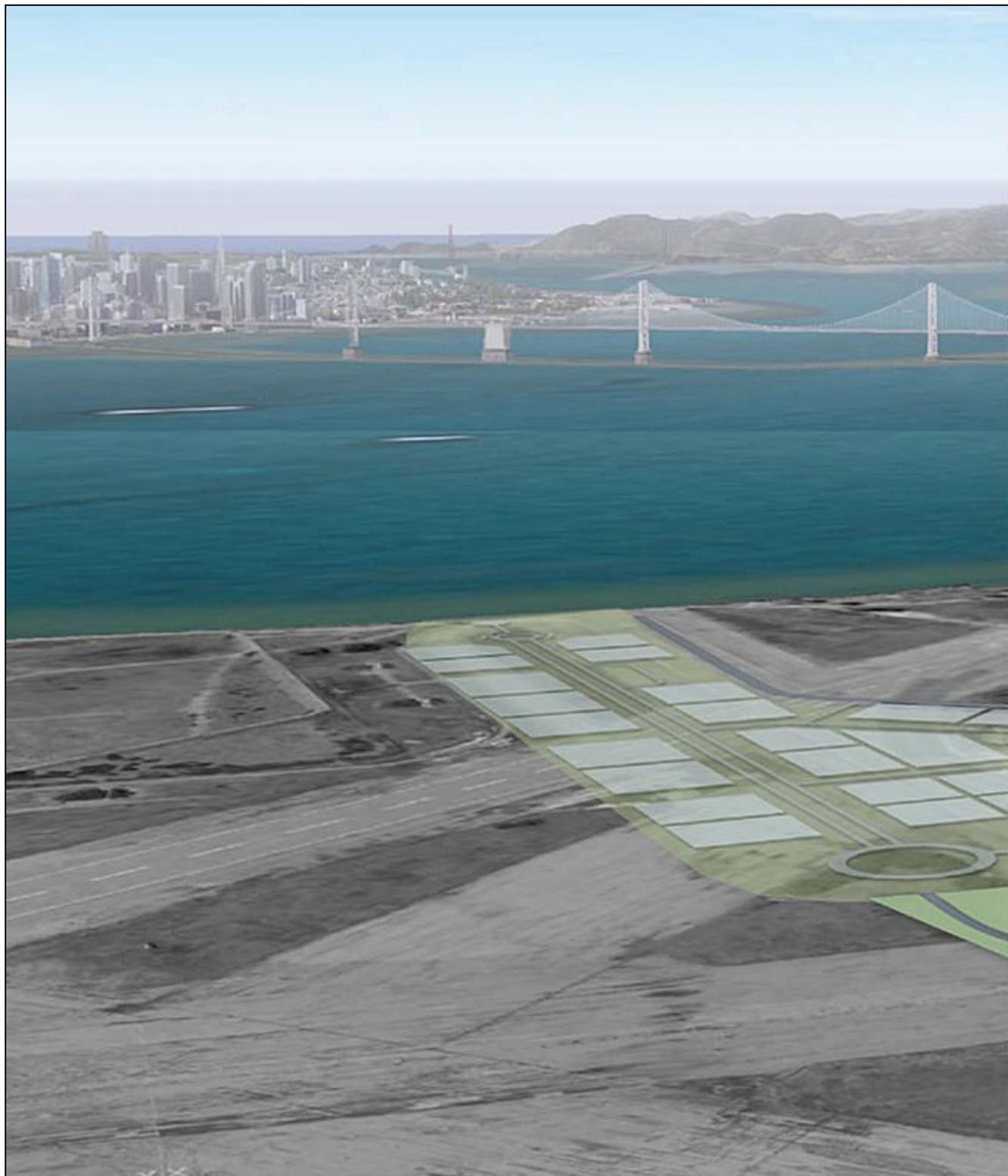
The construction of VA facilities under Alternative 2 would be similar to that under Alternative 1, except that a portion of the development area would be moved farther north. Therefore, impacts of construction under Alternative 2 on visual character and on light and glare would be the same as those described for Alternative 1. Construction-related impacts of Alternative 2 would not be significant.

Operation

The operation of VA facilities under Alternative 2 would be similar to that under Alternative 1, except that a portion of the development area would be moved farther north. Impacts of facility operation under Alternative 2 on visual character and on light and glare would be the same as those described for Alternative 1. Operation-related impacts of Alternative 2 would not be significant.

The renderings shown in Figures 3.5-6 and 3.5-7 provide aerial perspectives conceptually illustrating the proposed facility massing at buildout development of Alternative 2 combined with the existing layout of the VA Development Area. The views are toward San Francisco, the San Francisco Bay Bridge, and San Francisco Bay to the west and northwest. As shown, the proposed VA facilities would not substantially alter views of the Bay. Rather, the shape and location of the VHA OPC building would take advantage of the panoramic views of San Francisco, the San Francisco Bay Bridge, and the Bay to the west. In addition, the cemetery portion of the development is lower in height and allows for views through the site in any direction.

Figure 3.5-8 provides visual simulations of Alternative 2 from the only publically accessible locations currently near the site: Middle Harbor Shoreline Park and former NAS Alameda hangars immediately east of the VA Transfer Parcel. As depicted in the simulated views from these public locations, the new development on the site is not noticeable at this distance and blends in with the industrial backdrop of the setting. The visual character of



Source: Image provided by HDR in 2012

Figure 3.5-6:

Aerial Perspective (Looking West) toward the Proposed VA Alameda Facilities at Buildout of Alternative 2 in 2017



Source: Image provided by HDR in 2012

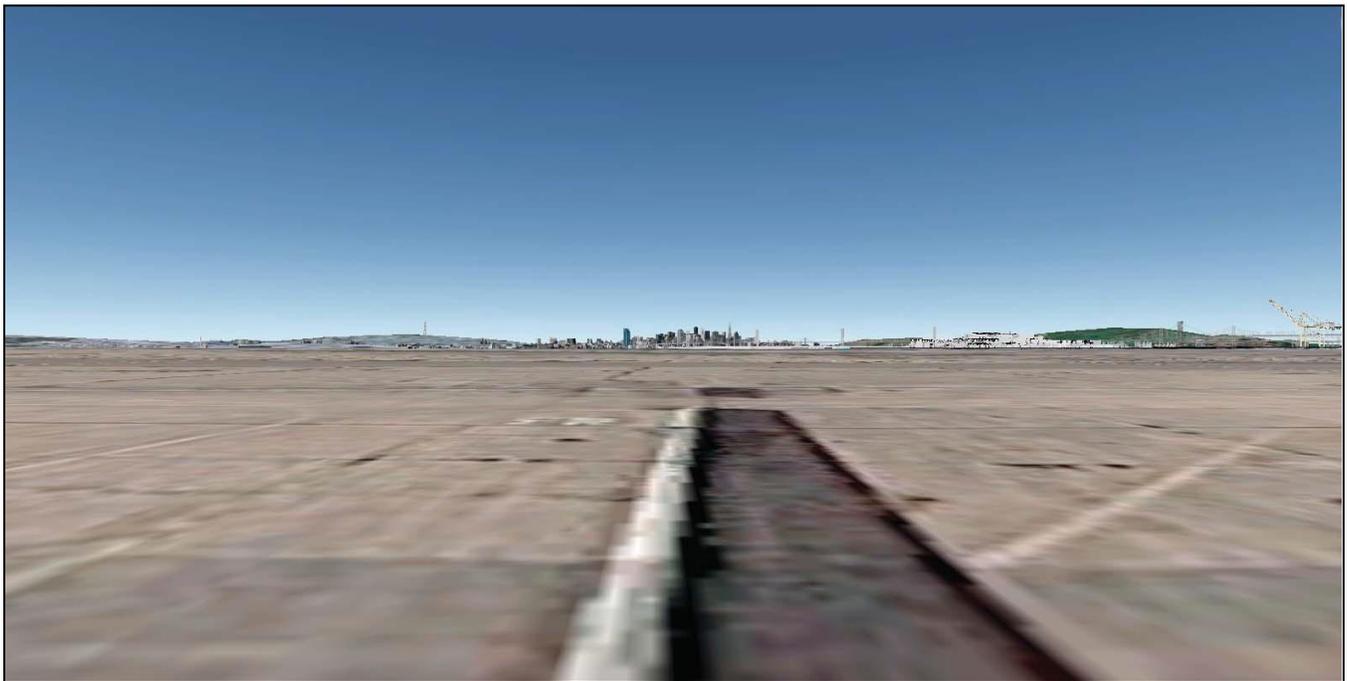
Figure 3.5-7:

Aerial Perspective (Looking Northwest) toward the Proposed VA Alameda Facilities at Buildout of Alternative 2 in 2017



Source: Image provided by HDR in 2012

A: Proposed view to the Southeast toward VA Development Area from Middle Harbor Shoreline Park in Oakland



Source: Image provided by HDR in 2012

B: Proposed View to the Northwest toward VA Development Area from between Former NAS Alameda Hangars

Figure 3.5-8: Visual Simulations Looking Toward the Proposed VA Alameda Facilities (from Publically Accessible Views) at Buildout of Alternative 2 in 2117

the VA Development Area would not be impaired but rather improved compared to the former NAS Alameda airfield. Finally, the changing weather patterns in the Bay Area include conditions affected by fog and air quality which would further make views toward the VA Development site difficult to distinguish new structures on the landscape. Additional perspectives of the proposed Alternative 2 project are depicted in Figure 3.5-9.



Source: Data Image provided by HDR in 2012

Figure 3.5-9: Conceptual Perspectives of the Front and Back of the Proposed VA Alameda Facilities

No Action Alternative

Construction

Because the VA facilities would not be constructed under the No Action Alternative, no construction-related changes in visual character, light, or glare would result. No significant construction-related impact would occur.

Operation

Under the No Action Alternative, there would be no operational changes in views, visual character, light, or glare. No significant operational impact would occur.

3.5.4 References

U.S. Fish and Wildlife Service (USFWS). 2012 (August 29). *Final Biological Opinion on the Proposed Naval Air Station Alameda Disposal and Reuse Project in the City of Alameda, Alameda County, California*. USFWS ID #81420-2009-F-0952-4.