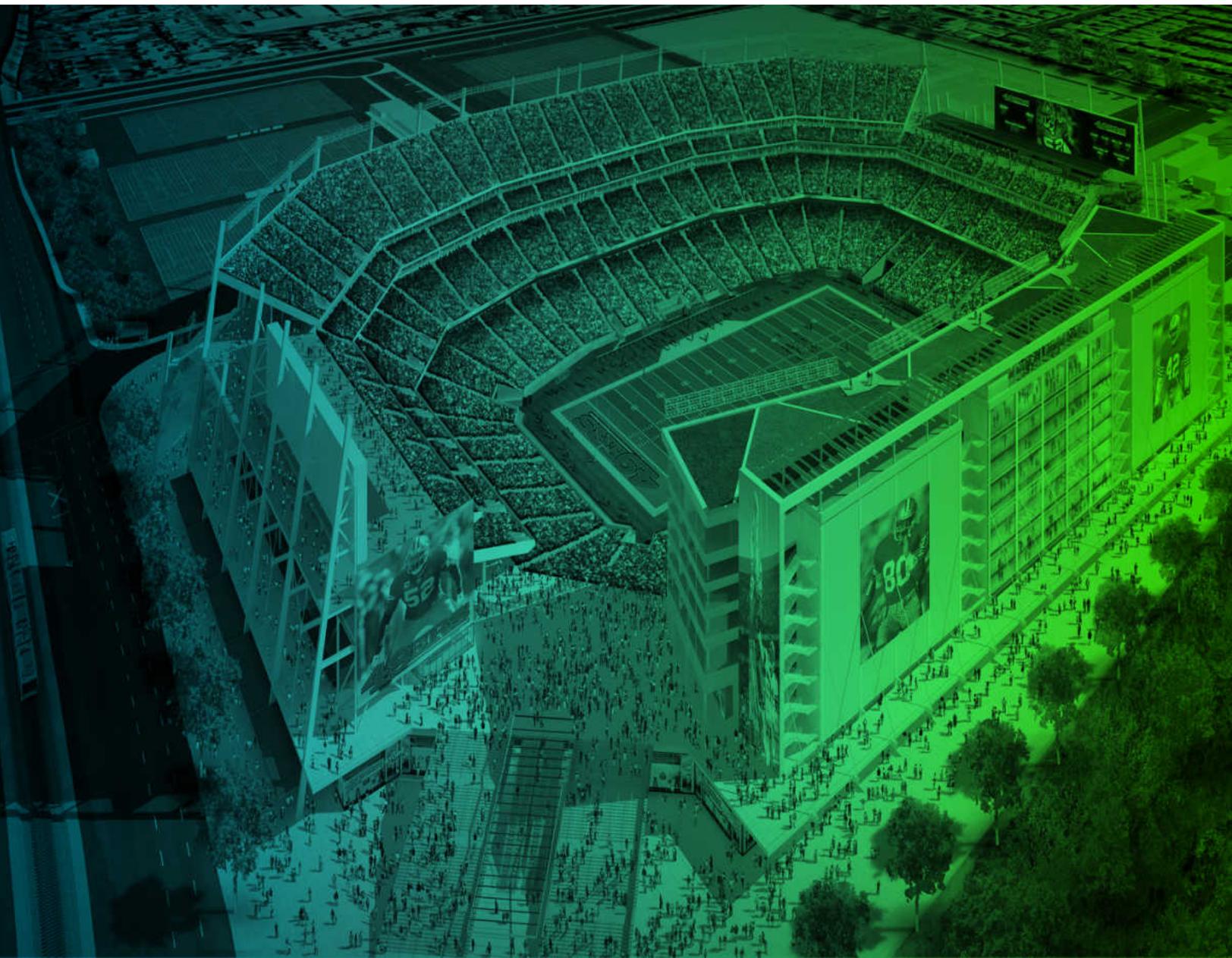


San Francisco 49ers

Transportation Management and Operations Plan for the
Levi's[®] Stadium in Santa Clara – July 2014





This page intentionally left blank.

DRAFT

Table of Contents

1.0 Purpose	1
2.0 Objectives	3
2.1 Administrative Objectives	3
2.1.1 Flexibility and Scalability	3
2.1.2 Procedures for Review and Update	3
2.1.3 Input from Interested Parties	3
2.1.4 Collection and Evaluation of Annual Data	3
2.2 Performance Objectives	4
2.2.1 Limit Duration of Traffic Congestion	5
2.2.2 Avoid Intrusions into Residential Neighborhoods	5
2.2.3 Avoid Intrusions into Surrounding Businesses	6
2.2.4 Facilitate Transit Ridership and Minimize Impacts to Existing Transit Service	8
2.2.5 Facilitate Arrivals by Bicycle	10
2.2.6 Ensure Safety	10
2.2.7 Provide Access to Neighboring Properties	10
2.2.8 Provide Adequate Parking	11
2.2.9 Effective Community Outreach and Education	11
2.2.10 Non-Permitted Parking	11
3.0 Working Groups	15
3.1 Transportation Operations Group (TOG)	15
3.1.1 Stadium Operations Liaison	15
3.1.2 Stadium Manager	16
3.2 Stadium Stakeholders Group (SSG)	16
4.0 Annual Schedule and Event Type	19
4.1 Annual Events Calendar	19
4.2 Stadium Authority Meeting Schedule	20
4.3 Working Group Meeting Schedule	20
4.4 Matrix of Control by Event Size	20
4.4.1 Parking Supply	21
4.4.2 Vehicle Access	22
4.4.3 Transit Access	25
4.4.4 Bicycle Access	25
4.4.5 Pedestrian Access	26
4.4.6 Emergency Vehicle Access	26
5.0 Components	27
5.1 Vehicle Access	27
5.1.1 Vehicle Ingress	27
5.1.2 Vehicle Egress	44
5.2 Transit Access	50
5.2.1 VTA Light Rail	50
5.2.2 VTA Local Bus	73
5.2.3 Other Public Bus	76
5.2.4 Charter Bus	76
5.2.5 Caltrain	78
5.2.6 Capitol Corridor	79



5.2.7	Altamont Corridor Express	82
5.3	Pedestrian Access	83
5.3.1	Roadway Closures / Pedestrian Only Areas	83
5.3.2	Access to Transit	85
5.3.3	Access to Parking	92
5.3.4	ADA Access	96
5.4	Bicycle Access	99
5.4.1	Access Routes	99
5.4.2	Bicycle Parking	100
5.5	Parking	104
5.5.1	Employee Parking	104
5.5.2	Patron Parking	105
5.6	Taxi and Pedicab Access	117
5.7	Emergency Vehicle Access Plan	120
5.7.1	Ambulance	120
5.7.2	Police	120
5.7.3	Fire	122
5.7.4	Stadium Command Post	122
5.8	TMOP Contingency Planning	123
5.8.1	Transit Access	123
5.8.2	Vehicular Access and Parking	123
6.0	Weekday Considerations	125
6.1	Advance Communication	125
6.1.1	Patrons	125
6.1.2	Area Businesses	125
6.1.3	Changeable Message Signs	126
6.2	Vehicle Access	126
6.3	Transit Access	128
6.4	Parking	128
6.5	Residential/Business Notifications and Communications	129
7.0	Integration/Coordination with Nearby Facilities	131
7.1	Great America Theme Park	131
7.1.1	Great America Theme Park Parking During Events	131
7.1.2	Great America Theme Park Vehicle Access during Events	133
7.2	Techmart and Convention Center Vehicle Access during Events	137
7.3	Santa Clara Youth Soccer Park Vehicle Access during Events	141
7.4	Santa Clara Golf & Tennis Club Vehicle Access during Events	143
7.5	David's Restaurant and Banquet Facility Vehicle Access during Events	145
7.6	Our Lady of Peace Church and Shrine	147
7.7	Great America Commuter Rail Station	148
8.0	Development of Operating Budget	151

List of Tables

Table 2-1: Summary of Data to be Collected	4
Table 2-2: Anticipated Arrival and Departure Patterns	5
Table 2-3: Transit Providers, and Data to be Collected	8
Table 4-1: Potential Stadium Events.....	19
Table 4-2: Anticipated Transit and Automobile Use for Events of Different Size	21
Table 5.1-1: Signal Phasing Modifications – Vehicle Ingress.....	38
Table 5.1-2: Encroachment Permit Needs	40
Table 5.1-3: Signal Phasing Modifications – Vehicle Egress	49
Table 5.5-1: Employee Event day Parking Demand	104
Table 5.5-2: Stadium Parking Program.....	108

List of Figures

Figure 2-1: Event Day Neighborhood Roadway Restrictions	7
Figure 2-2: Transit Providers	9
Figure 2-3: Major Neighboring Commercial Properties	12
Figure 2-4: Gameday Parking Facilities	13
Figure 3-1: Stadium TMOP Operations Flow Chart	17
Figure 4-1: TMOP Area of Influence by Event Size	23
Figure 4-2: Intersection Adjustments by Event Size	24
Figure 5.1-1a: Vehicular Paths of Travel – Ingress.....	29
Figure 5.1-1b: Vehicular Paths of Travel – Egress	30
Figure 5.1-2: Detailed Gameday Signage.....	31
Figure 5.1-3: Advance Event Message Signs	32
Figure 5.1-4: Proposed Inbound Lane Configurations and Control.....	36
Figure 5.1-5: Pedestrian Crossings at Monitored Intersections	37
Figure 5.1-6: Traffic Signal Improvement Locations	41
Figure 5.1-7: Paratransit and Pick-up / Drop-off Routes, and Supplemental	45
Figure 5.1-8: Proposed Outbound Lane Configurations and Control	47
Figure 5.2-1: Transit Service in the Stadium Vicinity	51
Figure 5.2-2a: VTA Light Rail Schematic East of Great America Station.....	54
Figure 5.2-2b: VTA Light Rail Schematic West of Great America Station.....	55
Figure 5.2-3a: VTA Satellite Lots	58
Figure 5.2-3b: Downtown Mountain View VTA Station	59
Figure 5.2-3c: NASA/Bayshore VTA Station.....	60
Figure 5.2-3d: I-880/Milpitas VTA Station	61
Figure 5.2-3e: Great Mall VTA Station.....	62
Figure 5.2-3f: Guadalupe Line and Vasona Line Parking Availability	63
Figure 5.2-4a: Post-Event Arrivals at VTA Great America Station (Westbound Egress)	66
Figure 5.2-4b: Post-Event Arrivals at VTA Great America Station (Eastbound Egress)	67
Figure 5.2-5a: Great America Light Rail Station Platform Configuration	68
Figure 5.2-5b: Great America Light Rail Station Platform Queuin Area	69
Figure 5.2-6: At-Grade Crossing of Tasman Drive.....	71
Figure 5.2-7: VTA Bus Service	75
Figure 5.2-8: Charter Bus Staging Area on Event Day	77
Figure 5.2-9: Great America Commuter Rail Station Platform Configuration	81
Figure 5.3-1: At-Grade Crossing of Tasman Drive.....	84
Figure 5.3-2: Directional Signage and Access to Transit	86
Figure 5.3-3: Great America Light Rail Station Platform Queuing Area	87
Figure 5.3-4: VTA Supplemental Bus Route Staging Area on Event Days	88



Figure 5.3-5: Great America Commuter Rail Station Platform Configuration 90

Figure 5.3-6: Charter Bus Staging Area on Event Day..... 91

Figure 5.3-7: General Parking Areas..... 93

Figure 5.3-8: Detailed Pedestrian Access to Parking Facilities on Event Days 94

Figure 5.3-9: Stadium Security Perimeter 95

Figure 5.3-10: Paratransit and Pick-up / Drop-off Routes, and Supplemental ADA Shuttle Routes 98

Figure 5.4-1: Bicycle Routes 101

Figure 5.4-2: Bicycle Diversions on Event Day 102

Figure 5.4-3: Bicycle Parking Facilities..... 103

Figure 5.5-1: Gameday Parking Facilities 107

Figure 5.5-2a: Vehicular Paths of Travel – Ingress 110

Figure 5.5-2b: Vehicular Paths of Travel – Egress 111

Figure 5.5-3: Areas of Parking Prohibitions during 2014 Game Days 112

Figure 5.5-4: Red Lot 1 ADA Parking..... 114

Figure 5.5-5: Tailgating Regulations..... 116

Figure 5.6-1: Taxi and Uber Staging Area on Event Days..... 118

Figure 5.6-2: Pedicab Staging Area and Routes 119

Figure 5.7-1: Emergency Vehicle Access..... 121

Figure 6-1: Proposed Outbound Lane Configurations and Control 127

Figure 7-1: Great America Theme Park Parking Supply on Event Day 132

Figure 7-2a: Access to Great America Theme Park on Event Day – Inbound..... 135

Figure 7-2b: Access to Great America Theme Park on Event Day – Outbound..... 136

Figure 7-3: Advance Event Message Signs 138

Figure 7-4: Access to Techmart, Convention Center, and the Hyatt Hotel on Event Days..... 140

Figure 7-5: Access to Santa Clara Youth Soccer Park on Event Days 142

Figure 7-6: Access to Santa Clara Tennis & Golf Club on Event Day 144

Figure 7-7: Access to David’s Restaurant on Event Day..... 146

Figure 7-8: Access to Our Lady of Peace Church and Shrine on Event Day 149

This page intentionally left blank.



1.0 Purpose

The purpose of this Transportation Management and Operations Plan (TMOP) is to provide a flexible framework and plan for the provision of safe and efficient multi-modal access, and adequate parking, for Levi's® Stadium in Santa Clara, California. The stadium will include approximately 68,500 seats, but can accommodate up to 71,000 patrons with the inclusion of standing-room-only tickets. Additionally, the Stadium has the potential for expansion to approximately 75,000 seats for the purpose of periodically hosting special events, such as the NFL Super Bowl. Per *The 49ers Stadium Project EIR* (City of Santa Clara, 2009), for capacity events such as typical San Francisco 49er games, 50,500 attendees are expected to arrive by automobile (as shown in Table 15, page 176 of the EIR, volume 1), with an average vehicle occupancy of 2.7 persons per vehicle (corresponding to 18,865 vehicles in total). 18,000 attendees will arrive by transit, including 5,000 by charter bus, 4,500 by Santa Clara Valley Transit Authority (VTA) light rail, 4,500 by local and regional bus services, and 4,000 by heavy rail (of which 3,000 will arrive via a transfer from Caltrain to VTA light rail). It should be noted that ridership projections from the EIR are to be updated as new ticket sales progress, and VTA uses that information to update its travel demand modeling. VTA will provide annual updated ridership projections.

The TMOP includes administrative and performance objectives by which the success of the plan's implementation goals can be measured. TMOP administrative objectives are intended to ensure that the plan is flexible and scalable, that procedures for review and update are clearly defined and that feedback from the public as well as other involved public and private organizations are considered. TMOP performance objectives include minimizing the duration of traffic congestion throughout the Stadium area, providing adequate parking facilities, facilitating trips by non-automobile uses, encouraging transit use, preventing intrusion into neighborhoods while maintaining access to neighboring business properties, and ensuring safe travel for all event patrons and local traffic.

As part of this document, working groups comprised of both public and private organizations are identified to ensure the effective implementation of traffic, transit, and parking plans. One working group will focus on day-to-day operations, while the other will function in an advisory capacity. Participants in each working group are based upon jurisdictional authority and/or expertise that support the functions of that particular group.

The TMOP includes an Annual Events Calendar for the Stadium, scheduled meetings for the Stadium Authority and working groups, and outlines the extent to which the TMOP should be implemented for events of different sizes. Based on the number of attendees expected for each event, the number of parking facilities used, the amount of lane reconfiguration and signal modification required, and the amount of transit service provided can be adjusted.

The TMOP outlines all elements necessary to facilitate safe and efficient access to and from the Stadium by way of all modes of transportation. With regard to vehicle ingress and egress, the type and location of signage is defined, the locations for all intersection treatments and roadway closures are identified, responsibility for implementation of various TMOP elements is defined, and the requisite number of hours to apply the TMOP is identified. Plans to allow access to neighboring business properties, and to restrict access into local neighborhoods are outlined. The types of transit service provided to the Stadium on event days are outlined, and methods to provide safe, orderly, and efficient access to transit facilities during the heavy egress load periods are described. New transit facilities to be built specifically for Stadium use are detailed. Designated pedestrian and bicycle facilities are described, and wayfinding signage to the stadium and to transit is outlined. Parking facilities for employees and patrons are identified, and plans for the use of other nearby parking facilities are outlined. The TMOP also outlines plans for emergency vehicle access, identifying the fastest routes to and from the Stadium during events.

In addition to weekend events, the TMOP identifies a methodology for implementing elements of the TMOP on weekday evenings. Plans for advance notification and outreach are outlined, and methods for maximizing traffic flow towards the Stadium during business hours are described. As businesses in the area will continue to function during the Stadium's ingress period for weekday events, methods for effective communications between these businesses (and area residents) and the Stadium's working groups are outlined.

Integration and coordination with nearby facilities are a priority of the TMOP. Specific access plans, advance signage, and means of communication are identified for businesses that will operate during Stadium events, including the Great America Theme Park, Santa Clara Convention Center, Techmart, Santa Clara Youth Soccer Park, Santa Clara Golf and Tennis Club, and David's Restaurant and Banquet Facility.

Finally, the TMOP is intended to be an evolving, living document, to be updated as necessary to better serve the surrounding community and the users and managers of the facility. The measures in this TMOP may help to inform the preparations and plans for special events, such as Super Bowl, but other unique procedures and security requirements may be involved that are not considered in detail here.



2.0 Objectives

The TMOP includes administrative and performance objectives by which the success of the plan's implementation goals can be measured. These objectives are intended to ensure that the plan is flexible and scalable, with provisions for obtaining input, collecting data, and allowing for future modifications to improve performance.

2.1 Administrative Objectives

2.1.1 Flexibility and Scalability

To ensure the effectiveness of the TMOP in various scenarios, the TMOP is both flexible and scalable. Annual reviews and updates, when necessary, are conducted to better serve both Stadium users and the public. Further, the TMOP has the ability to be modified within any year to respond quickly to any on-going concerns and issues based on feedback received and observations made, on an event-by-event basis. The TMOP is also scalable, allowing size-appropriate measures to be deployed for sold out events as well as smaller events.

2.1.2 Procedures for Review and Update

The TMOP functions as an actively maintained procedures manual, that is continuously updated to better serve the transportation and parking needs of the facility, as conditions change in the surrounding area of the stadium, and as better means for providing effective transportation solutions are identified. On an annual basis, after the end of the NFL season (anticipated as the first quarter of the calendar year), the written TMOP will be reviewed and updated as necessary, through recommendations of the working groups, that are ratified by the Director of Planning and Inspection (Please refer to Section 3.0 below for a description of the working groups). Some elements of the TMOP will be reviewed at various points during the season in order to make any adjustments that may be necessary immediately (e.g., issues related to neighborhood intrusion). The Transportation Operations Group (described in section 3.0) will be responsible for maintaining the TMOP document. These changes will also be included in an annual report prepared by the Stadium Manager, for review by the Director of Planning and Inspection.

2.1.3 Input from Interested Parties

Stadium Working Groups, as described in section 3.0 of the TMOP, are responsible for the implementation of the TMOP, collection of data to assess the plan's effectiveness, and obtaining input from interested agencies and the public. Specifically, the Transportation Operations Group makes observations on event days, considers feedback from the Stadium Operations Liaison (the point of contact for community members), and considers feedback from the Stadium Stakeholders Group, which is comprised of professionals from public agencies and private organizations. All recommended changes reviewed and approved by the Director of Planning and Inspection will be presented at Stadium Authority Meetings.

2.1.4 Collection and Evaluation of Annual Data

To assess the TMOP's effectiveness, and evaluate future improvement measures, travel behavior data will be periodically collected. Specifically, data is to be collected annually on a sample basis for the first five years after Stadium operations commence, followed by collections every five years moving forward. It is expected that after five years of operation, the majority of operational improvements will have been identified and implemented, and users of the area surrounding the Stadium will understand event day operations. As such, the collection of additional annual data would not be beneficial.

Data will be collected during a regular-season Sunday afternoon game, and during a regular-season weekday evening game should one occur (i.e., Monday Night Football, Thursday Night Football), or other evening event, both at least one month after the start of the regular season. A summary of topics to be examined, and details regarding the data to be collected is provided in **Table 2-1**.

Table 2-1: Summary of Data to be Collected

Item for Evaluation	What Data is to be Collected?	Responsible Party for Collection and Compilation of Data	When shall Data be Collected?	Where Data shall be Collected?	How Data shall be Summarized?
Duration of Congestion	Field observations and aerial photographs (one Sunday and one evening game)	Transportation Consultant under Stadium Manager Direction	During a Sunday afternoon game, during a weekday evening game or event	Parking Lots, key traffic congestion points	Graphically; to identify bottleneck locations
Intrusion into Santa Clara, San Jose and Sunnyvale Residential Neighborhoods	Aerial photographs of on-street parking (one Sunday and one evening game)	Transportation Consultant under Stadium Manager Direction	Aerial photography taken at intervals from 9:00 AM to 6:00 PM; during a Sunday afternoon game and a weekday evening game	Aerial photographs of surrounding residential neighborhoods	Tabular; to identify the extent of intrusion into neighborhoods
Transit Ridership	Boarding/alighting data from transit providers	VTA, ACE, Capitol Corridor, Caltrain, Charter Buses	Collected before season (once on a Sunday, once on a Monday), and every game; summarized at the end of season	On transit providers' trains / buses, at transit stops	Tabular
Parking	Aerial photographs of Stadium parking facilities, parking counts	Transportation Consultant under Stadium Manager Direction	Aerial photography taken at intervals from 9:00 AM to 6:00 PM; during a Sunday afternoon game and a weekday evening game	All Stadium parking facilities	Tabular
Modal Split	Arrival data from all modes of travel	Traffic Consultant, VTA, ACE, Capitol Corridor, Caltrain	Throughout season, prior to the start of a season	Aerial photographs, transit data, bicycle parking counts	Tabular
Access to Neighboring Properties	Aerial photographs of neighboring properties parking facilities, field observations	Transportation Consultant under Stadium Manager Direction	Aerial photography taken at intervals from 9:00 AM to 6:00 PM; during a Sunday afternoon game and a weekday evening game	Aerial photographs of neighboring properties parking facilities	Tabular; to identify the extent to which neighboring uses are utilized

Source: AECOM, 2014.

2.2 Performance Objectives

Performance objectives of the TMOP are based on expected arrival and departure totals as provided in *The 49ers Stadium Project EIR* (City of Santa Clara, 2009). Anticipated arrival and departure totals for vehicle trips are summarized in **Table 2-2**. The values provided are based on factors including transit availability, average vehicle occupancy rates, available roadway capacity, historical Candlestick Park information, and anticipated modal split information. As shown in *The 49ers Stadium Project EIR*, 74 percent of patrons are expected to arrive by automobile, 7 percent are expected to arrive by charter bus, and 19 percent are expected to arrive by public transportation. This data is to be updated once per season or as is otherwise appropriate.



Table 2-2: Anticipated Arrival and Departure Patterns

Time Frame	Auto Trips		Charter Buses		Total Vehicle Trips
	Percent	Trips	Percent	Trips	
<i>General Arrival Pattern</i>					
> 5 Hours	6	1,122	0	0	1,122
4-5 Hours	8	1,496	0	0	1,496
3-4 Hours	14	2,619	2	2	2,621
2-3 Hours	14	2,619	5	6	2,624
1-2 Hours	19	3,554	28	32	3,586
< Hour	39	7,295	65	74	7,369
Total	100	18,704	100	114	18,818
<i>General Departure Pattern</i>					
During Game	10	1,870	10	11	1,882
< 1 Hour	64	11,971	80	91	12,062
1-2 Hours	26	4,863	10	11	4,874
Total	100	18,704	100	114	18,818

Source: City of Santa Clara, *The 49ers Stadium Project EIR*, 2009.

2.2.1 Limit Duration of Traffic Congestion

Providing a transportation plan that minimizes the duration of traffic congestion is a key program objective. As specified in section 2.1.4, the duration of congestion will be annually measured as part of the program's assessment program. Per the *Transportation Management Plan for a New San Francisco 49ers Stadium in Santa Clara, CA* (AECOM, 2009), the period of arrival for football games can be as long as five hours prior to the start of a game. However, the period of departure will typically occur near the completion of a game, and conclude less than two hours afterward. Thus, efforts to limit the duration of traffic congestion are focused on post-game traffic departure.

The duration of traffic congestion will be measured by way of field observations at key traffic locations. The locations to be examined will include but not be limited to the Stadium Main Parking Lot, the SR 237 eastbound and westbound ramps at Great America Parkway, the Great America Parkway / Mission College Boulevard intersection, the US 101 / Great America Parkway intersection, and the Lawrence Expressway / Tasman Drive intersection. At the Stadium Main Parking Lot, the duration of congestion shall be identified as the time at which the lot begins to empty, to the time at which queuing at lot exit points ceases. At each other location, the duration of congestion shall be identified as the time at which the Stadium Main Parking Lot begins to empty, to the time at which the intersection's standard signal phasing would be sufficient to manage traffic. The time at which intersection's standard signal phasing would be sufficient to manage traffic is to be determined by the judgment of assigned traffic monitoring officers. When queuing for outbound vehicles is observed to clear the intersection each traffic cycle, the officer will report to the Stadium's Traffic Operations Center. Once all officers have reported that queuing no longer results in vehicles waiting multiple cycles to clear an intersection, all signals will be returned to their standard signal phasing via the Stadium's Traffic Operations Center. As noted in section 2.1.4, this data will be collected during a regular-season Sunday game, and during a regular-season weekday evening game (i.e., Monday Night Football, Thursday Night Football).

2.2.2 Avoid Intrusions into Residential Neighborhoods

As reducing noise, air quality, and traffic impacts to the surrounding residential neighborhoods is of utmost importance, the potential for intrusion of traffic and pedestrians into residential areas shall be examined. As noted in the *Transportation Management Plan for a New San Francisco 49ers Stadium in Santa Clara, CA* (AECOM,

2009), to prohibit Stadium patrons from intruding on residential areas, such as the Adobe Wells Mobile Home Park, Agnews and the Rivermark neighborhoods, Stadium access as well as Stadium parking in those neighborhoods will be restricted on the following roadways:

Event-related vehicle access restriction and on-street parking restriction:

- Calle De Primavera;
- Fairway Glen Drive;
- Hogan Drive;
- Eisenhower Drive;
- Hope Drive;
- Agnew Road;
- Bassett Street;
- Davis Street;
- Cheeney Street;
- Fillmore Street;
- Lakeshore Drive;
- Lake Santa Clara Drive;
- Reamwood Avenue;
- Birchwood Drive;
- Adobe Wells Mobile Home Park Access;
- Palamos Avenue;
- Sandia Avenue;
- Bridgewood Way;
- Wildwood Avenue;
- Stars and Stripes Drive;
- Centennial Boulevard;
- Renaissance Drive; and
- Democracy Way.

On-street parking restriction only:

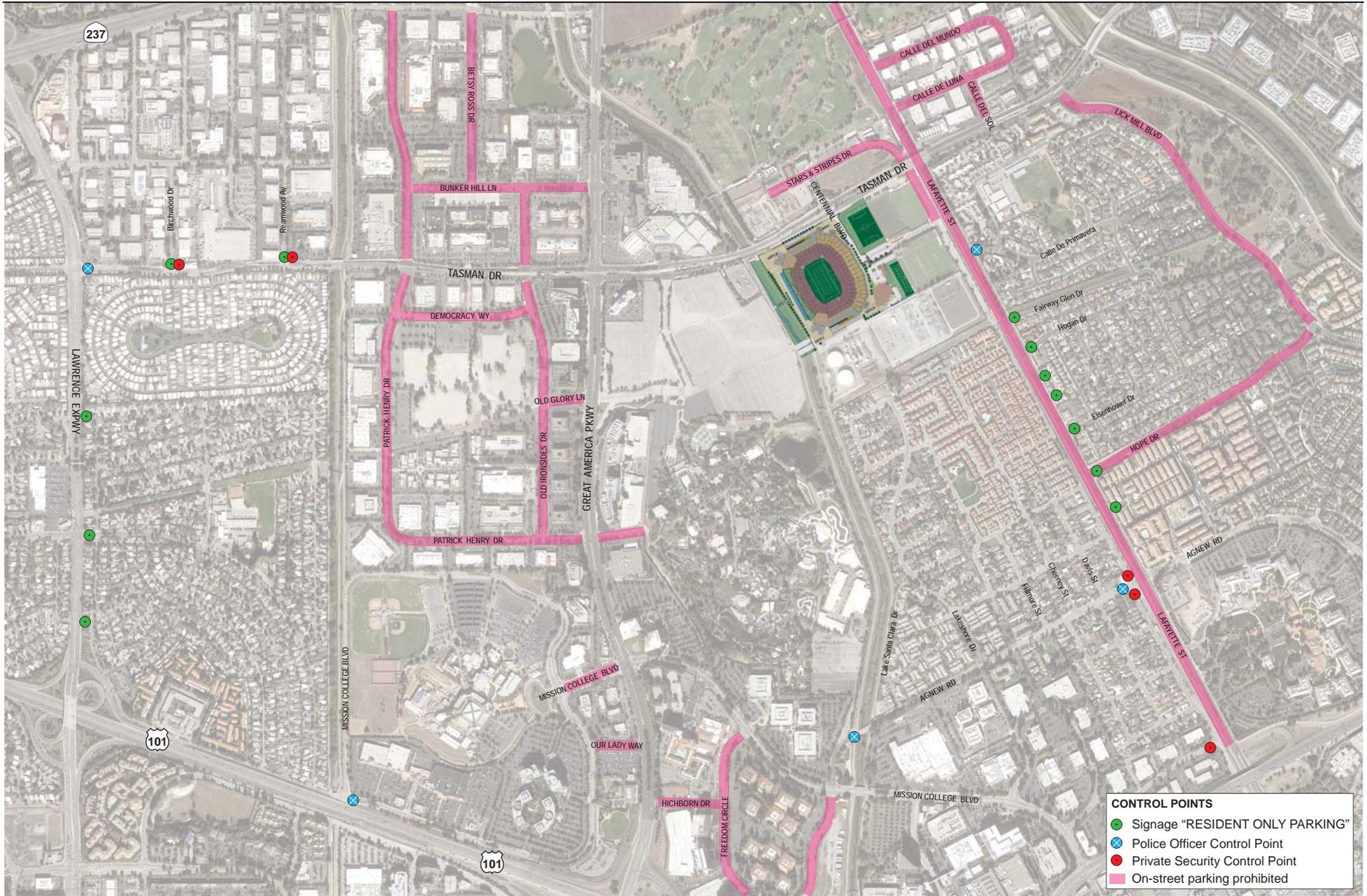
- Lick Mill Boulevard;
- Lafayette Street;
- Freedom Circle;
- Mission College Boulevard;
- Hichborn Drive;
- Our Lady's Way;
- Patrick Henry Drive;
- Old Ironsides Drive;
- Old Glory Lane;
- Betsy Ross Drive;
- Bunker Hill Lane;
- Stars and Stripes Drive;
- Democracy Way;
- Calle Del Sol;
- Calle De Luna; and
- Calle Del Mundo.

An illustration of the event day restrictions of roadways providing access to residential neighborhoods is provided in **Figure 2-1**. Intrusion into residential areas is to be measured through an examination of on-street parking conditions beyond these roadways. When requested by the Transportation Operations Group (TOG), aerial photographs will be taken at 15-minute intervals from 9:00 AM to 6:00 PM on a regular-season Sunday game day, assuming a 1:00-1:30 PM start time. The TOG is responsible for evaluating the aerial photographs and determining the extent to which intrusion occurs. Based on findings, adjustments to the TMOP will be proposed.

2.2.3 Avoid Intrusions into Surrounding Businesses

In order to address the upcoming changes on parking and access on event days, the San Francisco 49ers have issued letters to surrounding property owners and businesses to identify methods for avoiding intrusions by Stadium patrons. These methods include:

- Posting signage and/or stationing staff to prohibit access to private property;
- Hire Forty Niners Stadium Management Co. Post, Secure and Block access to your property;
- Join the Levi's® Stadium Parking Operations Program; and/or,
- Sell Parking on Your Property (off-site parking permit is required, available to commercial properties, not available to residential properties).



Event Day Roadway Restrictions.ai

San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

Figure 2-1
Event Day Neighborhood Roadway Restrictions

2.2.4 Facilitate Transit Ridership and Minimize Impacts to Existing Transit Service

A major goal of the TMOP is to facilitate and encourage the use of transit on event days, as the use of transit will provide multiple benefits to the area, including the minimization of the period of transportation congestion. In addition to encouraging transit use, impacts to existing transit service will be minimized in order to limit the impact to non-event transit passengers.

Transit operating agencies shall provide transit service (route, capacity, frequency) and ridership data for each regular-season game. The TOG shall request hourly passenger boarding and alighting by station from transit operators. A summary of each transit agency, and the anticipated data to be collected, is provided in **Table 2-3**. Each transit provider has been met with to identify needs with respect to data collection efforts, and to develop a strategy to collect as much data as is appropriate. **Figure 2-2** illustrates the transit providers' routes in the vicinity of the Stadium.

Table 2-3: Transit Providers, and Data to be Collected

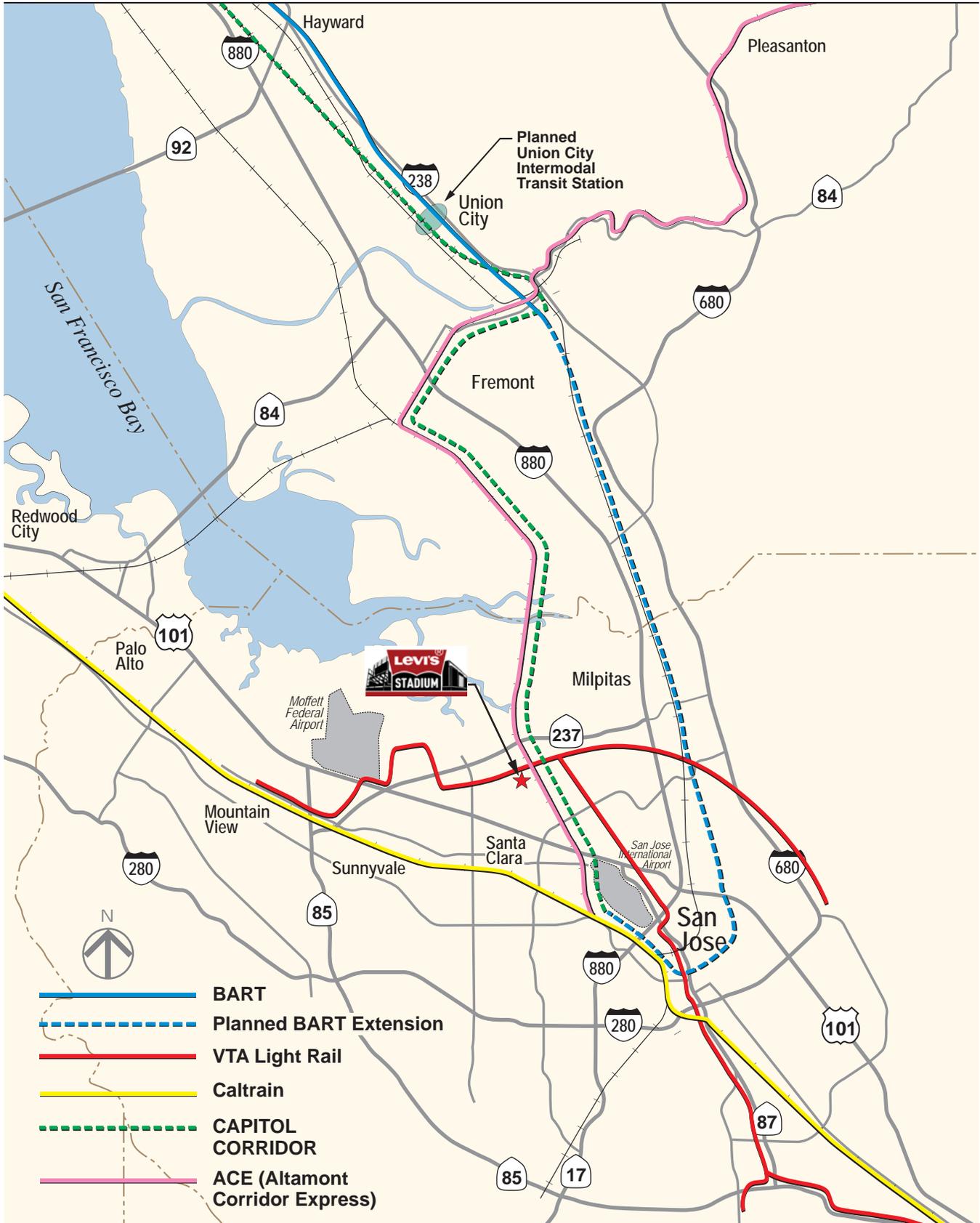
Transit Provider	Transit Service Type	Boarding / Alighting by Station	Capacity / Utilization	Headways
Santa Clara Valley Transportation Authority (VTA)	Light Rail	x	x	x
	Bus	x	x	x
Caltrain	Heavy Rail	x	x	--
Altamont Corridor Express (ACE)	Heavy Rail	x	x	--
Capitol Corridor	Heavy Rail	x	x	--
Charter Bus	Bus	x	x	--

Source: AECOM, 2014.

The Transportation Operations Group (TOG), described in greater detail in Section 3, is responsible for summarizing transit ridership, and qualitatively assessing transit operations. Event day conditions shall be compared with non-event day conditions (as determined through non-event day data collections) to determine the impact of event patrons on transit operations. The transit analysis shall consider impacts due to changes in transit service levels and ridership.

Lowering headways and increasing service frequency, when feasible, will enable operating agencies to increase the number of patrons delivered and cleared from the Stadium. The addition of special transit service (e.g., special bus service, expanded VTA LRT Sunday service with limited-stop routes) to accommodate event patrons, and the coordination of transit service between the Stadium and rail facilities, will improve service to events and minimize impacts to existing transit service. Additionally, the use of VTA park and ride lots, coordinated transit provider transfers (e.g., Caltrain-to-VTA Light Rail transfers at the Downtown Mountain View Station), as well as streamlined transit ticketing services will improve service to events.

Further, for events with above 20,000 attendees, the section of Tasman Drive immediately adjacent to the Stadium, between Centennial Boulevard and the Great America Theme Park driveway / Convention Center driveway (herein referred to as "Convention Center Circle"), will be closed to all vehicular traffic. Such a closure will allow for a pedestrian zone for Stadium patrons arriving from or departing to VTA light rail; improving VTA light rail boarding and alighting efficiency at the Great America VTA Station.



Transit Providers.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 2-2
Transit Providers**

2.2.5 Facilitate Arrivals by Bicycle

Facilitating and encouraging arrival to events by bicycling is also a goal of the TMOP.

The extent to which bicycle access is facilitated is to be measured through an evaluation of the usage levels of the Stadium bicycle parking facilities. Specifically, bicycle parking counts shall be collected for event days and non-event days for comparison. Aerial photographs are to be taken at 15-minute intervals pre-game, mid-game, and post-game during a regular-season Sunday game, and during a regular-season weekday evening game (i.e., Monday Night Football, Thursday Night Football), both at least one month after the start of the regular season to identify any effects of the Stadium on nearby bicycle facilities. The Transportation Operations Group (TOG) is responsible for evaluating the aerial photographs and determining the adequacy of the available bicycle parking supply. Based on findings, adjustments to the TMOP will be proposed.

2.2.6 Ensure Safety

The safety of patrons using all modes of transportation, as well as the safety of residents throughout the area is a crucial program objective. The ways in which general safety levels will be affected (positively and negatively) shall be addressed, and the means by which they are to be quantified shall be discussed in this section of the TMOP.

The Stadium area shall be assigned a unique identification number that will be applied to all crime and incident reports prepared by the Santa Clara, San Jose and Sunnyvale Police Departments. The Santa Clara Police Department is responsible for analyzing crime and incident data and evaluating the safety of Stadium patrons and residents throughout the area on Stadium event days compared to non-event days, and for providing updated information to the Transportation Operations Group. Based on the findings, adjustments to the TMOP and Public Safety Plan will be proposed.

2.2.7 Provide Access to Neighboring Properties

An objective of the TMOP is to ensure access to owners, employees, business patrons, and other users of neighboring properties. Major nearby land uses which may be in normal operation on event days include, but are not limited to, the following:

- Great America Theme Park;
- Convention Center;
- Techmart;
- David's Restaurant and Banquet Facility;
- Our Lady of the Peace Church and Shrine;
- AMC Mercado 20;
- Mission College;
- Santa Clara Golf & Tennis Club;
- Santa Clara Youth Soccer Park;
- Hyatt Regency;
- Hilton Santa Clara;
- Avatar Hotel and Bennigans Restaurant;
- Santa Clara Marriott; and
- Owners/Managers of area Retail Commercial Centers.

The location of each neighboring property is illustrated in **Figure 2-3**. The extent to which the TMOP allows efficient access to these properties is to be measured through an evaluation of each property's parking facilities. Aerial photographs are to be taken at 15-minute intervals pre-game, mid-game, and post-game during a regular-season Sunday game, and during a regular-season weekday evening game (i.e., Monday Night Football, Thursday Night Football), both at least one month after the start of the regular season. The Stadium Manager will also collect and provide data and observations in the form of a written report during these data collection periods. The Stadium Manager will retain a transportation consultant to evaluate the aerial photographs and determine whether game day access to the properties is adequate. Based on the findings, adjustments to the TMOP will be proposed.



2.2.8 Provide Adequate Parking

The provision of adequate parking facilities within a reasonable walking distance to the stadium is important in itself. The parking lot locations will serve to minimize the number of conflict points between patrons walking to/from the stadium and automobiles. Aerial photographs are to be taken at 15-minute intervals pre-game, mid-game, and post-game during a regular-season Sunday game, and during a regular-season weekday evening game prior to darkness (i.e., Monday Night Football, Thursday Night Football), both at least one month after the start of the regular season. The Transportation Operations Group is responsible for evaluating the aerial photographs, determining the occupancy levels of each lot, and determining the overall adequacy of the available parking supply. Based on findings, adjustments to the TMOP will be proposed. An illustration of the parking facilities for Stadium events is provided in **Figure 2-4**.

2.2.9 Effective Community Outreach and Education

The Stadium Manager, along with the City of Santa Clara, will define measures of effectiveness for outreach and education plans, and identify the extent to which the plans meets each measure of effectiveness. Community outreach and education measures will include:

- Education upon ticket purchase and/or with tickets;
- Brochures and mailers to area residents and local businesses;
- Press releases and media alerts;
- Telephone hotline;
- Web-based dissemination via social media and cell phone application;
- Information posted on VTA light rail trains and buses; and
- Stadium Stakeholders Group meetings.

2.2.10 Non-Permitted Parking

As noted in section 2.2.2, any intrusive parking in non-permitted areas (on-street in residential neighborhoods, or in no-event off-street parking lots) is to be evaluated using aerial photographs taken at 15-minute intervals from 9:00 AM to 6:00 PM on a regular-season Sunday game day, assuming a 1:00-1:30 PM start time. The Transportation Operations Group is responsible for evaluating the aerial photographs and determining the extent to which non-permitted parking occurs. Enforcement of the Stadium's prescribed parking plan will be carried out by the appropriate jurisdiction's law enforcement.

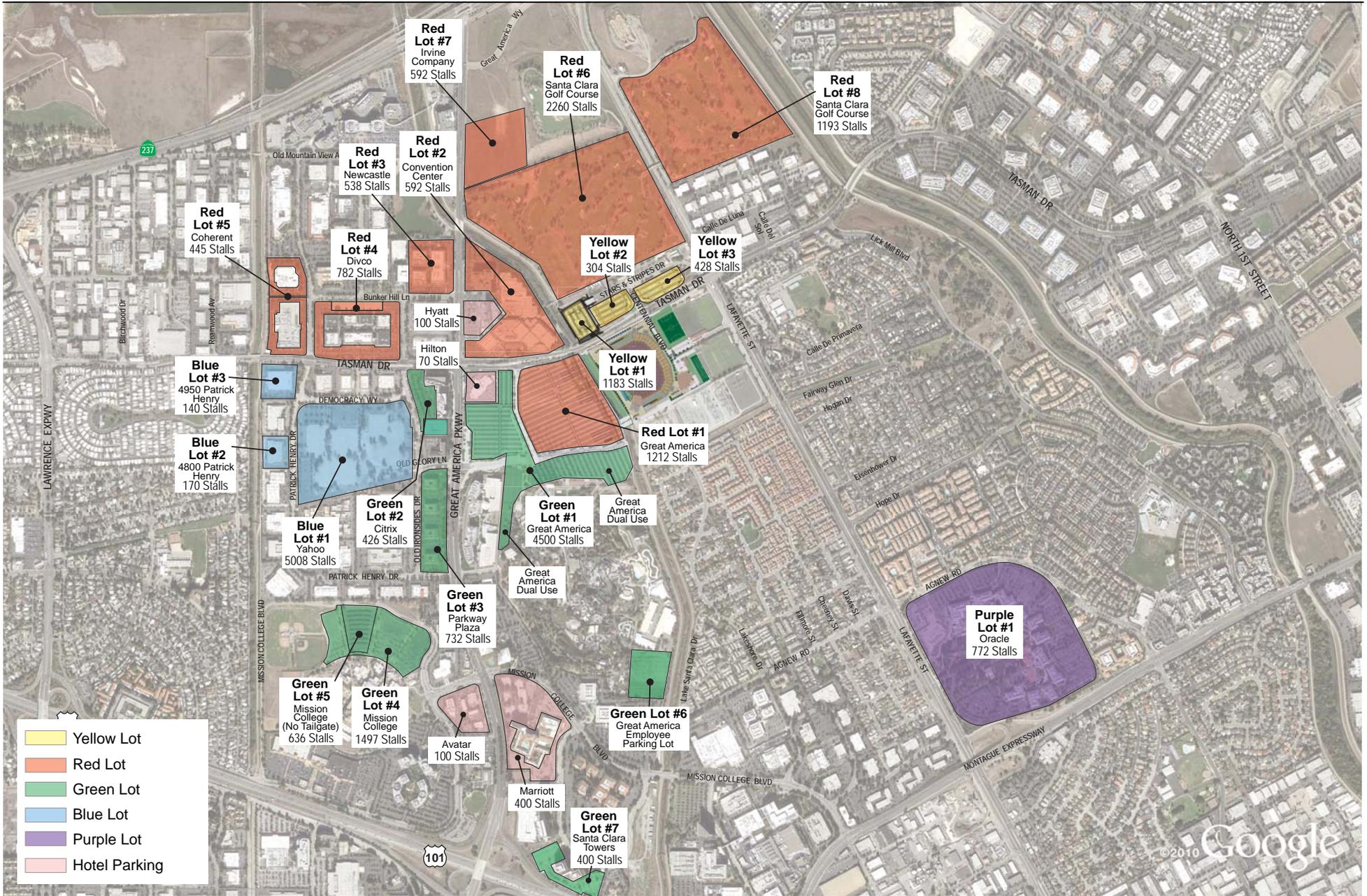


NOTE:
Subject to additions as
information becomes available.

Neighboring Commercial Properties.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 2-3
Major Neighboring Commercial Properties



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 2-4
Gameday Parking Facilities**

This page intentionally left blank.



3.0 Working Groups

Two working groups are identified to ensure the effective implementation of traffic, transit, and parking plans. The make-up and emphasis of each working group is slightly different, but together they provide support for the Stadium Authority Stadium Manager, and the entity charged with daily operations of the Stadium facility.

The first working group, the Transportation Operations Group (TOG), focuses on day-to-day operations including pre-season planning, individual event planning, and event follow-up assessments. The second working group, the Stadium Stakeholders Group (SSG), functions primarily in an advisory capacity, acting in more of an information gathering and sharing role, taking public input through the Stadium Operations Liaison and providing recommendations to the TOG. Participants in each group are based upon jurisdictional authority and/or expertise that support the functions of the particular group.

3.1 Transportation Operations Group (TOG)

The TOG is responsible for setting up and revising traffic, transit, and parking plans, assessing the performance of these plans, and responding to recommendations from the SSG. The TOG is to participate in meetings prior-to and following each event with 20,000 or more attendees held at the Stadium, and meetings convened for events with fewer than 20,000 attendees on a case-by-case basis. The TOG is responsible for taking input, observations, and recommendations into consideration, and moves them forward to assess operational feasibility. The TOG will include (but is not limited to) the following members:

- San Francisco 49ers Stadium Operations Staff
- Valley Transportation Authority (VTA) Staff
- City of Santa Clara Staff (including Public Safety Staff)
- Caltrain Staff
- Altamont Corridor Express (ACE) Staff
- Capitol Corridor Staff
- Participating law enforcement agencies (led by City of Santa Clara Police Department)
- Stadium Operations Liaison

3.1.1 Stadium Operations Liaison

A Stadium Operations Liaison position or office will be established by the TOG to function as a single point of contact for residents and businesses. The Stadium Operations Liaison position or office will be staffed by the Stadium Manager. The Stadium Operations Liaison's duties may include, but are not limited to: submitting weekly reports regarding community concerns and compliments about Stadium activities to the Santa Clara City Manager's Office, the Special Events Unit at the Santa Clara Police Department and the Stadium Manager, submitting an annual report with the same information to the Stadium Authority, attend pre- and post-TOG meetings and Stakeholder meetings, and attend significant events at the Stadium. The Stadium Operations Liaison will be accessible to all local residents, business owners, and patrons at Neighbors@LevisStadium.com.

The Stadium Operations Liaison serves as the first line of communications for community members and Stadium patrons. For larger issues that cannot be dealt with by the Stadium Operations Liaison, community members and

Stadium patrons shall present issues at SSG meetings for resolution, and/or forward significant issues to the Stadium Manager for their review and resolution.

3.1.2 Stadium Manager

The Stadium Manager (currently Management Co.) will coordinate with area residents and area businesses, maintain permits and agreements with all parties involved, and facilitate Stadium-related data collection efforts. Specifically, the Stadium Manager will maintain permits with all parties participating in parking agreements with San Francisco 49ers management, and will hire a parking operator to manage all event day parking operations.

3.2 Stadium Stakeholders Group (SSG)

The Stadium Stakeholders Group is responsible for evaluating stadium operations on event days, obtaining public input, identifying areas of concern, and advising the TOG on what revisions to the TMOP should be considered. The SSG is to participate in quarterly public meetings to discuss these items. Membership of the SSG includes both public and private professionals, including members of the TOG. The SSG will include (but is not limited to) the following members:

- City of Santa Clara Staff (including Public Safety Staff)
- Participating law enforcement agencies (led by City of Santa Clara Police Department)
- Ambulance Providers
- City of San Jose Staff
- City of Sunnyvale Staff
- City of Milpitas Staff
- San Francisco 49ers Stadium Operations Staff
- Stadium Operations Liaison
- Valley Transportation Authority (VTA) Staff
- Caltrans Staff
- Caltrain Staff
- Altamont Corridor Express (ACE) Staff
- Capitol Corridor Staff
- Private Transit and Transport Providers including taxi and charter bus companies
- Parking Facilities Contractors
- Private Security Contractors
- Convention Center
- Great America Theme Park
- Santa Clara Golf and Tennis Club
- Santa Clara Hotels in the Community Facilities District

A flow chart illustrating each working group, their function, and their relation to each other is provided in **Figure 3-1**. It should be noted that the Stadium Authority and the Stadium Manager (currently Management Co.) share the agenda for the SSG, and all decisions will be made jointly. The TOG meetings are facilitated by the Stadium Manager (currently Management Co.).

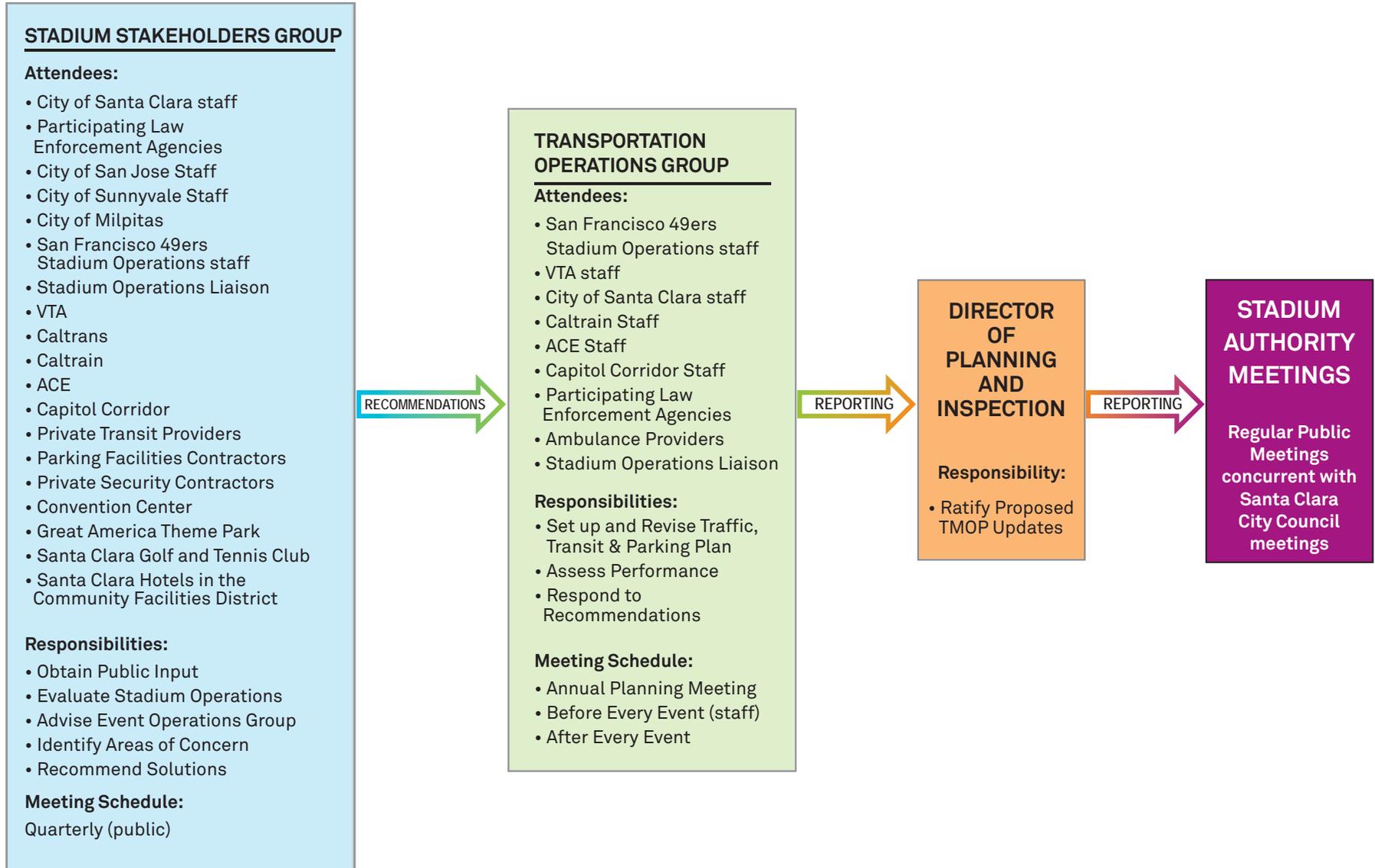


Figure 3-1
Stadium TMOP Operations Flow Chart

This page intentionally left blank.



4.0 Annual Schedule and Event Type

The TMOP includes an Annual Events Calendar for the stadium, as well as scheduled meetings for the Stadium Authority, and working groups.

4.1 Annual Events Calendar

The anticipated Annual Events Calendar is to be compiled by the Stadium Manager, and shall identify and describe all anticipated stadium activity, ensuring that each event receives an appropriate amount of attention with regard to traffic, transit, and parking provision. The information to be provided in the schedule for event purposes shall include:

- 4.1.1 Number of Events
- 4.1.2 Event Type
- 4.1.3 Number of Attendees
- 4.1.4 Day, Time and Duration of Event
- 4.1.5 Special Considerations
- 4.1.6 Expected Parking Demand

Updates to the annual events calendar (received throughout the year) will be reviewed and approved by the Director of Planning and Inspection or City Manager, whichever is appropriate given the size of events. Schedule updates will be conveyed to the community via www.LevisStadium.com and other appropriate outreach methods to ensure affected parties are made aware of changes in the Annual Events Calendar that may affect them.

Typically, an NFL season will run from August through December, with 10 scheduled home games (two preseason games and eight regular season games). Additionally, up to two home playoff games may be scheduled in January. In addition, the Stadium will host non-NFL events and other community events. **Table 4-1** lists potential events that may be held at the Stadium annually.

Table 4-1: Potential Stadium Events

Event Type	Estimated Attendance	No. of Events per Year	No. of Days per Event	Estimated Parking Demand per Day
San Francisco 49ers Games	68,500	10-12	1	18,865
X-Games	50,000	1	4	4,500
Moto-Cross	42,500	1	1	13,005
International Soccer	40,000	2	1	12,240
Concerts	37,500	1	1	11,475
College Football	37,500	1	1	11,475
Festivals/Antique Shows	25,000	8	1	9,000
College Bowl Game	25,000	1	1	7,650
Car Shows (parking lot event)	12,000	2	4	1,200
Small Events	50 to 500+	250	1	varies

Source: *The 49ers Santa Clara Stadium Project EIR*, City of Santa Clara, 2005; AECOM, 2014.

4.2 Stadium Authority Meeting Schedule

The Annual Events Calendar shall identify all Stadium Authority meetings, which are to be held concurrently with the regularly scheduled Santa Clara City Council meetings. The Santa Clara City Council meets twice a month, typically on the second and fourth Tuesday of each month. At its meetings (which are to be recorded with agendas and minutes), the Stadium Authority will receive and evaluate reports and recommendations from the TOG and SSG, provide feedback, and take any necessary actions.

4.3 Working Group Meeting Schedule

Stadium Stakeholders Group (SSG) meetings shall occur quarterly. At their scheduled meetings, the SSG shall obtain input, evaluate Stadium operations, identify areas of concern, and advise the Transportation Operations Group.

The TOG is to participate in meetings prior-to and following each event with 20,000 or more attendees held at the Stadium, and events with fewer than 20,000 attendees on a case-by-case basis. At their scheduled meetings, the TOG shall assess the performance of the TMOP, evaluate input, observations, and recommendations provided by the SSG, and revise the TMOP as necessary. Significant TOG findings and recommendations shall be reported at Stadium Authority meetings.

4.4 Matrix of Control by Event Size

Travel characteristics to the Stadium will vary depending on the size and type of event occurring. For smaller events, a lower transit modal split, and a lower average vehicle occupancy is expected. Thus, for smaller events, elements of the TMOP may be scaled down to minimize the effect of Stadium operations on the surrounding transportation network. Estimated levels of transit ridership and automobile use for events of varying size are summarized in **Table 4-2**.



Table 4-2: Anticipated Transit and Automobile Use for Events of Different Size

Event Size	Event Type	Expected Transit Ridership ⁽¹⁾						Charter Bus	Expected Vehicle Trips ⁽¹⁾		
		Light Rail	Bus	Caltrain	Capitol Corridor	ACE	Mode Share		Patrons	AVO ⁽²⁾	Total Cars
68,500 ⁽³⁾	Football Game	4,500	4,500	3,000	500	700	19%	5,000	50,300	2.70	18,865
55,000 ⁽³⁾	X-Games Moto-Cross Internat'l Soccer Concert (Large) College Football	3,600	800	2,400	400	0	13%	500	47,300	2.63	18,000
35,000 ⁽³⁾	Festivals Antique Show Concert (Medium)	1,800	550	1,200	200	0	11%	0	31,250	2.39	13,000
20,000 ⁽⁴⁾	Concert (Small)	700	325	450	75	0	8%	0	18,455	2.15	8,500
10,000 ⁽⁴⁾	Car Show	200	100	100	25	0	4%	0	9,575	2.05	4,700

Source: AECOM, 2014.

Notes: ⁽¹⁾ Ridership, vehicle arrivals, and total parked cars represent the maximum expected value for a given range of attendees.

⁽²⁾ Average Vehicle Occupancy (AVO) is scaled based on the size of a given event.

⁽³⁾ Tasman Drive may be closed for events of this size.

⁽⁴⁾ Tasman Drive may not be closed for events of this size.

4.4.1 Parking Supply

As shown in **Table 4-2**, the number of parking spaces required to accommodate events of different sizes varies from a maximum of 18,865 spaces to under 5,000 spaces (not including employee parking). The extent to which the TMOP should be scaled with respect to parking is summarized below:

- **68,500 Attendees:** For “capacity” events, all points of the TMOP shall be fully applied.
- **55,000 Attendees:** Due to the anticipated reduction in average vehicle occupancy, and lower transit mode share, events such as large concerts and international soccer matches with 55,000 attendees will only generate approximately 865 fewer vehicle trips than a capacity event. As such, all parking elements of the TMOP should be fully applied, with the exclusion of some parking facilities furthest from the Stadium. Any event day signage related to these facilities shall not be included.
- **35,000 Attendees:** Events with 35,000 attendees will generate approximately 6,000 fewer vehicle trips than a capacity event. As such, all parking elements of the TMOP should be fully applied, with the exclusion of parking facilities furthest from the Stadium. Signage related to these facilities shall not be included.
- **20,000 Attendees:** Events with 20,000 attendees will generate approximately 10,000 fewer vehicle trips than a capacity event. As such, all event parking can be accommodated within parking facilities adjacent to the Stadium, as well as other partnering parking facilities nearest to the Stadium. Any event signage south of Patrick Henry Drive shall direct motorists to these facilities.
- **10,000 Attendees:** Events with 10,000 attendees will generate approximately 14,000 fewer vehicle trips than a capacity event. As such, all event parking will typically be accommodated entirely within the Great

America Main Parking Lot, or within other nearby parking facilities. Signage provided in the Stadium area should direct motorists to the nearest Great America Main Parking Lot driveway.

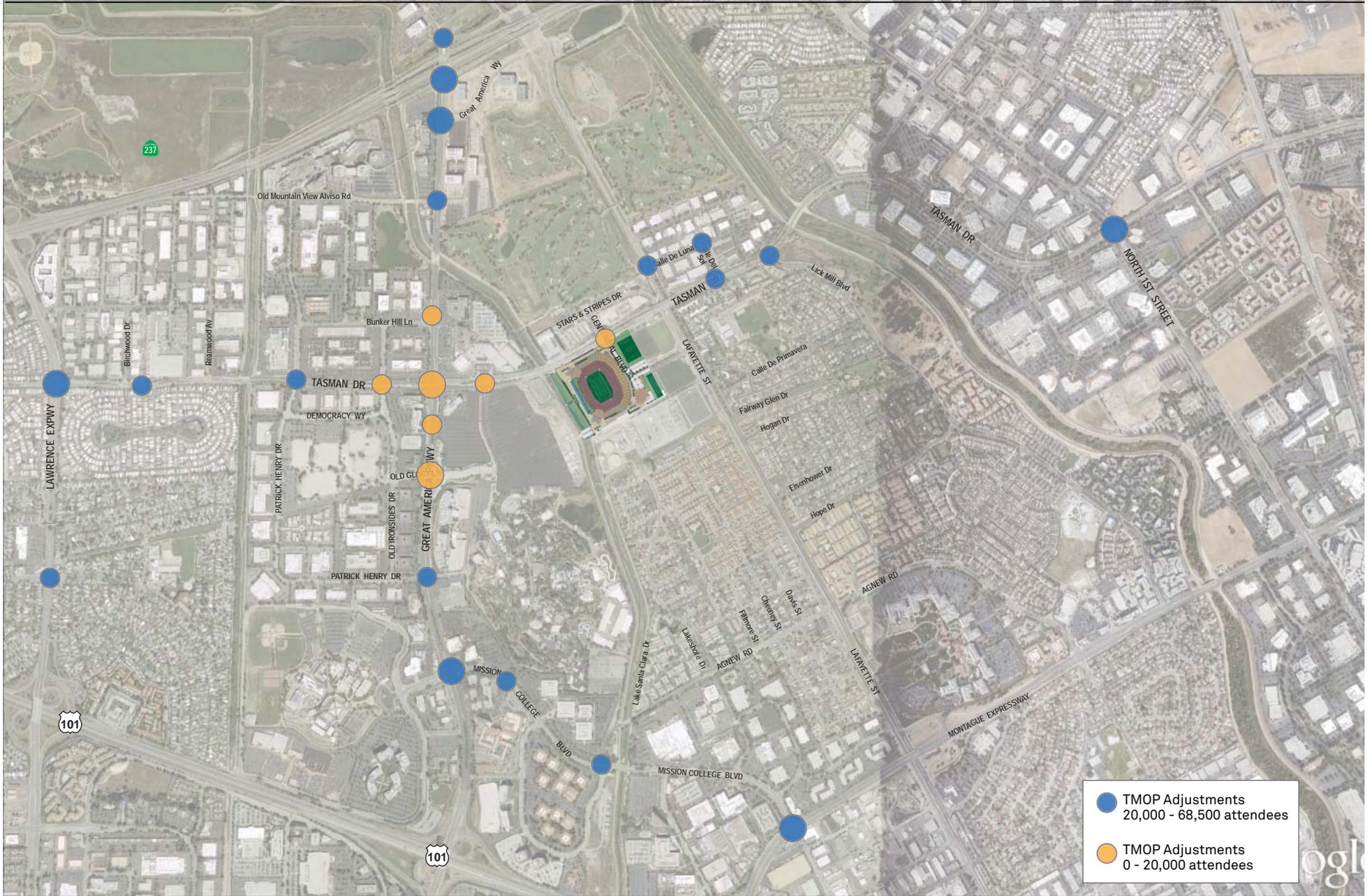
The parking supply required to accommodate each event size is shown in **Figure 4-1**. Further, **Figure 4-1** illustrates the Stadium's "area of influence" by event size.

4.4.2 Vehicle Access

Per **Table 4-2**, the number of vehicle trips generated by patrons for events of different sizes varies from a maximum of 18,865 vehicles to under 5,000 vehicles. Based on the expected number of patrons for a given event, the minimum number of parking facilities contracted to provide parking on event days will be utilized. The extent to which the TMOP should be scaled with respect to vehicle access is summarized below:

- **68,500 Attendees:** For "capacity" events, all points of the TMOP shall be fully applied.
- **55,000 Attendees:** All parking elements of the TMOP shall be fully applied, with permitted off-site lots. However, as the roadways used to access these excluded facilities may be used to access other parking facilities that will otherwise be included, all traffic-related elements of the TMOP shall be fully applied.
- **35,000 Attendees:** Elements of the TMOP shall be applied, with permitted off-site lots. Lane reconfigurations and signal modifications at intersections near these excluded facilities shall be revised to focus traffic flow to other parking facilities.
- **20,000 Attendees:** Event parking shall be accommodated within parking facilities adjacent to the Stadium, and within permitted off-site lots. Lane reconfigurations throughout the Stadium area would no longer be required, though some signal timing modifications would be warranted to focus flow towards parking facilities. Officer presence at intersections would only be required at intersections adjacent to parking facilities.
- **10,000 Attendees:** Event parking shall be accommodated entirely within the Stadium Great America Main Parking Lot. This level of vehicle trip generation would not necessitate lane reconfigurations or signal modifications. Officer presence at intersections would not be required.

Intersection adjustments by event size are shown in **Figure 4-2**.



Intersection Adjustments by Event Size.a1

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 4-2
Intersection Adjustments by Event Size



As noted in section 2.2.2, vehicle traffic, as well as on-street parking, will be restricted on several roadways for a portion of each event day to minimize the potential for intrusion into residential areas. Specifically, event parking will be restricted at the following locations:

Event-related vehicle access restriction and on-street parking restriction:

- Calle De Primavera;
- Fairway Glen Drive;
- Hogan Drive;
- Eisenhower Drive;
- Hope Drive;
- Agnew Road;
- Bassett Street;
- Davis Street;
- Cheeney Street;
- Fillmore Street;
- Lakeshore Drive;
- Lake Santa Clara Drive;
- Reamwood Avenue;
- Birchwood Drive;
- Adobe Wells Mobile Home Park Access;
- Palamos Avenue;
- Sandia Avenue;
- Bridgewood Way;
- Wildwood Avenue;
- Stars and Stripes Drive;
- Centennial Boulevard;
- Renaissance Drive; and
- Democracy Way.

On-street parking restriction only:

- Lick Mill Boulevard;
- Lafayette Street;
- Freedom Circle;
- Mission College Boulevard;
- Hichborn Drive;
- Our Lady's Way;
- Patrick Henry Drive;
- Old Ironsides Drive;
- Old Glory Lane;
- Betsy Ross Drive;
- Bunker Hill Lane;
- Stars and Stripes Drive;
- Democracy Way;
- Calle Del Sol;
- Calle De Luna; and
- Calle Del Mundo.

However, since parking for events with 20,000 attendees or fewer can be accommodated within the immediate vicinity of the Stadium, it is unlikely that intrusion into residential areas would occur for events of this size. As such, the listed restrictions would not be necessary for events with 20,000 attendees or fewer.

4.4.3 Transit Access

Per **Table 4-2**, the transit mode share is expected to decrease with smaller events. For non-football events, ACE is not assumed to provide service beyond its current service schedule. A small amount of Charter Bus use can be expected for events with 55,000 attendees, but none is expected for smaller events. With lower ridership levels on VTA bus and Capitol Corridor at smaller events, queuing is expected to be proportionally smaller. Similarly, fewer VTA buses will be staged along their usual route during events. VTA light rail queuing will also be smaller for events with lower attendance levels. Thus, for events with 20,000 attendees or lower, the closure of Tasman Drive between the Convention Center and Centennial Boulevard will not be required. It should be noted that Tasman Drive could be open or closed for events with more than 20,000 attendees, allowing the Stadium Manager the flexibility to keep Tasman Drive open when appropriate.

4.4.4 Bicycle Access

Bicycle access to the Stadium with the implementation of the TMOP shall remain the same, regardless of the size of event occurring. However, for events with 20,000 attendees or lower, only the bicycle parking lot at the northeast corner of Red Lot 1 will be required. For events exceeding 20,000 attendees, a bicycle valet service shall be provided that includes a dedicated, bicycle storage area with valet service for visitors. Initially, the bicycle storage

areas shall provide enough space to house a minimum of 750 bicycles, if needed. The size of the bicycle valet area shall be adjusted, based upon demand, up to a maximum capacity of 1,250 bicycles.

It should be noted that during certain large events, the portion of the San Tomas Aquino Creek Trail running between Agnew Road and Tasman Drive will be temporarily closed to ensure the integrity of the Stadium's security perimeter. Users of the creek trail will temporarily be diverted to low-volume side streets. Full details regarding any temporary closure of the San Tomas Aquino Creek Trail are provided in section 5.4.1.

4.4.5 Pedestrian Access

As noted in section 4.4.2, for events with 20,000 attendees or lower, TMOP lane reconfigurations as outlined in section 5.1 will not be required. Officer control at intersections will only be required at intersections adjacent to parking facilities for events with 20,000 attendees, and officer control at intersections will not be required for events with 10,000 attendees. Further, per section 4.4.3, for events with 20,000 attendees or lower, the closure of Tasman Drive between the Convention Center and Centennial Boulevard will not be required. As such, for smaller events, pedestrians will access the Stadium using standard intersection crossing periods. However, it should be noted that for all events that do implement the closure of Tasman Drive (i.e., events with more than 20,000 attendees), the mid-block Tasman Drive pedestrian crossing may be opened. When Tasman Drive is open (i.e., events with fewer than 20,000 attendees) the crossing will be closed depending on anticipated transportation patterns for the event.

4.4.6 Emergency Vehicle Access

Emergency vehicles will be permitted to use the restricted section of Tasman Drive, although they will be required to travel at slow speeds to ensure pedestrian safety. Access to all sides of the Stadium will be provided via the Stadium's Main Lot (Red Lot 1 and Green Lot 1), Tasman Drive, Centennial Boulevard, and Bill Walsh Way. Traffic control officers will be directed to prioritize emergency vehicle access through officer-controlled intersections during gameday events.

As noted in section 4.4.2, for events with 20,000 attendees or lower, TMOP lane reconfigurations will not be implemented. Further, per section 4.4.3, for events with 20,000 attendees or lower, the closure of Tasman Drive between the Convention Center and Centennial Boulevard will not be required. As such, for smaller events, emergency vehicles will be able to access to the Stadium from all directions.



5.0 Components

The TMOP identifies all necessary components for providing efficient access to and from the Stadium site by way of all modes of transportation. This section provides details on how access for each mode will be provided for weekend events. Access for weekday events are detailed in section 6.0.

5.1 Vehicle Access

Vehicle access to and from the Stadium will be optimized to maximize inbound capacity during the pre-event period and outbound capacity during the post-event period through a comprehensive program of lane adjustments, traffic signal timing / phasing modifications, and street restrictions supplemented with signage and deployment of officers to monitor intersection operation. Vehicle access has been designed to maximize traffic flow in and out of the Stadium area, thereby minimizing the overall period of congestion for all users while retaining local traffic needs and minimizing conflict points between Stadium and non-Stadium traffic. In addition, for events with above 20,000 attendees, the section of Tasman Drive immediately adjacent to the Stadium, from Convention Center Circle east to Centennial Boulevard, may be closed to all vehicular traffic providing a pedestrian zone for Stadium patrons arriving from or departing to VTA light rail or walking to and from off-site parking facilities. Further, during vehicle ingress, the north side of Tasman Drive between Great America Parkway and Convention Center Circle (i.e., westbound Tasman Drive) will be closed to all non-emergency vehicular traffic, extending the pedestrian zone for Stadium patrons walking from off-site parking facilities west of the Stadium. During vehicle egress, the south side of Tasman Drive between Great America Parkway and Convention Center Circle (i.e., eastbound Tasman Drive) will be closed to all non-emergency vehicular traffic, extending the pedestrian zone for Stadium patrons walking to off-site parking facilities west of the Stadium.

Access routes to and from Stadium parking facilities are illustrated in **Figures 5.1-1a** and **5.1-1b** for ingress and egress, respectively.

5.1.1 Vehicle Ingress

In the hours prior to the start of any Stadium event, the surrounding transportation network is to be adjusted to allow for efficient ingress into designated parking facilities. The details associated with the traffic plan for vehicle ingress includes:

Hours of Implementation

Based on historical behavior at Candlestick Point, fans typically arrive at parking facilities over five hours prior to the start of a regular-season Sunday afternoon game. Thus, for regular-season Sunday afternoon games, the vehicle ingress portion of the TMOP will be implemented five hours prior to the start of a game. However, as part of the Stadium's Conditions of Approval, tailgating activities shall not occur prior to 9:00 AM on game days in the Great America Theme Park parking lot, the Santa Clara Golf and Tennis Club, or Stadium parking areas within the Stadium security perimeter (i.e., Green Lot 1, Red Lot 1, Red Lot 2, Yellow Lot 1, Yellow Lot 2, and Yellow Lot 3). These parking areas will be barricaded until 9:00 AM to preclude event attendees from arriving before 9:00 AM. Thus, access to these specific locations will be prohibited prior to 9:00 AM for regular-season Sunday afternoon games. However, it should be noted that this policy is subject to change based on the discretion of the Santa Clara Chief of Police, or his/her designee.

For events of smaller size, the hours of implementation of the TMOP will be scaled appropriately per the findings of section 4.0. For weekday evening events, the hours of implementation of the TMOP will be in accordance with the findings of section 6.0.

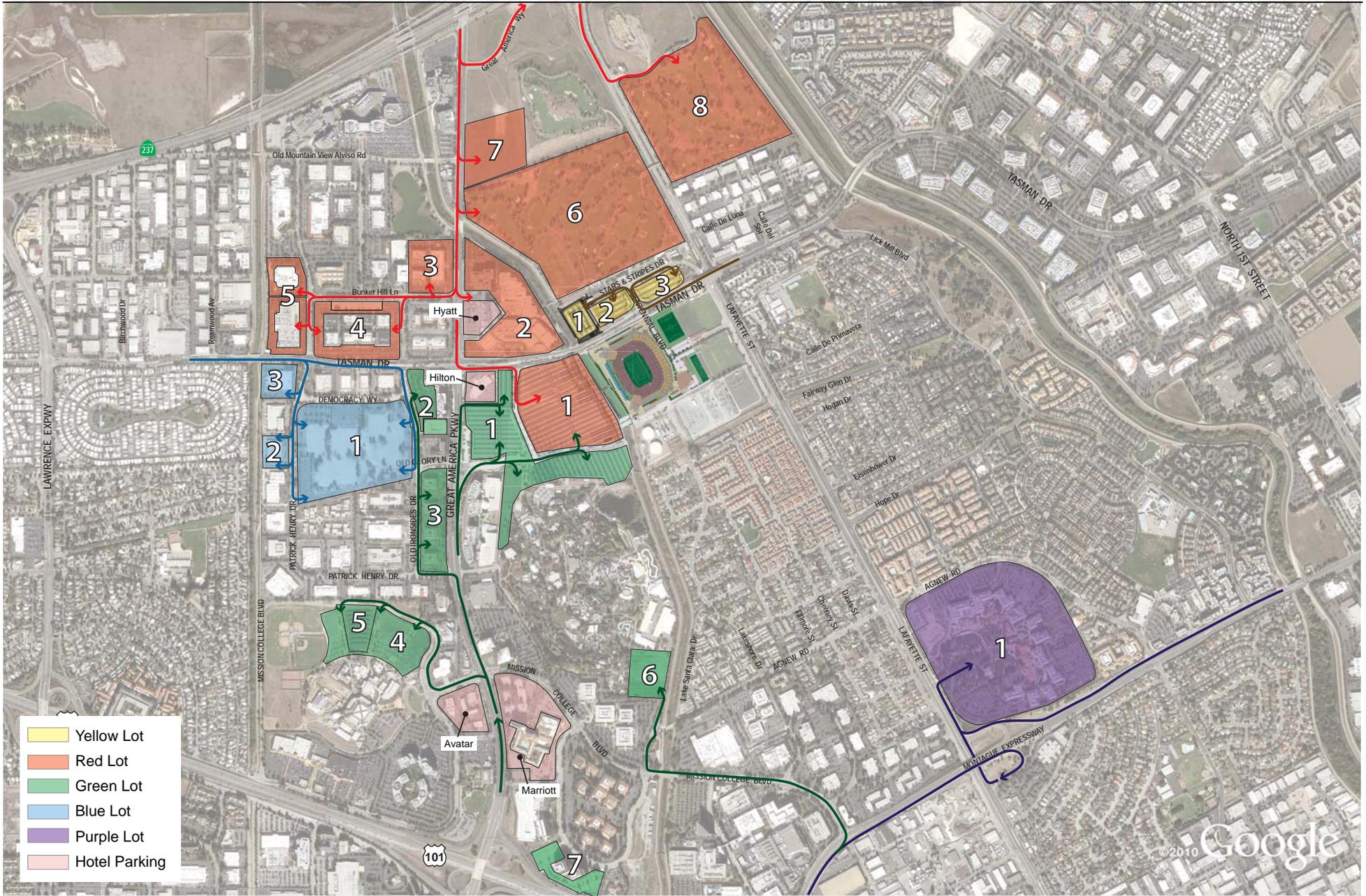
Directional Signage

The vehicle ingress plan associated with the TMOP shall include signage to direct patrons to the Stadium parking facilities. It is anticipated that over 75 percent of Stadium patrons will have assigned parking lots to park in, and in some cases, assigned spaces within assigned parking lots to park in. The remaining 25 percent of Stadium patrons without assigned parking lots will park in cash-only parking lots. Directional signage shall be placed throughout the Stadium area to clearly identify routes to specific assigned parking lots, as well as cash-only lots. The location of each sign throughout the Stadium area is illustrated in **Figure 5.1-2**.

Changeable Message Signs

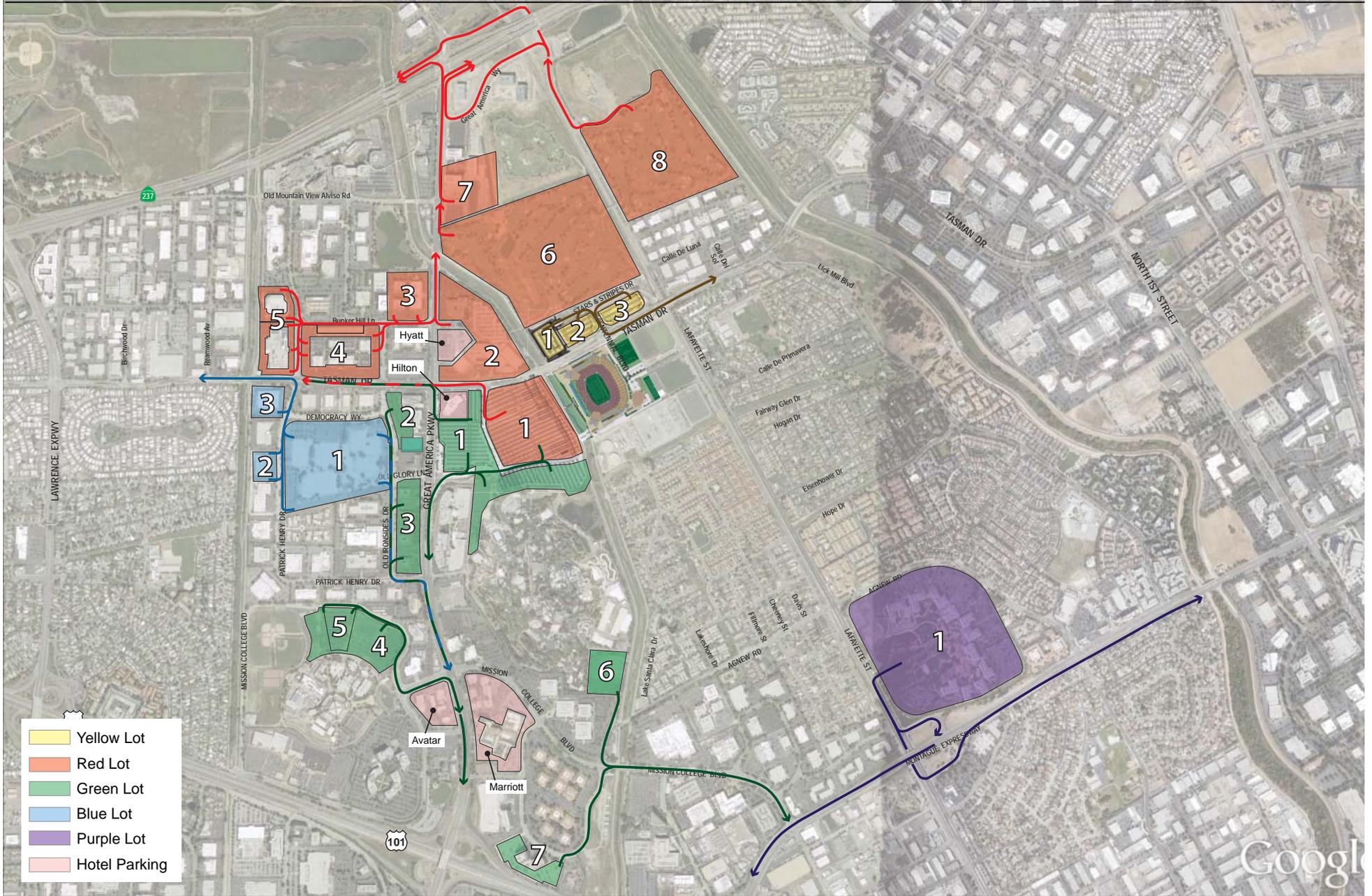
As arrival to some of the Stadium's parking facilities can be expected to begin over five hours prior to the start of a regular-season Sunday afternoon game, changeable message signs must be in place and functioning no less than six hours prior to a start of a game. For events of smaller size, the schedule for deployment of changeable message signs will be scaled appropriately per the findings of section 4.0.

Each sign shall notify motorists of Stadium activity, and suggest alternate routes. The location of each sign is provided in **Figure 5.1-3**. Further, it should be noted that four days in advance of an event, additional changeable message signs are to be placed at key locations (e.g., nearby freeway ramps and key roadways) to warn drivers to expect traffic congestion due to Stadium-related traffic. Signs will indicate the day and time of the game, warn drivers that substantial congestion is expected, and recommend alternative routes using other freeway ramps or streets to avoid Stadium-related traffic.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

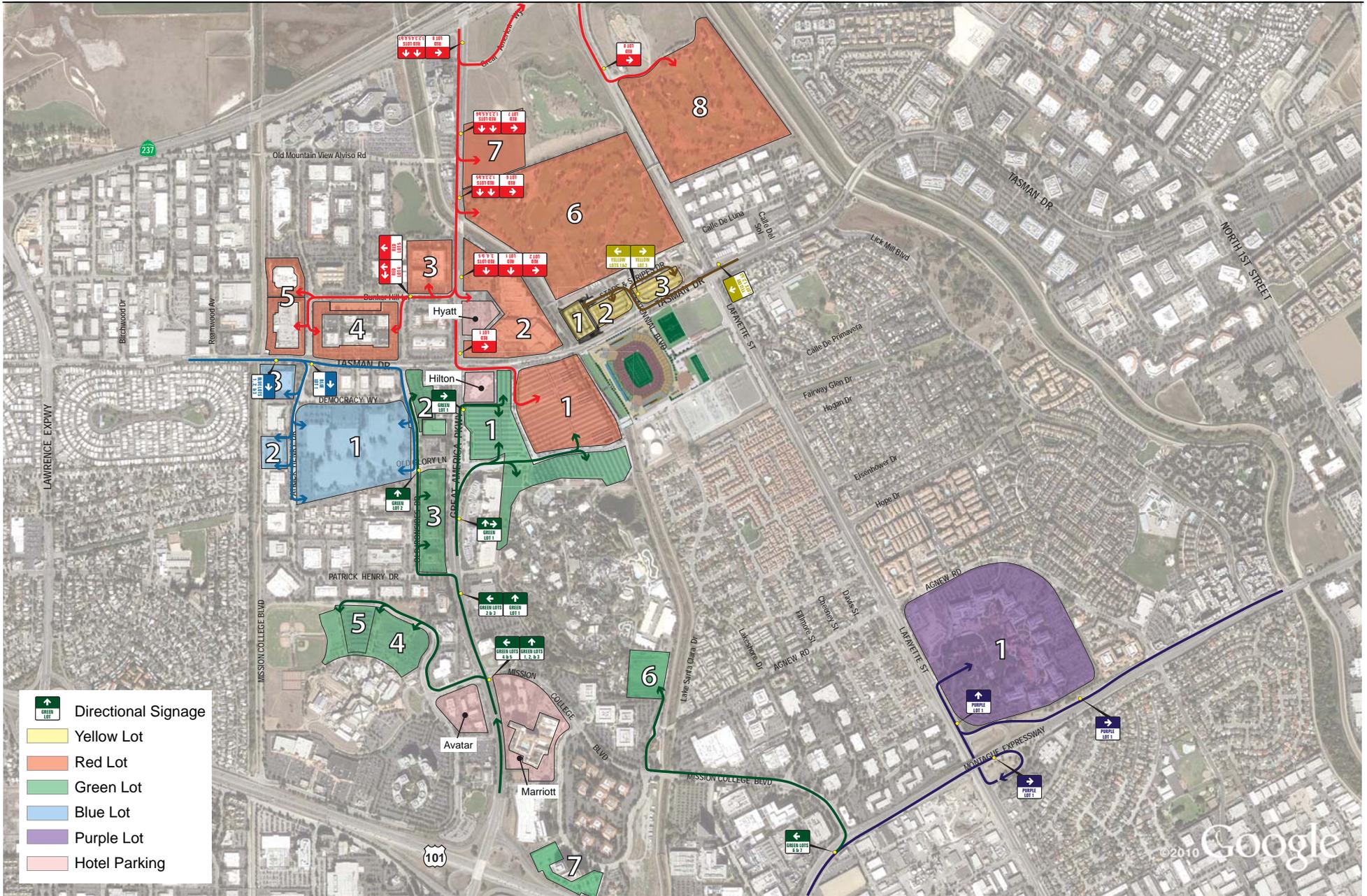
Figure 5.1-1a
Vehicular Paths of Travel - Ingress



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.1-1b

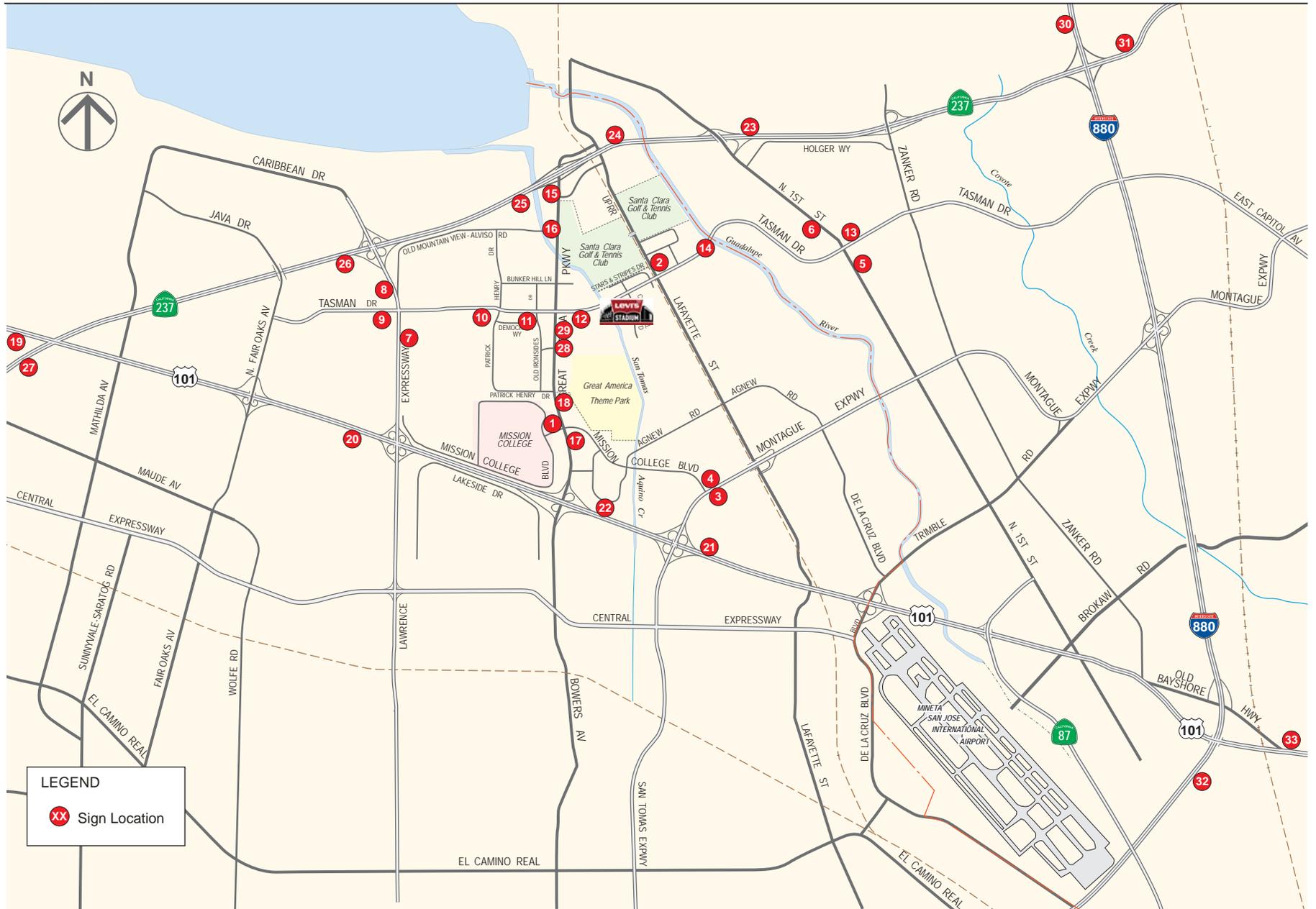
Vehicular Paths of Travel - Egress



Detailed Gameday Signage rev7.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.1-2
Detailed Gameday Signage**



Advance Event Message Signs (7-3).ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.1-3

Advance Event Message Signs



Road Restrictions and On-Street Parking Restrictions

As discussed in section 2.2.2, some roadways shall be closed to all motorists, and others shall be restricted to motorists who are local residents. Many of the road restrictions will include residential streets – ensuring that Stadium traffic does not negatively affect local residents. These roadways include:

Event-related vehicle access restriction and on-street parking restriction:

- Calle De Primavera;
- Fairway Glen Drive;
- Hogan Drive;
- Eisenhower Drive;
- Hope Drive;
- Agnew Road;
- Bassett Street;
- Davis Street;
- Cheeney Street;
- Fillmore Street;
- Lakeshore Drive;
- Lake Santa Clara Drive;
- Reamwood Avenue;
- Birchwood Drive;
- Adobe Wells Mobile Home Park Access;
- Palamos Avenue;
- Sandia Avenue;
- Bridgewood Way;
- Wildwood Avenue;
- Stars and Stripes Drive;
- Centennial Boulevard;
- Renaissance Drive; and
- Democracy Way.

On-street parking restriction only:

- Lick Mill Boulevard;
- Lafayette Street;
- Freedom Circle;
- Mission College Boulevard;
- Hichborn Drive;
- Our Lady’s Way;
- Patrick Henry Drive;
- Old Ironsides Drive;
- Old Glory Lane;
- Betsy Ross Drive;
- Bunker Hill Lane;
- Stars and Stripes Drive;
- Democracy Way;
- Calle Del Sol;
- Calle De Luna; and
- Calle Del Mundo.

As arrival to some of the Stadium’s parking facilities can be expected to begin over five hours prior to the start of a regular-season Sunday afternoon game, roadway restrictions must be implemented no less than six hours prior to a start of a game. For events of smaller size, the schedule for road restrictions and on-street parking restrictions will be scaled appropriately per the findings of section 4.0.

A hierarchy of solutions are to be implemented, based on the extent to which neighborhood intrusion occurs:

1. Initially, cones and “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs shall be placed at the appropriate residential streets.
2. Should unacceptable levels of neighborhood intrusion occur (based on the judgment of the Santa Clara Chief of Police), curbside signage shall be provided noting that on-street parking is prohibited for Stadium traffic, in addition to the placement of cones and “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs.
3. Should unacceptable levels of neighborhood intrusion continue to occur (based on the judgment of the Santa Clara Chief of Police), traffic control officers will be assigned to neighborhood entrances to monitor all vehicle entry to residential streets, in addition to the placement of cones, “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs, and curbside signage.

4. Finally, should unacceptable levels of neighborhood intrusion continue to occur (based on the judgment of the Santa Clara Chief of Police, and the Director of Public Works), a Residential Permit Parking program may be instituted if requested by the impacted neighborhoods, and should the affected city concur. In addition to the placement of cones, "NO STADIUM PARKING – RESIDENT PARKING ONLY" signs, curbside signage, and the assignment of officers to monitor vehicle entry, signage noting that the area is designated for Residential Permit Parking only shall be installed.

Additionally, certain roadways will be marked for restricted parking and/or tow away zones. These roadways shall include Patrick Henry Drive, Old Ironsides Road, Bunker Hill Lane, and Democracy Way, which will be designated for Charter Bus staging, and Lafayette Street, which is to be used by residents only. Implementation of these parking restrictions will be done by way of signage along the curb, stating that parking is prohibited on specific Stadium operation dates.

It should be noted that these roadway restrictions apply specifically to on-street parking. Section 5.5.2 provides details regarding the use of off-street parking.

Officer Monitored Intersections

A number of intersections in the vicinity of the Stadium that will include lane adjustments as part of the TMOP traffic ingress plan will include officers to monitor traffic flow. Officers will not manually direct traffic flow; traffic signals at each intersection will continue to operate with signal timing optimized for movements carrying Stadium traffic. However, it should be noted that traffic control priority will be for light rail, and no manual operations of traffic signals are anticipated. The duty of each officer stationed at an intersection is to ensure that motorists and pedestrians continue to observe their designated signal crossing times, as well as ensure that prohibited movements do not occur (e.g., turns into residential neighborhoods).

Lane Delineation (coning)

A number of intersections in the vicinity of the Stadium will require lane adjustments, including the restriction of some turning movements and lane restrictions. These adjustments will allow for the most efficient flow of vehicles into the Stadium area, while minimizing conflicts with pedestrians.

The majority of these lane adjustments will be implemented using cones and temporary barricades, which minimizes the required setup and takedown time and allow for easy modifications as needed to permit access for special vehicles and non-Stadium traffic. At officer-monitored intersections, the deployment of traffic monitoring personnel will supplement coning in the enforcement of the designated lane changes. The lane adjustments to be implemented during the vehicle ingress period are illustrated in **Figure 5.1-4**.

Traffic Signal Timing/Phasing Modifications

A number of intersections will require adjustments to traffic control devices during event periods. In particular, it will be necessary to adjust signal timing at intersections near the Stadium (including some of the intersections with lane adjustments and / or officer monitoring) during the vehicle ingress period to accommodate heavy inbound traffic flows towards the Stadium. A special event-day signal plan containing all the necessary timing and phasing adjustments will be developed for use during events and will be implemented from the Stadium's Command Post, or from the Traffic Operations Center at the Santa Clara City Hall. However, as noted, traffic control priority will be for light rail, and no manual operations of traffic signals are planned.



While some intersections will see major changes in timing and phasing for traffic, light rail phasing at all intersections along Tasman Drive will be retained (with some modifications, if required) to facilitate light rail operations through the Stadium area. Some pedestrian phases at specific intersections along major event-day traffic routes will be temporarily deactivated (accompanied with “no pedestrian crossing” signage) to eliminate potential vehicular-pedestrian conflicts, which could both present safety issues for pedestrians and substantially affect traffic flow to and from the Stadium. The locations of allowable pedestrian crossings during events are illustrated in **Figure 5.1-5**. These signal modifications will be supplemented by the presence of the officers deployed throughout the Stadium area, who will be directed to facilitate pedestrian and bicycle access in coordination with VTA’s light rail operations as needed to ensure the safety of all roadway users, whether Stadium-related or not. In particular, it may be occasionally necessary to prematurely terminate conflicting traffic phases at some intersections to facilitate the movement of pedestrians and light rail trains into and out of the area. Officers stationed at these intersections will serve to reinforce these signal timing changes by flushing out any vehicles stranded in the intersection and by keeping light rail tracks and crosswalks clear and unobstructed. **Table 5.1-1** summarizes the intersection vehicle turning movements and signal phases that will remain active during the vehicle ingress period.

DRAFT

Table 5.1-1: Signal Phasing Modifications – Vehicle Ingress

Intersection	Active Traffic Phases / Movements								Active Pedestrian Phases			
	NBL	NBTR	SBL	SBTR	EBL	EBTR	WBL	WBTR	North (E-W)	South (E-W)	East (N-S)	West (N-S)
Great America Parkway / SR-237 Westbound Ramps				X			X	X				X
Great America Parkway / SR-237 Eastbound Ramps		X	X	X		X						X
Great America Parkway / Great America Way		X	X	X		X		X			X	X
Great America Parkway / Old Mountain View–Alviso Road		X	X	X		X						X
Great America Parkway / Bunker Hill Lane			X	X				X		X	X	X
Great America Parkway / Tasman Drive			X						X			
Great America Parkway / Old Glory Lane		X							X			X
Great America Parkway / Patrick Henry Drive	X	X				X	X				X	X
Great America Parkway / Mission College Boulevard	X	X		X		X					X	X
Patrick Henry Drive / Tasman Drive				X		X		X	X	X	X	
Old Ironsides Drive / Tasman Drive				X		X			X	X	X	
Convention Circle / Tasman Drive						X			X	X	X	
Centennial Boulevard / Tasman Drive								X	X			X
Calle Del Sol / Tasman Drive				X	X			X				
Calle Del Sol / Calle De Luna	X	X				X		X				
Lafayette Street / Calle De Luna	X	X		X			X	X	X		X	
Lick Mill Boulevard / Tasman Drive		X		X			X	X	X	X		
North 1 st Street / Tasman Drive	X	X	X	X	X	X	X	X	X	X	X	X
Marriott Parking Access / Mission College Boulevard		X				X	X		X	X	X	X
Freedom Circle / Agnew Road / Mission College Boulevard		X	X		X		X	X	X	X	X	X
Mission College Boulevard / Montague Expressway	X	X	X	X	X	X	X	X	X	X	X	X
Lawrence Expressway / Tasman Drive	X	X	X	X	X	X	X	X	X	X	X	X
Lawrence Expressway / Sandia Avenue	X	X	X	X	X	X	X	X	X	X	X	X

Source: AECOM, 2014.

Notes: X = Active Phase / Movement
 ■ = Non-existent movement or crossing



Traffic Control Center Coordination

A traffic control center within Levi's Stadium will be used to manually manage traffic signal operations to better accommodate traffic needs. Manual management of the signal operations is possible at intersections with updated signal controller cabinets, traffic monitoring cameras, traffic signal communications conduits and cables, and associated communications upgrades. Per the Stadium Development Permit, traffic signal equipment at signalized intersections within the area bounded by SR237 to the north, US101 to the south, Calabazas Creek to the west and Guadalupe River to the east. Specifically, upgrades will be made at the following intersections:

- Great America Parkway / Great America Way;
- Great America Parkway / Old Mountain View-Alviso Road;
- Great America Parkway / Bunker Hill Lane;
- Great America Parkway / Tasman Drive;
- Great America Parkway / Old Glory Lane;
- Great America Parkway / Patrick Henry Drive;
- Great America Parkway / Mission College Boulevard;
- Great America Parkway / U.S. 101 Northbound Ramps;
- Bowers Avenue / U.S. 101 Southbound Ramps;
- Tasman Drive / Patrick Henry Drive;
- Tasman Drive / Old Ironsides Drive;
- Tasman Drive / Convention Center Circle;
- Tasman Drive / Centennial Boulevard;
- Tasman Drive / Calle Del Sol;
- Tasman Drive / Lick Mill Boulevard;
- Mission College Boulevard / Marriott;
- Mission College Boulevard / Agnew Road; and
- Mission College Boulevard / Mission College Loop Road.

Additionally, communications from the traffic control center will be setup to manage the traffic signals at the following traffic signals in other jurisdictions:

- Tasman Drive / Lawrence Expressway (County of Santa Clara);
- Tasman Drive / Reamwood Avenue (City of Sunnyvale);
- Tasman Drive / Adobe Wells / Birchwood Avenue (City of Sunnyvale); and
- Tasman Drive at First Street (City of San Jose).

The location of all intersection receiving upgraded traffic signal controller cabinets, surveillance cameras, traffic signal fiberoptic interconnection conduits and cables, and associated communications upgrades is shown in **Figure 5.1-6**.

Encroachment Permits

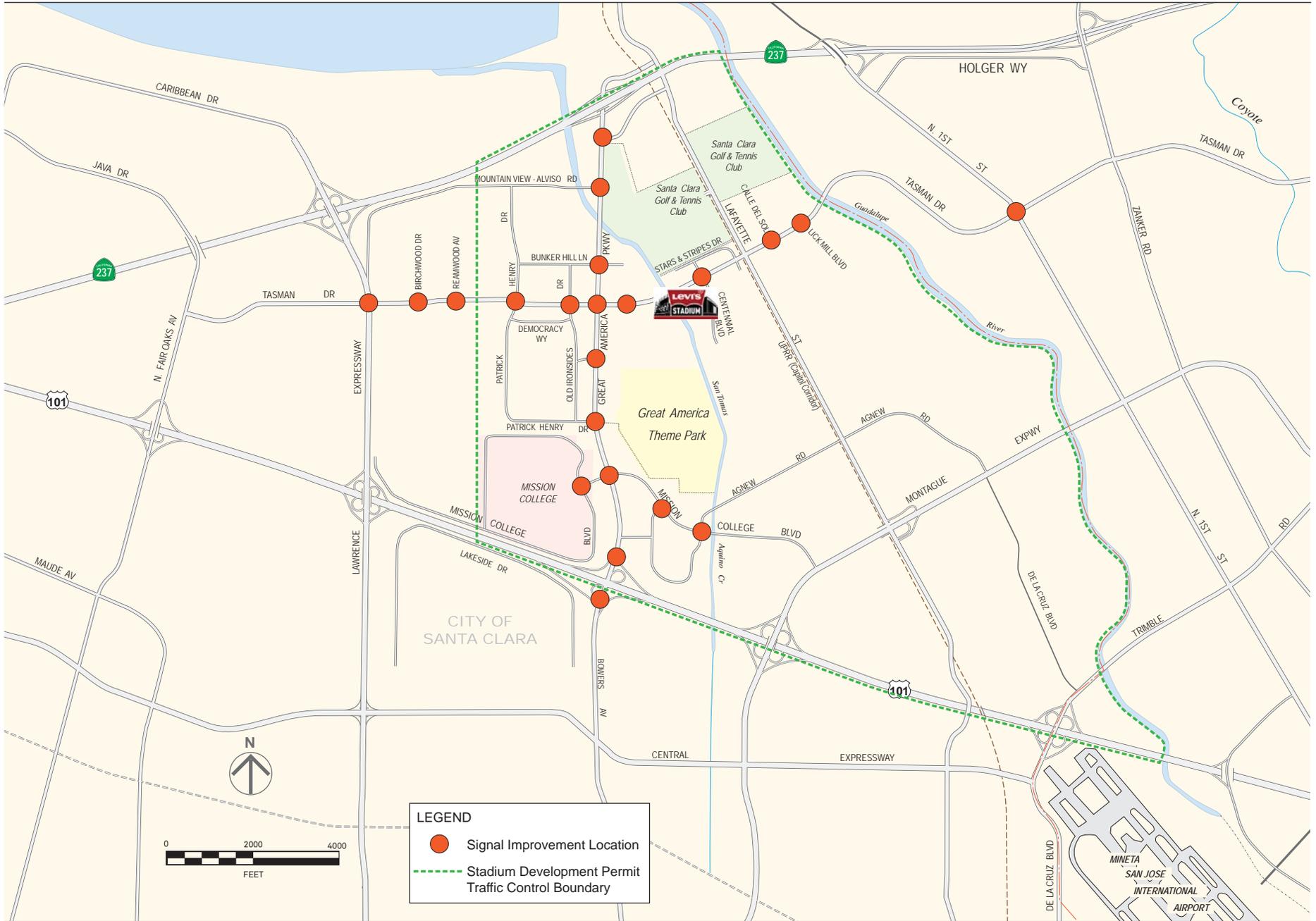
Encroachment permits are required to place equipment and modify access/controls within other jurisdictions' rights of way. These jurisdictions (aside from the City of Santa Clara) include the City of San Jose, City of Sunnyvale, VTA, and Caltrans. Encroachment permits, including the relevant jurisdictions, are summarized in **Table 5.1-2**.

Table 5.1-2: Encroachment Permit Needs

Location	Item	Jurisdiction
SR 237 at Great America Parkway	Changeable Message Signs (2)	Caltrans
U.S. 101 at Great America Parkway	Changeable Message Signs (1)	Caltrans
U.S. 101 at Lawrence Expressway	Changeable Message Signs (1)	Caltrans
U.S. 101 at Montague Expressway	Changeable Message Signs (1)	Caltrans
I-880 / U.S. 101 Interchange	Changeable Message Signs (2)	Caltrans
I-880 / SR 237 Interchange	Changeable Message Signs (2)	Caltrans
U.S. 101 / SR 237 Interchange	Changeable Message Signs (2)	Caltrans
SR 237 at Lawrence Expressway	Changeable Message Signs (1)	Caltrans
SR 237 at North 1 st Street	Changeable Message Signs (1)	Caltrans
Reamwood Avenue / Tasman Drive	Roadway restriction, Traffic Monitoring Officer (1)	City of Sunnyvale
Adobe Wells Entrance / Tasman Drive	Roadway restriction	City of Sunnyvale
Birchwood Drive / Tasman Drive	Roadway restriction, Traffic Monitoring Officer (1)	City of Sunnyvale
Lawrence Expressway / Tasman Drive	Traffic Monitoring Officer (1)	Santa Clara County
Lawrence Expressway / Tasman Drive	Changeable Message Signs (3)	Santa Clara County
Lawrence Expressway / Sandia Avenue	Traffic Monitoring Officer (1)	Santa Clara County
Tasman Drive, Lawrence Expressway to North 1 st Street	Signal Coordination	Santa Clara County
North 1 st Street / Tasman Drive	Traffic Monitoring Officer (1)	City of San Jose
Tasman Drive, adjacent to Stadium	New at-grade crossing	VTA
Great America VTA Station	Mid-Block Crossing Gate Operator	VTA

Source: AECOM, 2014.

It should be added that all non-VTA personnel stationed, or working in the vicinity of VTA light rail tracks will have received VTA safety training. This training will come as part of a Rail Access Permit issued to the 49ers.



Traffic Signal Improvements.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.1-6
Traffic Signal Improvements

Jurisdictional Permissions

To implement the proposed intersection adjustments on event days, the City of Santa Clara Traffic Engineer will obtain permissions based on the jurisdiction a specific intersection falls under. Intersections that require adjustment per TMOP are sorted by jurisdiction below:

Caltrans, Santa Clara County, City of San Jose, City of Sunnyvale:

- Changeable Message Signs:
 - S.R. 237 approaching U.S. 101 eastbound;
 - S.R. 237 approaching Lawrence Expressway eastbound;
 - S.R. 237 approaching Great America Parkway eastbound;
 - S.R. 237 approaching Great America Parkway westbound;
 - S.R. 237 approaching I-880 westbound;
 - U.S. 101 approaching S.R. 237 eastbound;
 - U.S. 101 approaching Lawrence Expressway eastbound;
 - U.S. 101 approaching Great America Parkway westbound;
 - U.S. 101 approaching Montague Expressway westbound;
 - U.S. 101 approaching I-880 westbound;
 - I-880 approaching U.S. 101 northbound;
 - I-880 approaching S.R. 237 southbound
 - Lawrence Expressway / Tasman Drive;
 - North 1st Street / Tasman Drive; and
 - Montague Expressway / Mission College Boulevard.
- Cones, temporary barricades, signal adjustments, directional signage:
 - Reamwood Avenue at Tasman Drive;
 - Adobe Wells Mobile Home Park Access at Tasman Drive;
 - Birchwood Drive at Tasman Drive;
 - Wildwood Avenue at Mission College Boulevard;
 - Lawrence Expressway / Tasman Drive;
 - Lawrence Expressway / Sandia Avenue; and
 - Lawrence Expressway / Sandia Avenue.

City of Santa Clara:

- Cones, temporary barricades, signal adjustments, directional signage:
 - Great America Parkway / SR-237 Ramps;
 - Great America Parkway / Great America Way;
 - Great America Parkway / Old Mountain View Alviso Road;
 - Great America Parkway / Bunker Hill Lane;
 - Great America Parkway / Tasman Drive;
 - Great America Parkway / Stadium North Driveway;
 - Great America Parkway / Old Glory Lane;
 - Great America Parkway / Patrick Henry Drive;
 - Great America Parkway / Mission College Boulevard;
 - Great America Parkway / Our Lady Way;



- Patrick Henry Drive / Tasman Drive;
- Old Ironsides Drive / Tasman Drive;
- Convention Circle / Tasman Drive;
- Centennial Boulevard / Tasman Drive;
- Calle Del Sol / Tasman Drive;
- Calle Del Sol / Calle De Luna;
- Lafayette Street / Calle De Luna;
- Lick Mill Boulevard / Tasman Drive;
- North 1st Street / Tasman Drive;
- Marriott Parking Access / Mission College Boulevard;
- Freedom Circle / Agnew Road / Mission College Boulevard;
- Montague Expressway / Mission College Boulevard;
- Roadway Restriction to Event Traffic:
 - Calle De Primavera at Lafayette Street;
 - Fairway Glen Drive at Lafayette Street;
 - Hogan Drive at Lafayette Street;
 - Eisenhower Drive at Lafayette Street;
 - Hope Drive at Lafayette Street;
 - Basset Street at Agnew Road;
 - Davis Street at Agnew Road;
 - Cheeney Street at Agnew Road;
 - Fillmore Street at Agnew Road;
 - Hunter Place at Agnew Road;
 - Lakeshore Drive at Agnew Road;
 - Lake Santa Clara Drive at Agnew Road; and
 - Agnew Road at Lafayette Street.

Access to Area Properties (employees, neighborhoods, golf course, etc)

In order to provide access to owners, employees, business patrons, and other users of neighboring properties during event periods, in locations where lane configurations have been adjusted and roadways have been closed, employees and patrons of local businesses, as well as local residents, will continue to have access to their properties. Ingress and egress of non-Stadium traffic will be facilitated by the presence of officers stationed at key intersections surrounding the Stadium. Officers will be directed to prioritize this non-Stadium traffic to minimize the impacts of Stadium events (and associated roadway restrictions and traffic congestion) on neighboring stakeholders.

Parking Locations

Arrival at some of the Stadium's parking facilities can be expected to begin as early as 9:00 am for a regular-season Sunday afternoon game. As such, all Stadium parking facilities must be clearly marked prior to 9:00 am. For events of smaller size, the schedule for deployment of parking lot signage will be scaled appropriately per the findings of section 4.0. However, it should be noted that this policy is subject to change based on the discretion of the Santa Clara Chief of Police, or his/her designee.

Stadium staff and/or parking operations staff will be present at these locations throughout the duration of the pre-event, event, and post-event periods to provide Stadium patrons with directional guidance and to assist patrons with disabilities in securing shuttle access to the Stadium.

Non-TMOP Parking Facilities

Measures to protect property owners from parking intrusion by Stadium patrons are described in Section 2.2.3.

Passenger Drop-Off / Pick-Up Area

Passenger drop-off and pick-up activities will be provided along Calle De Luna, adjacent to the taxi area described in section 5.6.

Blue Lot 1 and Green Lot 4 will serve as ADA paratransit vehicle drop-off and pick-up locations. These lots will offer an additional parking supply for disabled patrons, and that a supplemental shuttle connecting Blue Lot 1 and Green Lot 4 directly with the Stadium will be provided for disabled patrons parking in these lots, or arriving by way of ADA paratransit.

Vehicles will access Blue Lot1 and Green Lot 4 based on the vehicular paths of travel illustrated in **Figures 5.1-1a** and **5.1-1b**. During events, specific waiting and queuing areas will be designated (using temporary signage) for the supplemental mobility shuttle. Stadium staff and / or officers will be present at Blue Lot 1 and Green Lot 4 to facilitate the mobility shuttle. Paratransit drop-off / pick-up routes are illustrated in **Figure 5.1-7**.

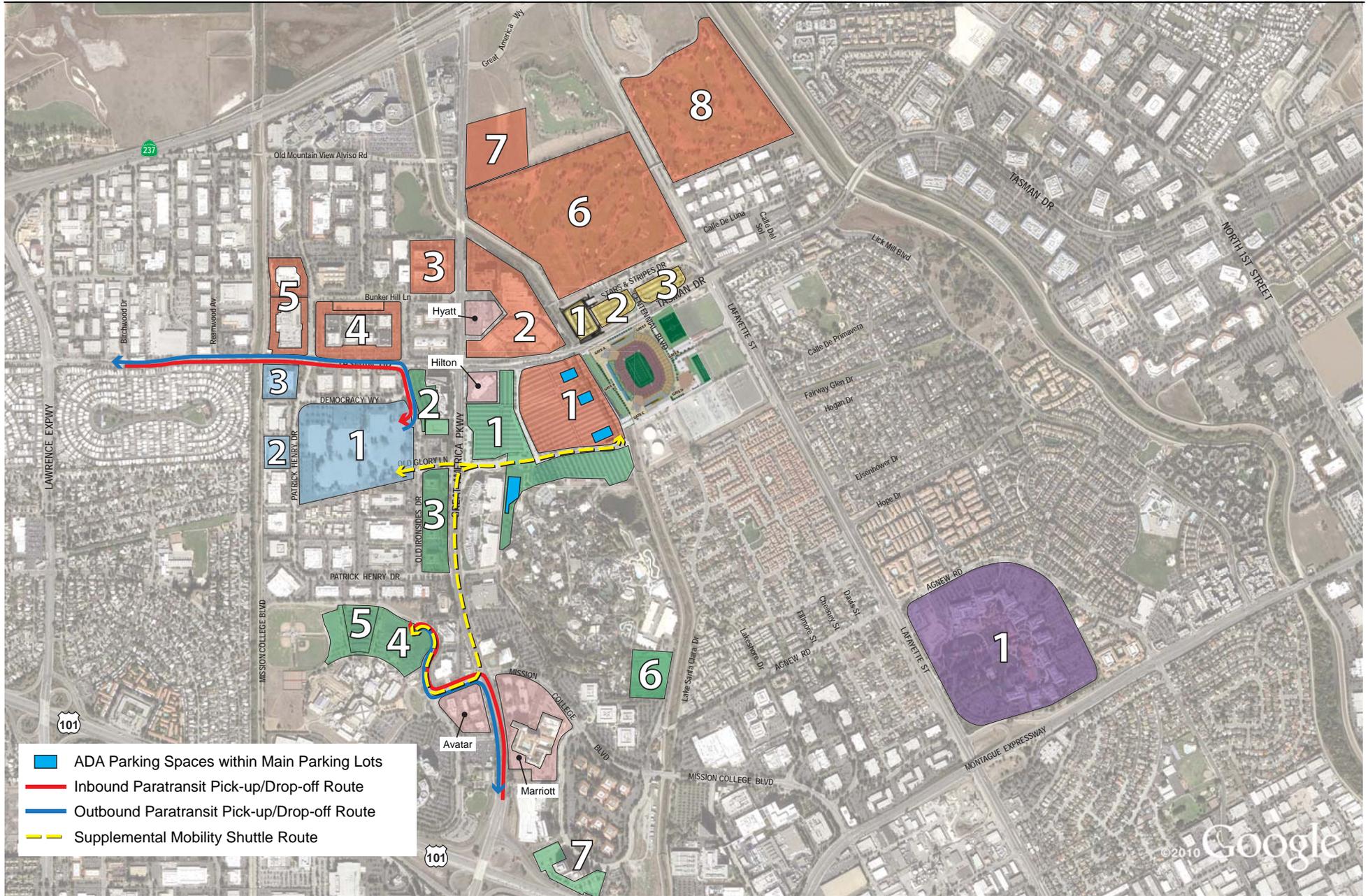
Outreach and Education

Season ticket holders and general admission patrons/parkers will be able to access transportation, transit, and parking information via a number of different methods. To ensure that these patrons, as well as area residents, businesses, and transit users are informed of event day occurrences and operations, the Stadium Manager shall disseminate educational travel information to all parties. Public awareness and communications strategies for implementation include:

- Education upon ticket purchase and/or with tickets;
- Brochures and mailers to area residents and local businesses;
- Press releases and media alerts;
- Telephone hotline;
- Web-based dissemination via social media and cell phone application;
- Information posted on VTA light rail trains and buses; and
- Stadium Stakeholders Group meetings.

5.1.2 Vehicle Egress

Prior to the end of any given Stadium event, the traffic plan for vehicular ingress will be modified to optimize traffic flow away from the area. The details associated with the traffic plan for vehicle egress includes:



- ADA Parking Spaces within Main Parking Lots
- Inbound Paratransit Pick-up/Drop-off Route
- Outbound Paratransit Pick-up/Drop-off Route
- - - Supplemental Mobility Shuttle Route

15.3-10] ADA & Paratransit Shuttle Route.a1

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.1-7
Paratransit and Pick-up / Drop-off Routes, and Supplemental Mobility Shuttle Route**

Hours of Implementation

Post-game traffic changes will be in effect up to three hours following game end to facilitate vehicle egress for Stadium patrons. Similar to vehicle ingress, the hours of implementation of the TMOP's traffic changes related to vehicle egress will be scaled appropriately for events of smaller size (as described in Section 4.0) or weekday evening events (Section 6.0).

Directional Signage

Specific egress routes will be designated for each event-day parking facility in order to optimize the distribution of post-event traffic in all four directions and into the roadway network serving the Stadium, generally following the same route as the ingress route. Similarly to the ingress period, directional signage will be placed to assist motorists exiting the area during the Stadium egress period.

Changeable Message Signs

The changeable message signs described in Section 5.1.1 will remain in effect through the post-event period to minimize entry in to the Stadium area by non-Stadium traffic and optimize traffic flow away from the Stadium.

Street Restrictions and On-Street Parking Restrictions

The street restrictions and on-street parking restrictions described in Section 5.1.1 will remain in effect through the post-event period to contain and direct Stadium traffic.

Officer Monitored Intersections

Officers assigned to the intersections listed in Section 5.1.1 will remain at their post through the post-event period to optimize Stadium vehicle egress, until such a time that traffic congestion returns to ambient levels.

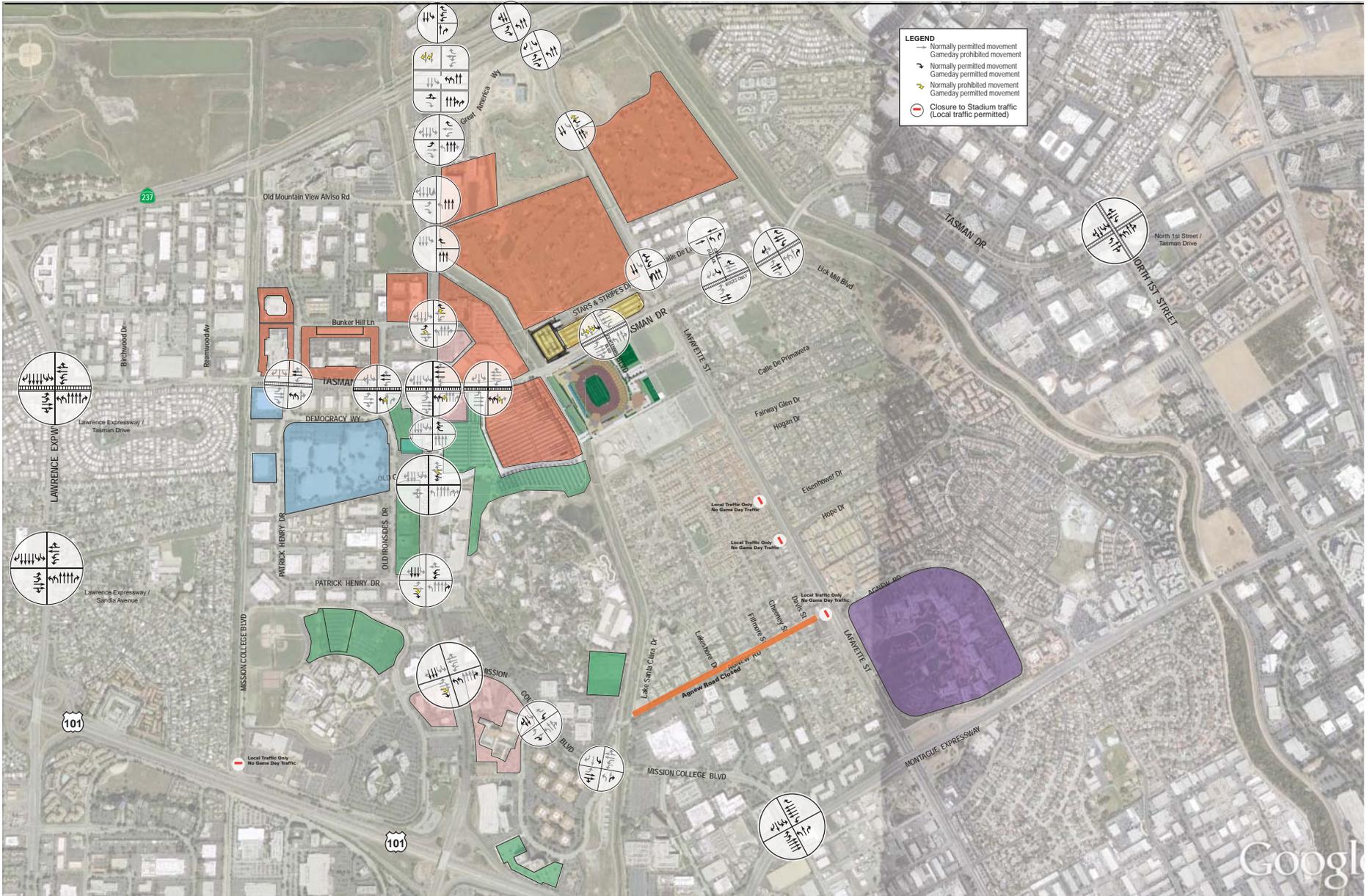
Lane Delineation (coning)

The lane adjustments to be implemented during the vehicle egress period are illustrated in **Figure 5.1-8**.

At approximately halftime during a Stadium gameday (or the equivalent half-way mark for other Stadium events), traffic monitoring personnel deployed at intersections will begin implementing the required lane adjustments for the vehicle egress period, starting with the areas furthest from the Stadium. Any changes to lane adjustments at intersections without officer monitoring are to be executed by traffic monitoring personnel stationed at the next closest intersection.

Traffic Signal Timing/Phasing Modifications

At approximately halftime during a Stadium gameday (or the equivalent half-way mark for other Stadium events), a specialized signal plan for vehicle egress will be put into effect. Similar to the vehicle ingress signal plan, the vehicle egress signal plan will implement a series of timing and phasing modifications at Stadium area intersections to facilitate traffic flow away from the Stadium along the designated egress routes.



Egress.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 5.1-8
Proposed Outbound Lane Configurations and Control

Table 5.1-3 summarizes the intersection vehicle turning movements and signal phases that will remain active during the vehicle egress period. As with vehicle ingress, pedestrian phasing at all intersections and light rail phasing at all intersections along Tasman Drive will be retained to facilitate pedestrian access and light rail operations.

Traffic Control Center Coordination

Remote traffic signal coordination as described in Section 5.1.1 will apply during the Stadium vehicle egress period.

Encroachment Permits

Encroachment permits as described in Section 5.1.1 will apply during the Stadium vehicle egress period.

Responsibilities

The responsibilities associated with intersection adjustments will remain the same for the vehicle egress period as for the vehicle ingress period.

Access to Area Properties (employees, neighborhoods, golf course, etc)

Access to neighboring properties will be maintained and secured similar to the vehicle ingress period.

Parking Locations

Any directional signage to help Stadium patrons find their vehicles will remain in place for the duration of the event (and after its conclusion), and Stadium staff will continue to be present at these locations to facilitate patron needs. Following the end of the vehicle egress period, Stadium staff will remove any temporary Stadium-related signage. For events of smaller size, the schedule for parking lot use and Stadium staff deployment at these locations will be scaled appropriately per the findings of section 4.0.

Non-TMOP Parking Facilities

Measures to protect property owners from parking intrusion by Stadium patrons are described in Section 2.2.3.

Passenger Drop Off/Pick Up Area

The consolidated passenger pick-up and drop-off area for private vehicles and ADA paratransit vehicles, as described in Section 5.1.1 for vehicle ingress, will remain in effect through the duration of the event and post-event periods.

Outreach and Education

Outreach and education as described in Section 5.1.1 will apply during the Stadium vehicle egress period.



Table 5.1-3: Signal Phasing Modifications – Vehicle Egress

Intersection	Active Traffic Phases / Movements								Active Pedestrian Phases			
	NBL	NBTR	SBL	SBTR	EBL	EBTR	WBL	WBTR	North (E-W)	South (E-W)	East (N-S)	West (N-S)
Great America Parkway / SR-237 Westbound Ramps	X	X		X								X
Great America Parkway / SR-237 Eastbound Ramps		X			X							X
Great America Parkway / Great America Way		X			X		X				X	X
Great America Parkway / Old Mountain View–Alviso Road		X										X
Great America Parkway / Bunker Hill Lane		X					X		X	X	X	X
Great America Parkway / Tasman Drive	X						X		X			
Great America Parkway / Old Glory Lane							X		X			X
Great America Parkway / Patrick Henry Drive		X		X		X	X				X	X
Great America Parkway / Mission College Boulevard	X	X		X		X					X	X
Patrick Henry Drive / Tasman Drive	X						X		X	X	X	
Old Ironsides Drive / Tasman Drive		X					X		X	X	X	
Convention Circle / Tasman Drive	X								X	X	X	
Centennial Boulevard / Tasman Drive			X						X	X		X
Calle Del Sol / Tasman Drive			X			X		X	X			
Calle Del Sol / Calle De Luna	X	X				X		X				
Lafayette Street / Calle De Luna	X	X		X			X	X	X		X	
Lick Mill Boulevard / Tasman Drive		X		X		X	X	X	X	X		
North 1 st Street / Tasman Drive	X	X	X	X	X	X	X	X	X	X	X	X
Marriott Parking Access / Mission College Boulevard		X	X			X			X	X	X	X
Freedom Circle / Agnew Road / Mission College Boulevard		X	X			X			X	X	X	X
Mission College Boulevard / Montague Expressway	X	X	X	X	X	X	X	X	X	X	X	X
Lawrence Expressway / Tasman Drive	X	X	X	X	X	X	X	X	X	X	X	X
Lawrence Expressway / Sandia Avenue	X	X	X	X	X	X	X	X	X	X	X	X

Source: AECOM, 2014.

Notes: X = Active Phase / Movement
 ■ = Non-existent movement or crossing

5.2 Transit Access

Transit access to the site is efficient and direct. Both heavy and light rail service already have stations within a few minute walk from the site. VTA Light Rail stops just north of the Stadium site. One of the Union Pacific Railroad's main lines lies directly east of the site, allowing train service from Sacramento/Oakland, Stockton/Tracy, and Gilroy/San Jose. Though Caltrain does not pass directly by the site, there are options described below for a convenient transfer. Special bus service operated by local transit agencies will continue in a similar fashion to that now provided for events at Candlestick Point, and adequate bus parking and loading areas are available on the streets near the site. An illustration of the transit services in the Stadium vicinity is provided in **Figure 5.2-1**. A system of exclusive pedestrian walkways have been developed using portions of existing streets and parking lots that would be closed to vehicles on event days. Such a system will minimize pedestrian/vehicle crossings after an event, and enhance the fan experience by making access to transit quicker and more convenient.

5.2.1 VTA Light Rail

It is important to note that the details of VTA light rail and bus operations before and after various events at the Stadium have been coordinated and developed in concert with VTA staff. This section of the TMOP seeks to outline what those operational details will be, and describes a number of potential solutions.

VTA provides light rail service to the Stadium. VTA currently operates two light rail lines (Winchester to Mountain View and Santa Teresa to Alum Rock) that jointly serve the system spine on North First Street and then branch off east and west of that spine. The closest existing light rail loading/unloading area is the Great America Station, which is located immediately northwest of the Stadium entrance on Tasman Drive, and is regularly served by the Winchester to Mountain View light rail line. The current Sunday LRT (Light Rail Train) service, with two car trains every 30 minutes, can carry approximately 2,000 riders. Adequately serving the projected event-day demand will require significantly more light rail service than is currently operated on Sunday by VTA.

The details associated with transit access with regard to VTA light rail are as follows:

Ridership

The VTA light rail system is 42 miles long, and provides good geographic coverage. Stadium patrons in the areas of Milpitas, Berryessa, East San Jose, Downtown San Jose, Willow Glen, South San Jose, and Campbell are all within a short distance of a light rail station. Patrons from other areas can easily drive to the light rail stations with parking lots. Ridership levels are expected to increase substantially on event days, with an estimated 4,500 Stadium patrons using the service (as estimated in the EIR). It should be noted that all ridership totals presented in section 5.2 are presented only as estimates, and are subject to change as newer information is obtained. Approximately 4,500 patrons are estimated to use local bus service (VTA local bus and east bay public bus) to reach the Stadium. A conservative assumption is that 3,000 of the bus riders will come via light rail instead. Of the potential 7,500 total LRT riders, two-thirds (5,000) are expected to arrive from the southeast and one-third (2,500) from the northwest. Additionally, it is expected that 90 percent (2,700) of the 3,000 Caltrain riders are coming from the north and will transfer to light rail in Mountain View. Therefore, the total demand for light rail is expected to be 10,200 patrons – 5,000 from the southeast and 5,200 from the northwest.

It should be noted that as part of the collection of annual data described in section 2.1.4, VTA will collect boarding and alighting data on its trains for the purposes of annual TMOP evaluation. Data is to be collected before the start of the NFL season (once on a Sunday and once on a Monday), and on all NFL game days at the Stadium.



VTA Satellite Lots rev3.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-1
Transit Service in the Stadium Vicinity

Service Levels

Working with VTA, appropriate service levels for events will be determined. This section presents an initial workable scenario for providing opening day service.

Headways

VTA Light Rail service in the Stadium area currently operates at 15-minute headways (i.e., frequency of service) during weekday peak commute hours, with 30-minute service during middays, evenings and weekends. VTA Light Rail has a one-mile-long single-track segment at Mountain View, which would constrain headways serving the Mountain View end of the line on event days. Headways will be shortened for periods before and after events. VTA currently has single-track operations between downtown Mountain View and across Central Expressway to Whisman Station. Analysis indicates that increasing capacity at the end of VTA's LRT line in Mountain View is key to serving Stadium event transit demand mid-line at the Great America Station and to serving the future BART connection in Milpitas. As VTA now operates on an easement from Caltrain, LRT improvements will require additional right-of-way and realignment of Caltrain tracks. Due to the complexity of the project, and the incremental utility of additional double-track, VTA is implementing the double-track improvement in two phases. Phase I proposes extending the existing LRT storage track east of the Mountain View Station approximately 1,400 feet east, to connect with the existing single track near the Highway 85 overpass, and adding a special event platform across from Caltrain. This gives VTA some operational flexibility, fits within the railroad corridor without effecting Caltrain operations, and can be done relatively quickly and inexpensively. VTA and Caltrain staffs are in agreement on the Phase I improvement. What is more critical to successful LRT service is the Phase II improvement, double-tracking light rail from Highway 85 to Whisman Station. VTA, Caltrain, and High Speed Rail staffs are currently in discussions to advance the Phase II improvement. Implementation of VTA's planned new Northern Express line, which will provide LRT service from Mountain View to Alum Rock, is not possible until completion of the Phase II Double Track, anticipated by end of 2016.

Train Size

The Winchester to Mountain View line is currently restricted to two-car train operation due to the size of the stations on the Vasona segment of that line (downtown San Jose to Winchester). The Tasman West segment (First Street to Mountain View) of the Winchester to Mountain View line, including the Great America station that will serve the Stadium, has three-car stations. Several operating constraints on the Winchester to Mountain View line affect the potential frequency of service. On the Tasman West segment, there is the single-track section near the Caltrain station in Mountain View, mentioned above. On the Vasona segment, there are several single-track segments.

Current plans show Winchester trains continuing to Mountain View as they do today. VTA plans to eventually double track the short segment in Mountain View and begin operating a line between Alum Rock and Mountain View. This TMOP analysis does not assume that the double tracking has been completed. However, it is assumed that VTA will operate frequent service to Mountain View for short periods to meet Stadium demands until Phase 2 is implemented.

Event-Day Service

VTA has identified three basic types of events that are likely to occur.

- **All Day Events:** Patrons are expected to arrive and leave over extended periods;



- **Timed Events:** Patrons are expected to arrive in a short period, and leave immediately after the event; and
- **Hybrid Events:** Patrons may arrive over an extended period but leave at a specified time, or vice versa.

Event Planning and Analysis

Each event will be evaluated to see what the projected light rail ridership and extra service needs would be. This will be done on a continuing basis as information about event schedules are received by VTA. A post event review will also be completed in order to address issues for future events.

All Day Events

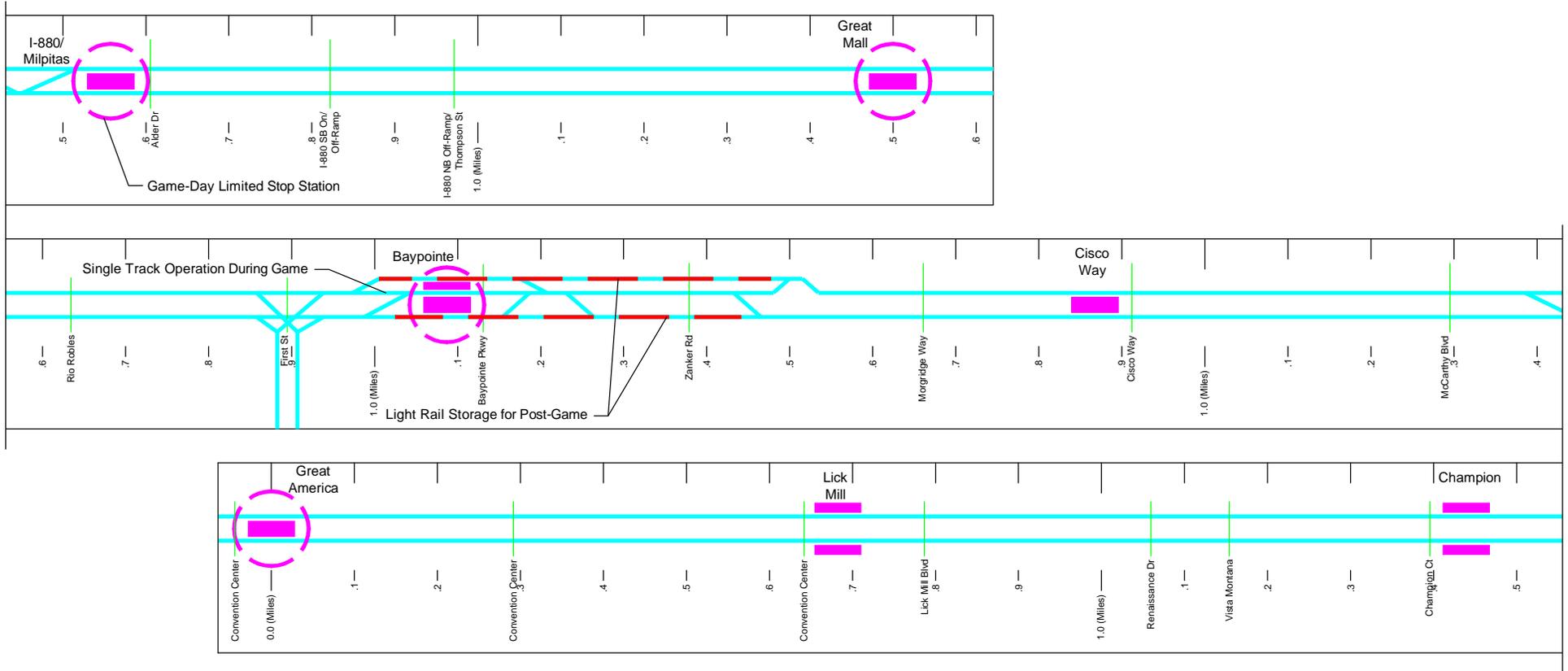
These are the all day events where the people are expected to arrive and leave at various times during the event. This might include events like art & wine festivals, craft fairs, etc. In this case, VTA will make no changes to existing service, run additional cars on existing trains, or supplement service with additional trains to boost the frequency unless the event were unusually large. The exact level of service and number of trains and operators required will depend on the event. Increased capacity for these events, if required, will be handled by adding cars to existing trains.

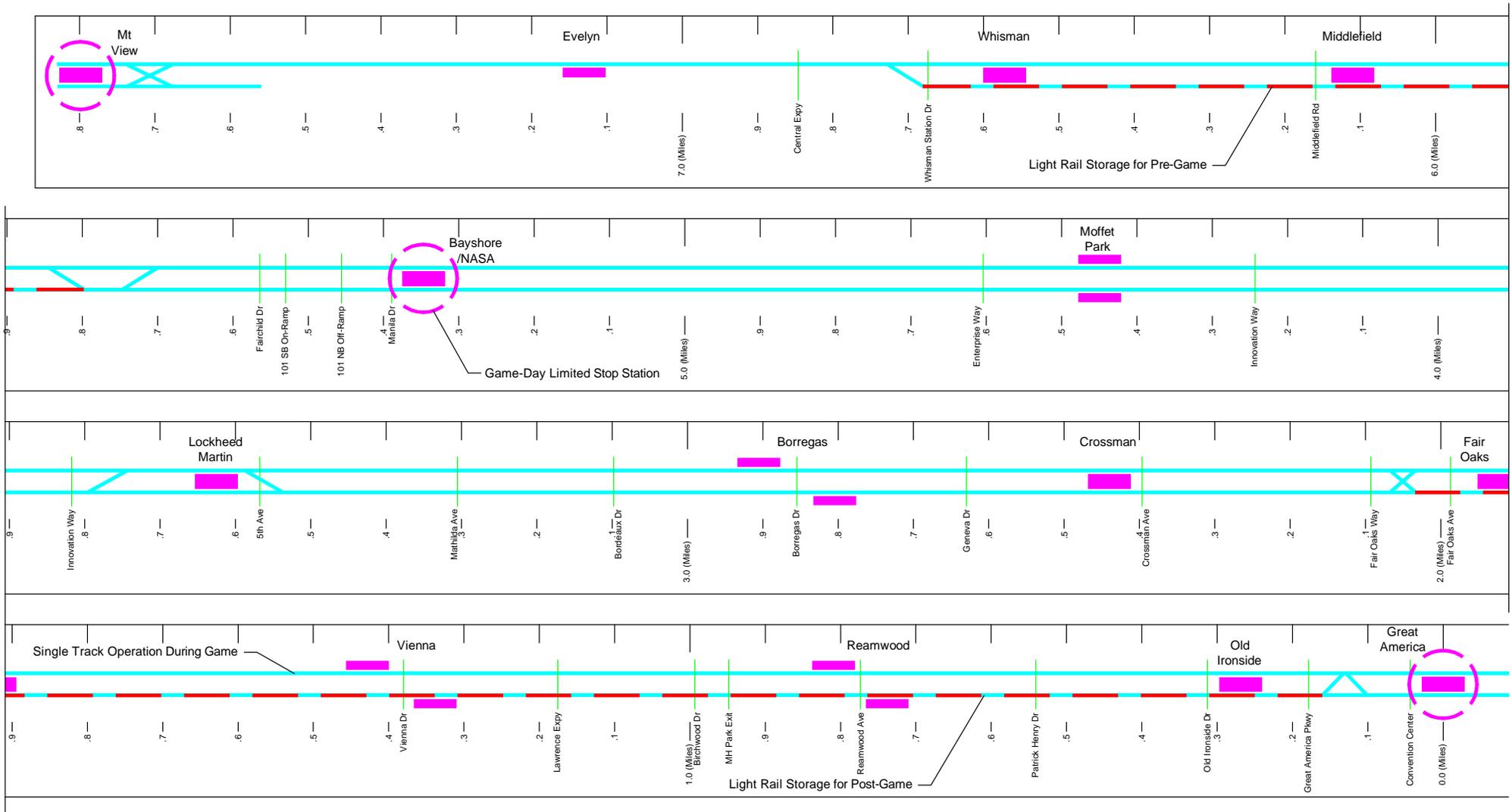
Timed Events

This will include 49ers games and events such as concerts or other major sporting events. Smaller events of this type may only require additional cars on scheduled trains, with one or two added trains to handle the anticipated load at the end of the event.

For larger events such as 49ers games, VTA will prepare an augmented schedule for that day. The schedule will preserve the existing service as much as possible. The pre-event service will involve adding cars to the appropriate trains, including trains that do not serve Great America in order to handle loads resulting from people transferring. There will be added trips from Alum Rock and Santa Teresa, locations not normally served by the trains going to Mountain View. There will also be service added between Mountain View and Great America to handle extra passengers from Caltrain. These extra pre-event trains will start approximately 3 hours before the event start time. The exact number and times of extra trains will be determined by the size and timing of the event. Weekday pre-event service will rely very heavily on existing service with maximum car deployments. A limited number of extra trains may be added from each end of the line. During large events, VTA will implement a train schedule such that customers could board at nearly any station and be taken directly to the Great America Station without having to transfer.

During the event VTA will move and stage the extra trains to be as close to the stadium as possible for the post-event service. A new double crossover will be constructed on Tasman Drive just west of Patrick Henry Drive, and a storage track is being built on Tasman Drive between Old Ironsides and Patrick Henry. It is anticipated that these projects will be completed in late August of 2014. The proposed storage areas are illustrated in **Figures 5.2-2a** and **5.2-2b**. The new storage track will be able to accommodate three 3-car trains and these trains will travel eastbound. Also, eastbound trains can stage on the regular service track, but this will require single tracking portions of the system between Mountain View and Old Ironsides and adversely affect regular service. Three 3-car trains can be staged at Baypointe on the center track for trains heading towards Mountain View. Trains can also be stored at the Light Rail operating division on Younger St. and/or Alum Rock, but these locations are 20-30 minutes away from Great America and these extra trains will have to be inserted between regular trains in order to arrive at the stadium at the right time.





San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-2b
VTA Light Rail Schematic West of Great America Station

For post-event, as many as 7-8 trains can be sent from Great America towards Mountain View (two will have 2 cars while the rest will have 3 with a total capacity of around 3,000-3,500 riders). The trains will depart approximately every 10 minutes (due to single track limitations in Mountain View). After that the limit will most be 4 per hour (half of these will be three car trains with a total capacity 1,600 per hour). However, articulated buses will provide extra capacity to supplement the light rail service between Mountain View and the Stadium. This will be examined more closely once the game day loads settle down. Some of the initial extra trains may be able to cycle back and load in the opposite direction if needed.

Trains leaving the stadium towards Alum Rock and Santa Teresa can depart approximately every 5 minutes depending on loading times. This will mean 8-10 three-car trains can leave the station heading towards Santa Teresa or Alum Rock (with a capacity of 3800-4800 riders). Passengers going east will have to be segregated by destination in order to facilitate loading the trains to make sure people are not confused. Some of the initial extra trains may be able to cycle back and load in the opposite direction if needed.

In addition, an extra train or two may have to be staged at Younger St. to fill in for regular Winchester trains coming from Mountain View that are seriously delayed by post-game loading.

Current plans call for all trains to serve all stations. In most cases the close headways and signal restrictions will require this to happen.

Based on the current fleet, there will be a limit of around 15 added trains if all were 3-car consists. Current regular service will require up to 37 cars (18 two car and 1 one car), but some trains that do not directly serve the Stadium may be able to use single car consists. The 15 added trains will require another 45 cars for a total of 82, leaving 17 spares for maintenance. It is very unlikely more than 80 cars will be available on a regular basis.

VTA buses will be used to augment light rail service to busier locations, if needed.

Hybrid Events

These events will treat either the pre-event or post-event service similar to an All Day Event while treating the post event or pre-event service like a timed event. The operating plan will be a mix of the All Day Event plan and a Timed Event Plan.

Passenger Loading/Queuing Areas

A passenger loading/queuing area will be provided north of the stadium on Tasman Drive for major events. The street will be closed to vehicular traffic in this area. This area will allow for easy, direct access to and from the stadium for light rail users. During the post-event exodus, passengers heading west towards Mountain View will board at the regular westbound platform. Passengers heading eastbound towards Winchester, Alum Rock or Santa Teresa will board on the new eastbound platform. Riders will need to be segregated into four separate queuing lines: Mountain View (west), Winchester (east), Alum Rock (east), and Santa Teresa (east) until passenger loads subside.

Satellite Parking Facilities

VTA light rail service will provide opportunities for patrons to park away from the Stadium area, and ride light rail into the Stadium. The potential demand for satellite parking may influence the planned light rail stops and may require some new or modified park-and-ride facilities VTA currently has 21 park-and-ride lots along the light rail



lines, providing 6,471 parking spaces. Stadium patrons may use all the park-and-ride lots along the light rail lines. At other locations, patrons can transfer from local light rail service to the event day special service. Potential parking locations (illustrated in **Figure 5.2-3a**), and issues associated with these priority sites, are discussed below:

- Downtown Mountain View – Fee parking is available at this station, but is shared with Caltrain and is fully utilized on weekdays. The parking facility is owned and operated by Caltrain, and not VTA. In total, 338 parking spaces are provided for motorists, and 98 bike lockers and 20 bike racks are provided for bicyclists. The location of parking facilities in relation to the Downtown Mountain View Station is illustrated in **Figure 5.2-3b**. Some patrons may attempt to park in the downtown area or adjacent neighborhoods. The City of Mountain View will enforce parking within the station vicinity, and throughout downtown Mountain View. Further, the City of Mountain View has completed the planning for a parking deck over the surface parking.
- Hostetter – This light rail station is adjacent to I-680 in the Berryessa area of San Jose, the Great Mall, and has substantial parking. In total, 100 parking spaces are provided for motorists, and 12 bike lockers are provided for bicyclists. The location of parking facilities in relation to the Hostetter Station is illustrated in **Figure 5.2-3c**.
- I-880/Milpitas – This station, adjacent to I-880, has a large park-and-ride lot and adjacent VTA-owned property. In total, 275 parking spaces are provided for motorists, and 10 bike lockers are provided for bicyclists. The location of parking facilities in relation to the I-880/Milpitas Station is illustrated in **Figure 5.2-3d**.
- Great Mall – This light rail station is immediately adjacent to the Great Mall, and has substantial parking. Stadium parking will be located at the furthest distance from the shopping mall. In total, 93 parking spaces are provided for motorists using the Great Mall Station. The location of parking facilities in relation to the Great Mall Station is illustrated in **Figure 5.2-3e**.
- Guadalupe Line – Along the light rail line extending south from downtown San Jose, there are several large park-and-ride lots that will be served by the special Stadium service. These include Tamien, Curtner, Capitol, Branham, Ohlone/Chynoweth, Blossom Hill, Snell, Cottle, and Santa Teresa. The amount of parking available at each of these locations is shown on **Figure 5.2-3f**.
- Vasona Line – The Vasona line to Campbell has park-and-ride lots at the Bascom and Winchester stations. There is also parking at the San Jose/Diridon Caltrain station. The amount of parking available at each of these locations is shown on **Figure 5.2-3f**.



VTA Satellite Lots rev3.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-3a
VTA Satellite Lots



Mountain View VTA Station.ai

San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

Figure 5.2-3b

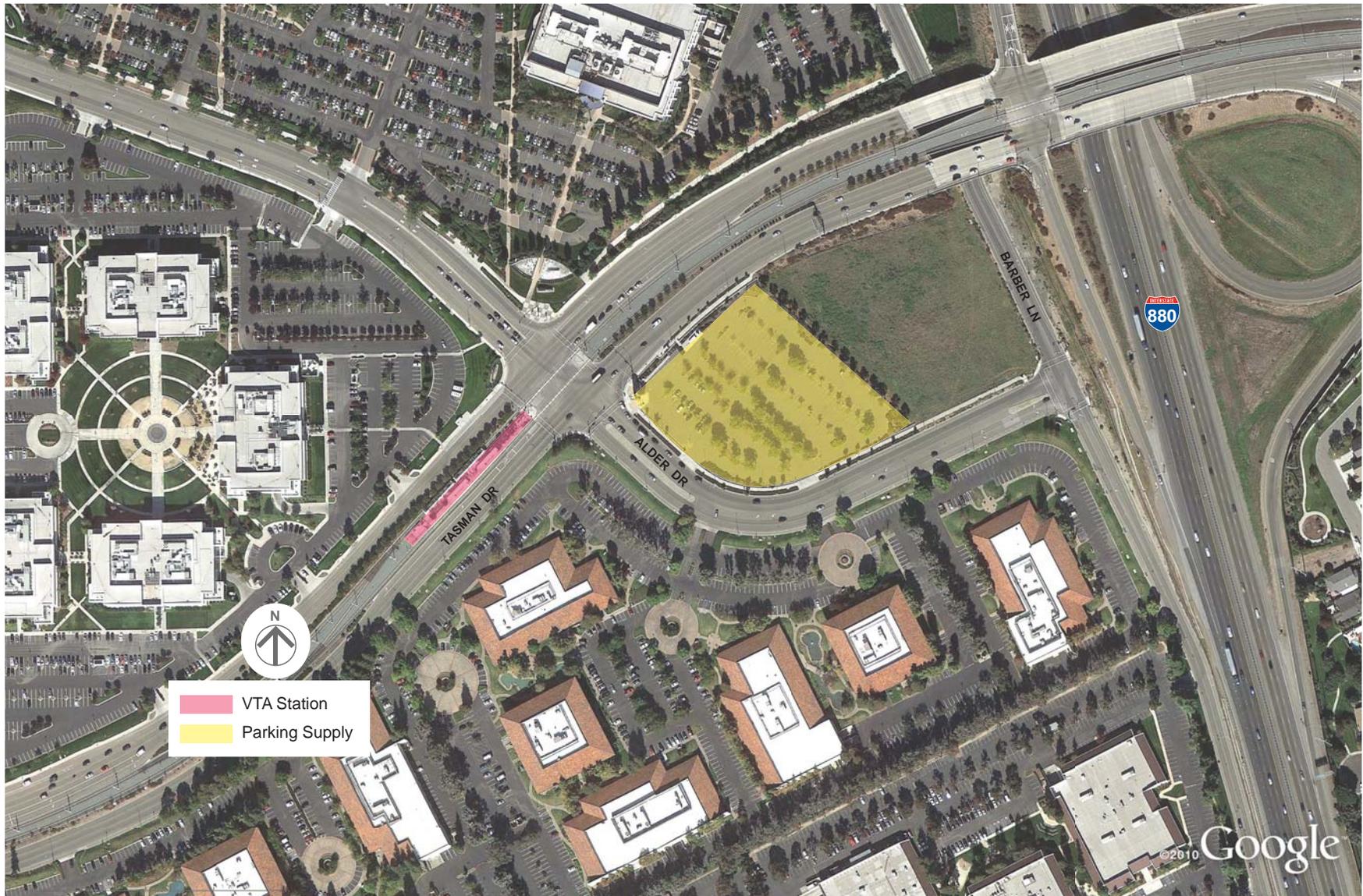
Downtown Mountain View VTA Station



Hostetter Station.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-3c
Hostetter Station



I-880 Milpitas VTA Station.ai

San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

Figure 5.2-3d
I-880 / Milpitas VTA Station



Great Mall VTA Station.ai

San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

Figure 5.2-3e
Great Mall VTA Station



Guadalupe & Vasona Parking Availability rev1.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-3f
Guadalupe Line and Vasona Line Parking Availability

Measures to Control Illegal Parking Adjacent to VTA Stations

Congestion around the Stadium and the provision of attractive transit service to the facility may lead to overflow parking around some VTA stations, which could result in some level of illegal parking (e.g. restricted neighborhood permit parking). To guard against parking issues, the level of parking at park-and-ride lots will be closely monitored. If problems arise with overflow or illegal parking, there are several possible actions that can be pursued. If intrusion into neighborhoods is the issue, VTA or the affected city could consider a permit parking program, or similar initiative. In some locations, there may be opportunities to expand the lot with temporary parking spaces.

Downtown Mountain View parking could be a particular issue. Parking on event days will be monitored to determine utilization and availability. This approach can work to the extent that there is excess downtown parking during normal event hours.

Coordination with Caltrain (and BART eventually)

VTA's special light rail service on event days is designed to coordinate with Caltrain service for Stadium patrons. The details of coordination are provided below.

The Mountain View station has a center platform and two tracks which means that two trains can load at the same time. To serve a fully loaded Caltrain arrival, this service plan assumes that trains operate in pairs on the Mountain View single-track segment. For example, on arrival of a Caltrain train before an event, both eastbound light rail trains will be waiting at the platform and load at the same time. The first train will depart and the second train will follow immediately at the minimum prescribed separation distance to maintain safety. Both trains will occupy the single-track segment at the same time. Once they entered the double track section, two westbound trains that had been holding on the westbound track will enter the single-track segment, separated by the minimum interval. There is also a storage track at the Mountain View station allowing storage of a third train. Therefore, when a Caltrain train arrives, VTA can dispatch three outbound light rail trains one after the other, without allowing an inbound train to enter the single-track segment until the last outbound train had cleared this section. If needed to meet demand, this approach maximizes the passenger throughput of the single-track section. Additional bus service will be scheduled to augment the light rail service and provide direct connections between Caltrain and Levi's Stadium.

After the conclusion of a Stadium event, VTA light rail trains will be expected to arrive at the Mountain View Station in 10-minute intervals. Patrons continuing onto Caltrain services will walk to the Caltrain boarding area, and board Caltrain trains.

Stadium Area Operations

Special accommodations will be made for VTA's light rail service on event days during peak usage periods. These accommodations include:



Passenger Loading/Queuing Areas

A passenger loading/queuing area will be provided north of the Stadium on Tasman Drive. The street in this area will be closed to vehicular traffic. This area will allow for easy, direct access to and from the Stadium for light rail users. Operations within the loading/queuing area outlined below. The following assumptions were made, per the findings of the *Transportation Management Plan for a New San Francisco 49ers Stadium in Santa Clara, CA*:

- Ridership Scenario
 - 5,000 eastbound
 - 2,500 westbound + 2,700 to transfer to Caltrain @ Mt View = 5,200 westbound
 - 10,200 total
- Post-event Passenger Arrivals at Station during Stadium Egress – percentages distributed in 7.5 min increments – as shown in **Figure 5.2-4a** and **Figure 5.2-4b**
 - 5% before end of event
 - 73% within 45 min of end of event
 - 22% within 75 min of end of event
- Light Rail Vehicle Capacity
 - 450 passengers per 3-car train

The following configuration, as illustrated in **Figure 5.2-5a** and **Figure 5.2-5b**, is proposed for implementation including the following specific characteristics:

- Existing Great America Platform is loaded from existing west side access for westbound only and eastbound uses a new “Event Only” platform south of the eastbound track
 - Headways
 - 10 min westbound (plus supplemental bus service)
 - 10 min eastbound (plus supplemental bus service)
 - Platform Access Rates
 - 220 passengers per minute for the westbound platform
 - Light Rail Vehicle Capacity
 - 450 passengers per 3-car train
 - Maximum Anticipated Off-Platform Queue Area
 - Westbound – 2,274 passengers = 9,096 square feet
 - Eastbound – 2,100 passengers = 8,400 square feet

This configuration generates the shortest queues possible while requiring the smallest queue area, primarily due to the service frequency provided. This configuration provides a short duration of substantial queuing (about 20 minutes).

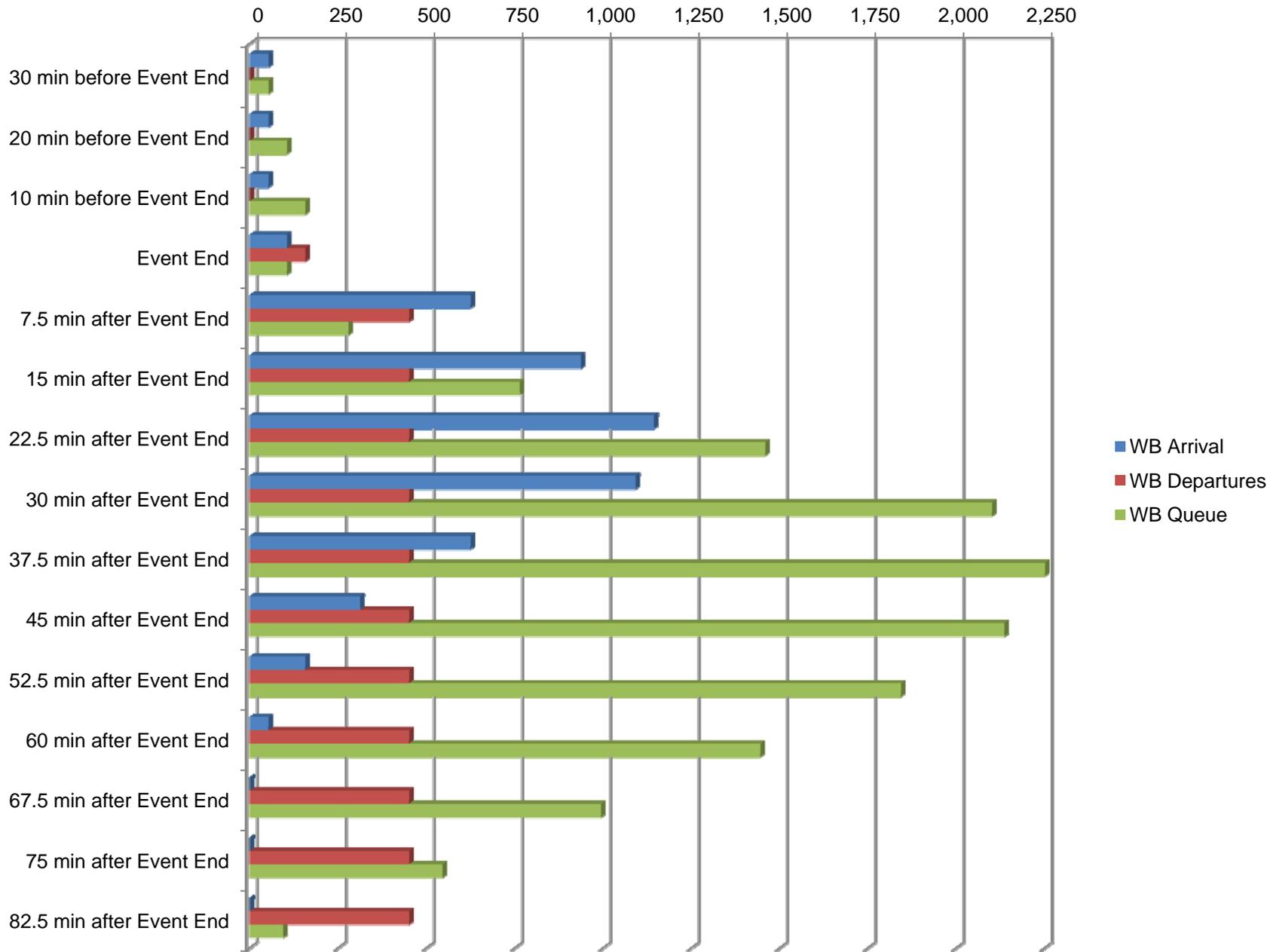


Figure 5.2-4a
Post-Event Arrivals at VTA Great America Station (Westbound Egress)

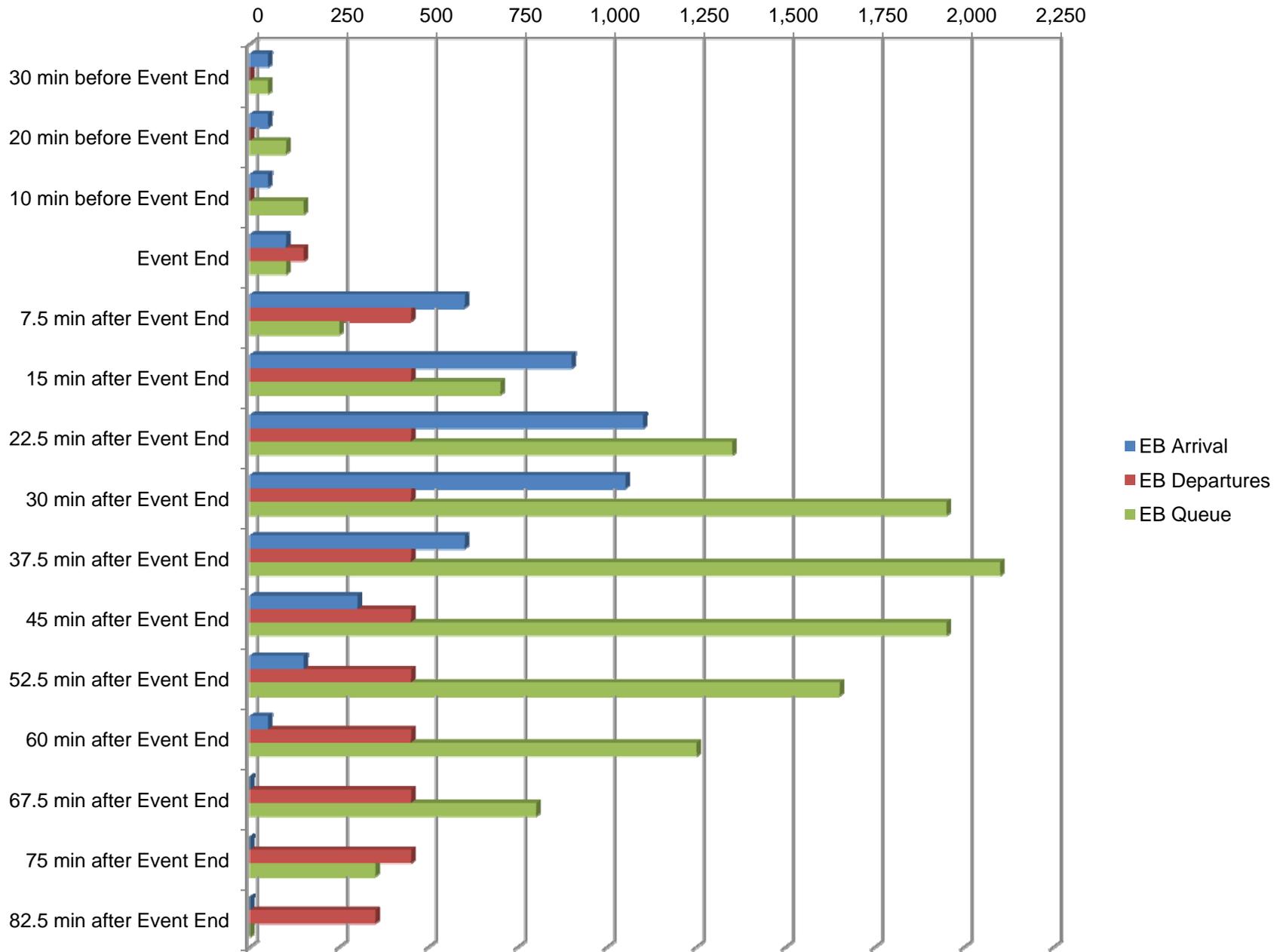
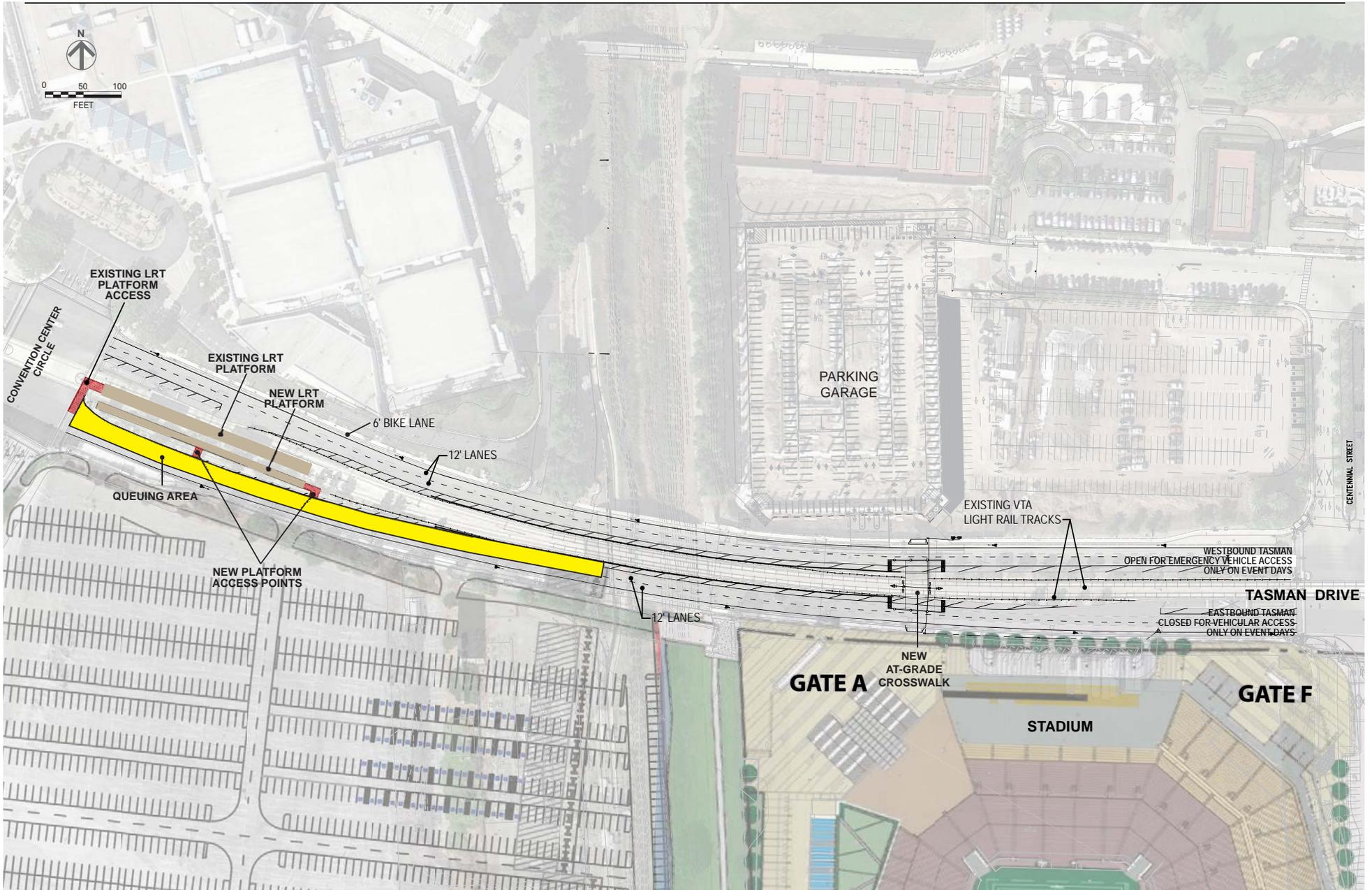
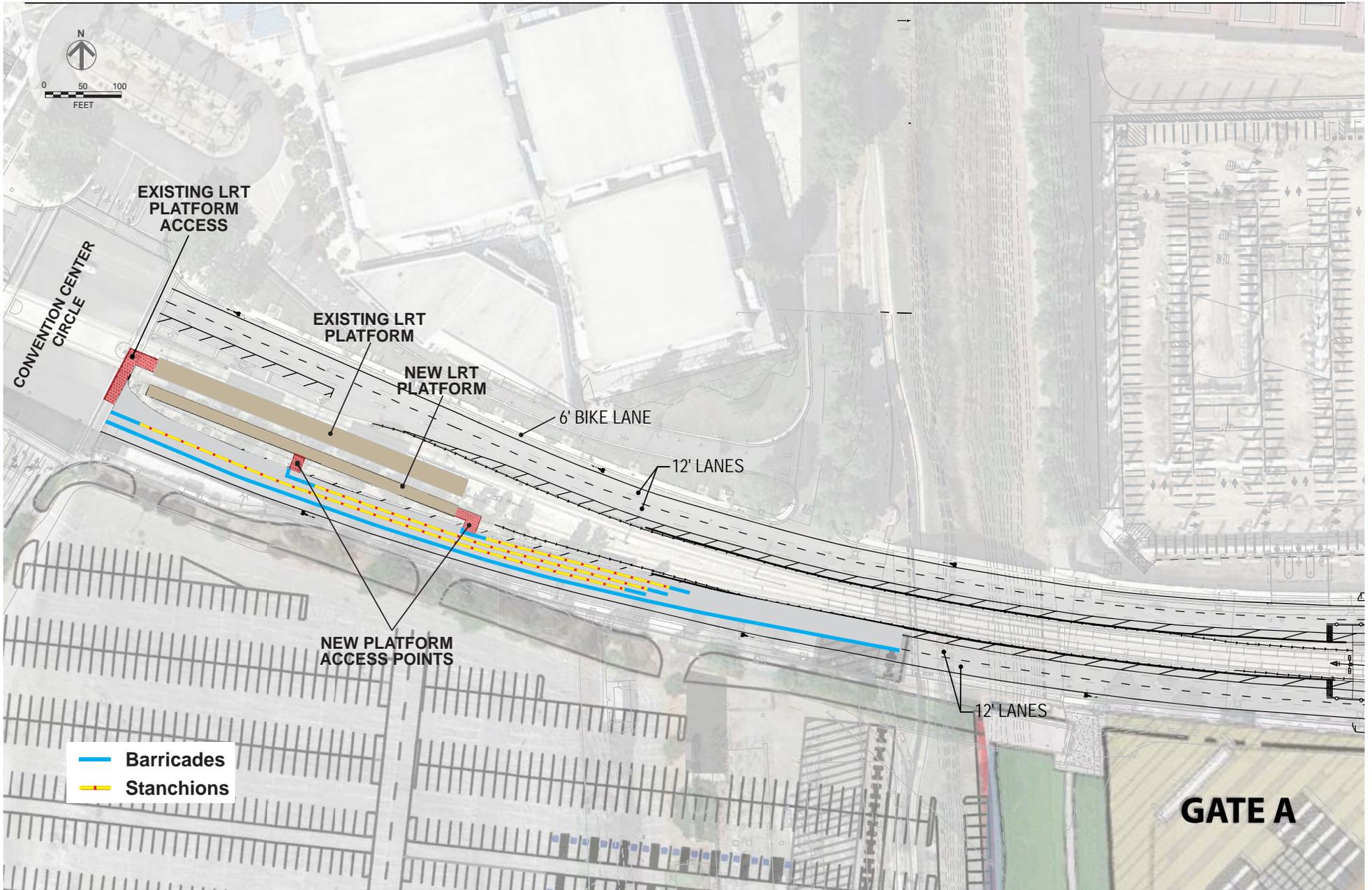


Figure 5.2-4b
Post-Event Arrivals at VTA Great America Station (Eastbound Egress)



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-5a
Great America Light Rail Station Platform Configuration



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-5b
Great America Light Rail Station Platform Queuing Area

Fare Collection

With the potential for high transit rider volumes and high service frequencies, special provisions for fare collection may be necessary. It should be noted that at this time, VTA has developed a complete fare collection plan for Stadium events, including setting up kiosks at platforms and stationing ticket checkers at station entry points.

The most efficient fare collection approach is for all, or nearly all riders to purchase day passes when they board on their way to the event. These passes are sold at all light rail stations. However, demand to use the ticket vending machines, and the likelihood that many riders will not be familiar with ticket machines, suggests that additional manual sale of day passes may be desirable. Rider demand will be closely monitored to identify station requiring additional manual ticket sales.

After the event, most riders would already have their day pass for their return trip. As needed, the manual sale of single tickets can also be provided. If demand is high enough, a special temporary ticket kiosk can be set up. Use of the ticket vending machines will be discouraged or prevented, due to the constrained platform capacity and boarding plans.

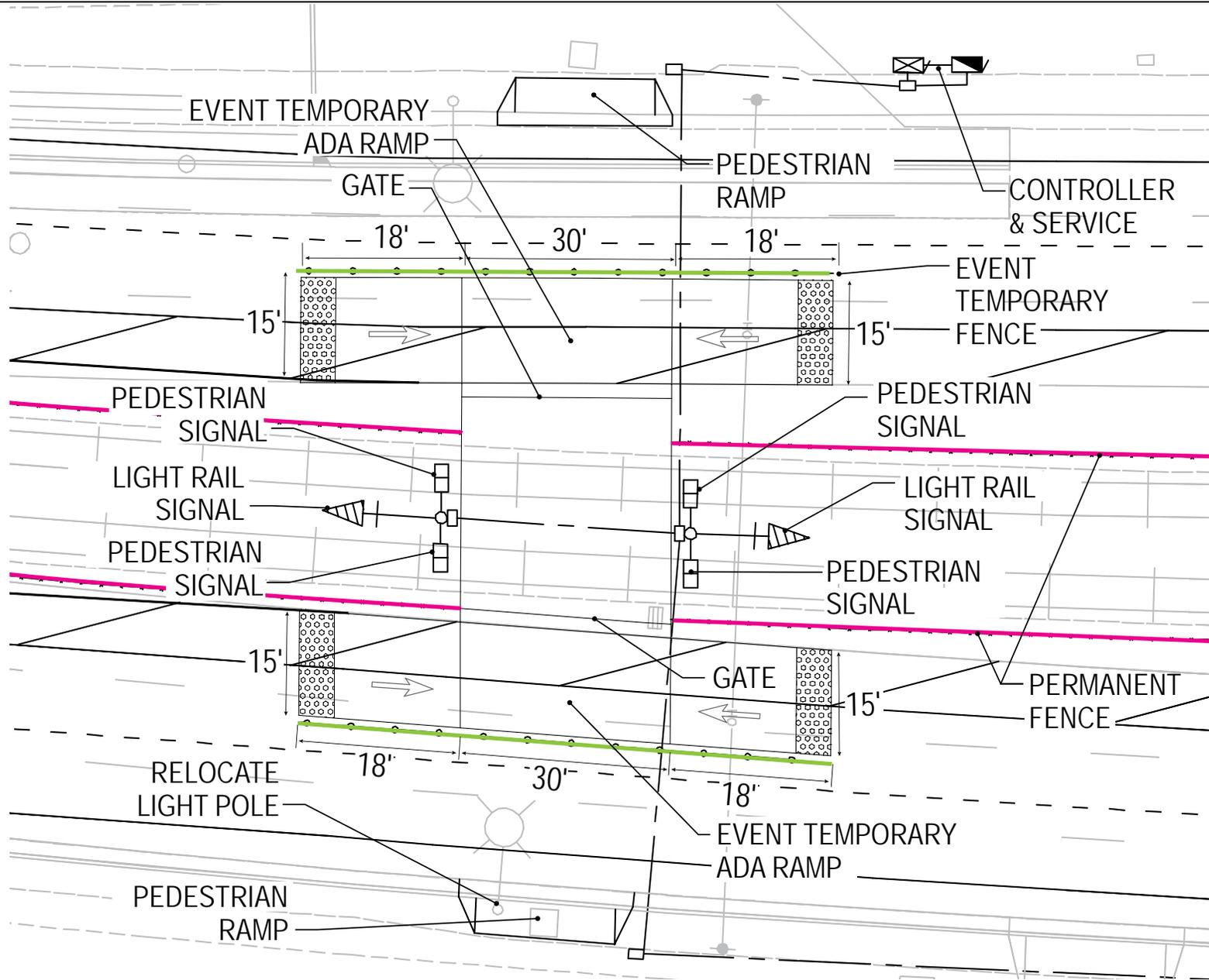
Alternatively, Stadium patrons using transit may choose to use a Clipper Card, which may be used on VTA light rail and bus, BART, Caltrain, and other bay area transit providers.

At-Grade Crossing

Given the need to provide on-street queuing areas on the south side of Tasman Drive east of Convention Center, there may otherwise not be sufficient pedestrian capacity to allow for safe, orderly and efficient egress westward from the Stadium without an at-grade crossing on Tasman Drive east of the Great America VTA Station. Such a crossing allows pedestrians to move to the north side of Tasman, bypassing the main parking lot, vehicle congestion and the VTA LRT queuing areas.

The design of the crossing includes standard track panels and pedestrian and LRT signalization. Fences, with locked gates, are installed on both sides of the trackway, adjacent to the Tasman traffic lanes. An illustration of the at-grade crossing of Tasman Drive is provided in **Figure 5.2-6**.

Additionally, a number of physical modifications to the Station area are being implemented, and several game day operational strategies will be employed. First, a new event-only platform is under construction on the south side of the existing tracks with two new event-only access points from Tasman Drive. This new event-only platform and event-only access points will allow for the existing platform to be dedicated to westbound movements with the new platform being solely dedicated to eastbound movements. Unique eastbound and westbound event-only queuing areas will be provided on the closed portion of Tasman Drive east of Convention Center Circle and south of the Station. The crossing will operate for events with 20,000 attendees or higher (and potentially for events with lower attendance levels, at the discretion of the Santa Clara Chief of Police and the City of Santa Clara Traffic Engineer), when Tasman Drive is closed to traffic in the crossing location.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.2-6
At-Grade Crossing of Tasman Drive**

Future Light Rail Plans

VTA is advancing capital improvements identified in its 2010 *Light Rail System Analysis*, to enhance the capacity, market-responsiveness, and efficiency of Light Rail Transit (LRT) operations. The improvements reconfigure LRT to respond to increasing population and employment and the extension of BART service to San José. The VTA Board of Directors adopted the LRT Improvement Plan in 2010, with the foresight and intent that, when the first segment of the Silicon Valley Berryessa Extension (SVBX) is completed in 2017; local transit services will enable connectivity from throughout VTA's service area.

By anticipating growth in the markets VTA serves, and by increasing VTA's regional connectivity, the new LRT network will attract more riders and generate greater return on investment than existing operations. VTA has defined the LRT Efficiency Program by the following capital and operating improvements:

- The **Southern Express** will expand the pilot Commuter Express Service to an all-day schedule on the Santa Teresa to Alum Rock line; establish new service from Almaden to Mountain View, including direct service from Almaden to Downtown San José, and turn back Winchester service from Campbell in Downtown San José.
- The **Northern Express** introduces a new service between Alum Rock and Mountain View, to increase ridership and efficiency, to effectively connect BART and the job centers in north San José, Santa Clara, Sunnyvale, and Mountain View, and to anticipate employment growth throughout the Tasman and North First Street corridors. This service will be introduced in 2017, commensurate with the opening of the VTA/BART Silicon Valley Rapid Transit - Berryessa Extension.
- The **First Street Speed Improvement** project has potential to increase maximum LRT speeds on North First Street from 35 to 45 mph, via a combination of signal prioritization, fencing and safety enhancements along the LRT right-of-way. Speed improvements on the Downtown Transit Mall are also planned.
- The **Transit Signal Priority** project will implement a system-wide real-time, reliable transit signal prioritization and light rail vehicle detection system to increase LRT operating speeds. This project is funded by a Transit Performance Initiative grant from the Metropolitan Transportation Commission.

Current planning work has demonstrated that, by advancing several capital improvements planned for 2017, VTA can gain system-wide operating and rider benefits well before BART service begins in 2017. This approach will also accustom VTA riders to reconfigured LRT services anticipating the initiation of BART service to Berryessa. Under this strategy, following completion of the capital improvements described below, three light rail services will operate with the following frequencies:

- **Almaden - Mountain View:** 15 minute headways with 30 minute midday headways from Tasman Station to Mountain View, 30 minute headways on weekends;
- **Santa Teresa - Alum Rock:** 15 minute headways all day; operate Express between Ohlone-Chynoweth and Downtown San José all day on weekdays, except after 8pm;
- **Winchester - Downtown San José:** 15-minute headways during peak, 30 minute headways midday and weekends.

However, LRT operations under this new reconfiguration can be delivered safely and efficiently only after three essential capital improvements are made. Without these capital improvements, VTA will have to engage in



exceptional operating practices to deliver both regular and stadium event services. Even if operated with extreme precision, without capital improvements, the system will be vulnerable to cascading delays, uncertain train arrivals, long passenger wait times, and overcrowded trains. This vulnerability stems from the inherent constraints of single-track segments and the lack of a turnaround facility for the Winchester line in Downtown San José.

The frequency of service planned for 2017 to and from the Downtown Mountain View LRT station requires double-tracking the single-track segment between Mountain View and Whisman Stations, and adding storage capacity and a double crossover west of Old Ironsides LRT Station in the vicinity of the 49ers Stadium.

VTA has developed concepts for Phase I Double Track of the Mountain View single-track segment, light rail vehicle storage in the vicinity of the 49ers Stadium in Santa Clara, and a Winchester Turnaround in the vicinity of Downtown San José. Besides securing acceptance of preferred designs by the host cities, by adjacent transit properties, and by the California Public Utilities Commission, VTA must additionally secure the appropriate environmental clearances and find expeditious means of funding and contracting final design, material procurement, right-of-way acquisition, and construction of these projects, to have them ready for operation by August of 2014.

5.2.2 VTA Local Bus

In addition to light rail service, VTA provides regular bus service, and will provide supplemental bus service, to the area adjacent to the Stadium. These services will carry patrons living within the VTA service area to the Stadium area. The details associated with transit access with regard to VTA bus service are as follows:

Ridership

As with light rail, bus ridership levels are expected to increase substantially on event days, compared to normal Sunday service. It should be noted that as part of the collection of annual data described in section 2.1.4, it is expected that VTA will collect boarding and alighting data on its buses for the purposes of annual TMOP evaluation. Data is to be collected before the start of the NFL season (once on a Sunday and once on a Monday), and on all NFL game days at the Stadium.

Routes

VTA currently operates three regular routes in the Stadium area that run seven days a week. These lines share a common route terminus near Tasman Drive and Old Ironsides, adjacent to the Old Ironsides light rail station. The three regular lines are:

- Line 55 – This line serves Sunnyvale and Cupertino. The route accesses the Stadium area along Tasman from the west.
- Line 57 – This line serves areas in Santa Clara to the south, traveling along Kiely and Saratoga. Access to the Stadium area is along Great America Parkway from the south.
- Line 60 – This line serves areas in Santa Clara to the south, traveling primarily along Winchester Boulevard. Access to the Stadium area is along Great America Parkway from the south.

On event days, these regular routes will be adjusted to provide more efficient service to the Stadium area and to respond to the Stadium Transportation Management Plan. The stop for the route terminus will remain at the current Old Ironsides terminus, and the main boarding and deboarding stops will be located within convenient walking

distance of the Stadium. Since none of the regular routes travel east along Tasman (which will be closed), the impact on regular and event-day riders will not be significant. Sunday service on these regular lines operate at frequencies of 45 to 60 minutes (for service related to weekday evening events, please see Section 6.3 of this document). Demand on these lines will be monitored and additional service added, if demand warrants. An illustration of the route map in the Stadium vicinity for these buses is provided in **Figure 5.2-7**.

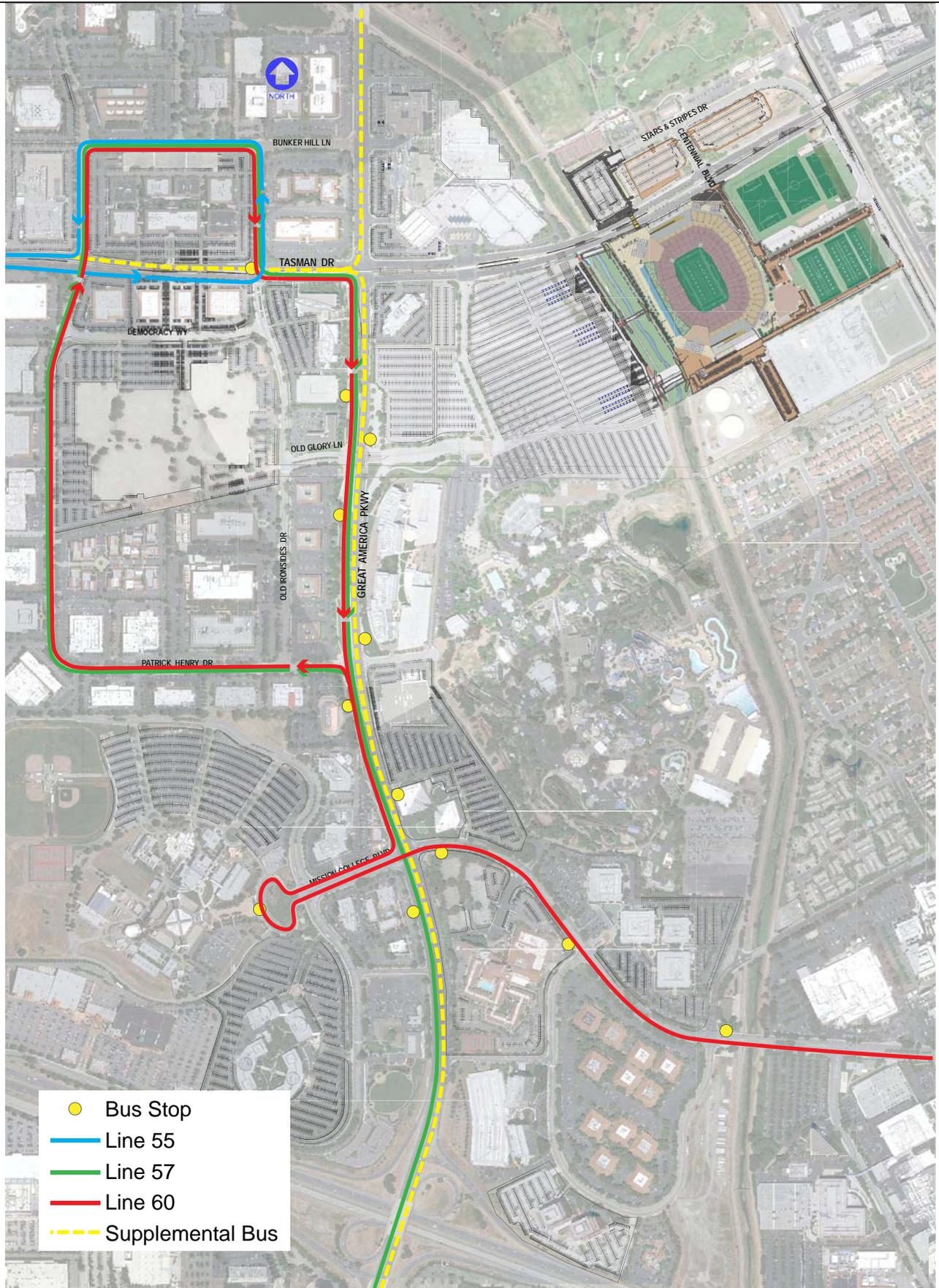
VTA also provides express service to the Great America area. These lines operate in peak hours on weekdays only and will not operate for weekend events. These lines include:

- Express Route 140 – This line connects to the Fremont BART station, via Milpitas. The route accesses the Stadium area along Tasman from the east.
- Express Route 121 – This line serves Morgan Hill and Gilroy, traveling along US-101. The route accesses the Stadium area via Great America Parkway from the south.
- Route 321 – This line connects the Great America area to North First Street and North San Jose.
- Route 328 – This line provides commute service along Lawrence Expressway.
- Route 330 – This line provides commute service along San Tomas Expressway.

VTA will also operate new event-day only bus services, connecting other high-volume locations in the south bay directly with the Stadium. These supplemental routes will include:

- Route 251 – Connecting the Fremont BART Station with the Stadium;
- Route 252 – Connecting the Vallco Shopping Mall area in Cupertino with the Stadium;
- Route 253 – Connecting Gilroy and Morgan Hill with the Stadium;
- Route 254 – Connecting the Eastridge Shopping Center area in San Jose with the Stadium; and
- Route 255 – Connecting the Almaden area in San Jose with the Stadium.

Each supplemental route will use multiple buses, based on demand. Supplemental Route 251 (Fremont BART) will drop off passengers along southbound Great America Parkway (between Tasman Drive and Bunker Hill Lane) and depart by turning west on Tasman Drive. Midway through an event, all Supplemental Route 251 buses will stage along northbound Great America Parkway (between Tasman Drive and Bunker Hill Lane), and exit north. Route 252 (Vallco) will drop off passengers on northbound Great America Parkway (between Tasman Drive and Old Glory Lane), and board passengers on southbound Great America Parkway (between Tasman Drive and Old Glory Lane). The remaining three Supplemental Routes will drop off passengers east of the Stadium along Tasman Drive (between Calle Del Sol and Lick Mill Boulevard), and depart via Calle Del Sol, Calle De Luna, and Lafayette Street. Midway through an event, one bus per Supplemental Route will stage along Tasman Drive between Calle Del Sol and Lick Mill Boulevard, and the remaining extra buses will wait along Tasman Drive east of Lick Mill Boulevard. When a bus is fully loaded, it will exit the area via Calle Del Sol, Calle De Luna, and Lafayette Street. Once a bus has departed the Tasman Drive loading area (i.e., between Calle Del Sol and Lick Mill Boulevard), a bus waiting along Tasman Drive east of Lick Mill Boulevard will be called to enter the loading area, and the process will repeat until all passengers have been served. Buses will continue to operate until one hour after the end of the event.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.2-7
VTA Bus Service

Stadium Area Ingress and Egress

Regular bus routes will operate along their regular routes to serve the Stadium on event days. Regular buses will arrive via Tasman (from the west) or Great America Parkway. Minor temporary routing changes may be needed. Buses will receive special access to those areas not open to general traffic.

VTA's Supplemental bus service will operate primarily along Great America Parkway, Tasman Drive, and Lafayette Street. Specifically, Supplemental Route 251 (Fremont BART) approach its loading / unloading area via eastbound Tasman Drive, and turning left on Great America Parkway. This Supplemental Route will then exit north along Great America Parkway towards SR 237. The remaining four Supplemental Routes will approach their loading / unloading areas via westbound Tasman Drive. These Supplemental Routes will then exit the area via Calle Del Sol, Calle De Luna, and Lafayette Street.

Pick Up and Drop Off

Regular bus service will utilize the current pick up and drop off stops near the current route terminus at Old Ironsides Drive and Tasman Drive. VTA's Supplemental bus service will use the designated passenger loading/queuing areas along Great America Parkway (between Tasman Drive and Bunker Hill Lane) and along Tasman Drive (between Calle Del Sol and Lick Mill Boulevard).

5.2.3 Other Public Bus

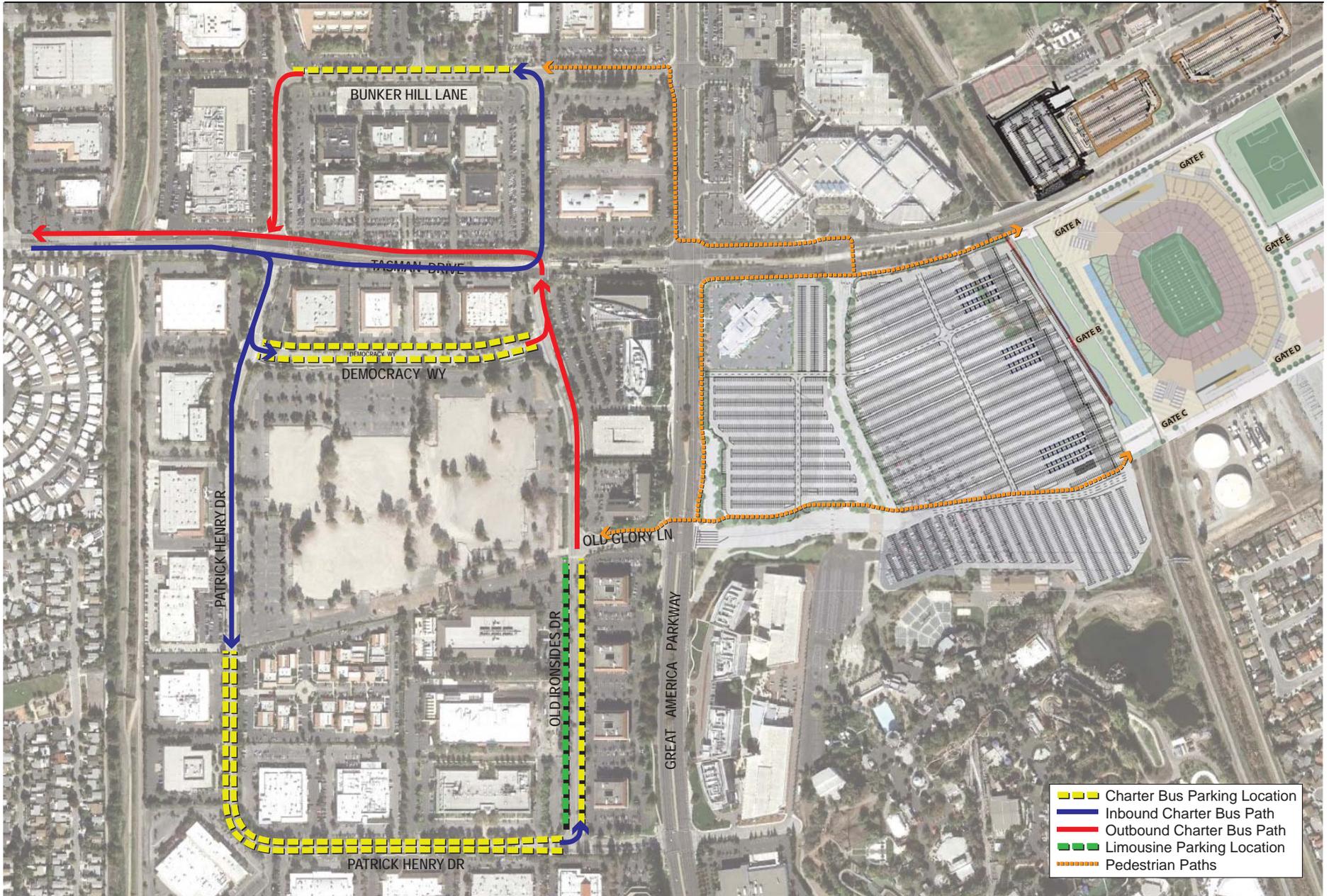
Until recently, events at Candlestick Park were served by several transit agencies, including San Francisco Muni, SamTrans and VTA. However, as a result of changes in regulations, the service previously operated by SamTrans and VTA is now provided by charter bus operators.

Currently, at Candlestick Park, San Francisco Muni operates regular service from several destinations in San Francisco directly to the Stadium. Many of the Muni patrons transfer from BART or other transit lines. It is not expected that Muni will operate to the Stadium in Santa Clara. Rather, current riders will use Caltrain or BART and transfer to bus or light rail near the Stadium or they can use Charter Bus services.

Other public bus routes serving Candlestick are operated by Golden Gate Transit (from Marin County) and Tri-Delta Transit (from the East Bay). These public transit agencies may continue to serve Levi's® Stadium with direct express service. Should these choose to provide service to the Stadium, their buses will be included as part of the Charter Bus operations described in Section 5.2.4 below.

5.2.4 Charter Bus

Private charter buses will provide service for approximately 5,000 Stadium patrons, but that number could be greater if it is determined that some public bus riders will shift to charters (e.g. SamTrans). Charter bus staging areas are shown in **Figure 5.3-8**. Charter buses will be staged on Democracy Way with space for approximately 41 buses, Bunker Hill Lane with space for approximately 16 buses, and overflow along Old Ironsides Drive (between Old Glory Way and Patrick Henry Drive) and Patrick Henry Drive (between Old Ironsides Drive and Democracy Way) with enough space for approximately 97 buses to park. All charter buses will enter and exit the staging area via Tasman Drive from the west. Once parked, the charter buses will stay in place throughout the duration of a game, and only depart once all passengers have returned to the bus in which they arrived. Based on historical data from Candlestick Park, over 90 percent of charter buses will arrive within two hours of the start of a game, and all charter buses will depart within two hours of the completion of a game.



5.2-8) Charter Bus Staging Area.sx

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 5.2-8

Charter Bus Staging Area on Event Day

As shown in **Figure 5.2-8**, charter bus patrons will access the staging area from Old Glory Lane, Old Ironsides Drive, and Tasman Drive. Traffic officers will control the pedestrian crossings at the Great America Parkway / Old Glory Lane and Old Ironsides Drive / Tasman Drive intersections.

It should be noted that limousine staging will occur in the vicinity of the charter buses; along the west side of Old Ironsides Drive (between Old Glory Way and Patrick Henry Drive). Limousines will enter and exit the staging area via Tasman Drive from the west. Once parked, the limousines will stay in place throughout the duration of a game, and only depart once passengers have returned. The limousine staging area is shown in **Figure 5.3-8**.

5.2.5 Caltrain

Caltrain provides rail service to the Stadium area from locations in San Francisco, San Mateo and Santa Clara counties. Service for approximately 2,000 to 3,000 Stadium attendees for Sunday afternoon events will be provided via regular Caltrain service, with a transfer to VTA light rail at the Mountain View station. Caltrain will supplement its normal service with two special trains. The details of Caltrain service on event days are as follows:

Operations Plan

Caltrain currently operates hourly service on weekends (for service related to weekday evening events, please see Section 6.0 of this document). The primary event day demand will be southbound trains for arrivals and northbound departure trains. Potential southbound trains at Mountain View for patrons arrive at 10:29 AM, 11:29 AM, and 12:29 PM. Additionally, a limited stop, Baby Bullet train arrives at 12:47 PM. Post event departures northbound at Mountain View are at 4:19 PM, 5:19 PM, and at 6:19 PM with a Baby Bullet train. Since travel time via light rail to the Great America station is about 25 minutes, arrivals before 12:00 PM and departures after 5:00 PM are preferred. The possibility of shifting the Baby Bullet trains for earlier arrival will be explored.

Currently, for sporting events at SAP Center in San Jose, and at AT&T Park in San Francisco, Caltrain relies primarily on regular service, but will operate two additional trains for Stadium events, and will hold trains for a short time (at the Lawrence Station) to provide departure flexibility. These trains are easier for Caltrain to manage since the sports facilities are located at terminal stations. However, it is expected that there will be a similar operating plan for Levi's® Stadium events.

Number of Trains

Two regular trains (Mountain View arrivals are currently scheduled at 10:29 AM and 11:29 AM and departures at 5:19 PM and 6:19 PM) provide the best service for events. Two additional trains will be provided. Each train can carry up to 1,000 patrons to and from the event.

It should be noted that as part of the collection of annual data described in section 2.1.4, Caltrain will collect boarding and alighting data on its trains for the purposes of annual TMOP evaluation. Data is to be collected before the start of the NFL season (once on a Sunday and once on a Monday), and on all NFL game days at the Stadium.

Train Size

Caltrain currently operates the maximum train size (five cars) that they provide at this time. Therefore, there is no current ability to expand train size. However, future conversion of Caltrain to an electrified operation may provide opportunities for increased capacity as well as increased service frequency.

Schedule



The schedule of Caltrain service to various event types at the facility will be described herein, both regular service, augmented service and/or special service.

Access to Stadium (via VTA Light Rail)

Currently, Caltrain does not provide direct access to the Stadium (Altamont Corridor Express (ACE) and Capitol Corridor do have access rights on the tracks adjacent to the Stadium). However, on event days, Caltrain will coordinate with VTA light rail to provide direct service to the Stadium via a transfer at the Mountain View Station. In addition, VTA Bus Line 60 operates from the Santa Clara Caltrain Station to the Stadium, and VTA Bus Line 55 operates from the Sunnyvale Caltrain Station to the Stadium. Should there be a need for additional capacity (if VTA light rail cannot provide enough capacity for example), supplemental bus service will be provided at the Mountain View Station. The details of such an operation is provided in Section 5.8.

Loading/Unloading/Schedule

As described above, Caltrain will deliver patrons to the Mountain View station, where transfers to the VTA light rail service will occur. As demand warrants, VTA can stage light rail trains to serve the demand. The location of the Caltrain / VTA light rail transfer point at the Mountain View station is illustrated in **Figure 5.2-1**.

Train Storage

Storage for additional trains needed to meet demand will occur at the San Francisco and San Jose terminals. In particular, after events, the backup trains will be dispatched from San Jose as needed to prevent overcrowding and to ensure available capacity for regular Caltrain riders.

5.2.6 Capitol Corridor

Capitol Corridor will provide rail service to Sunday afternoon Stadium events for approximately 500 Stadium attendees via the current Amtrak route to Oakland and Sacramento. The details of potential Capitol Corridor service on event days are as follows:

Operations Plan

Capitol Corridor may consider adjusting the schedule of its regular service on event days to accommodate greater demand and better serve event times. Currently, the Great America ACE/Capitol station is served by westbound (from San Jose) arrivals on Sunday at 8:26 AM, 10:26 AM, and 1:26 PM and eastbound departures at 4:37 PM and 6:02 PM. There is also an eastbound arrival from San Jose at 1:02 PM and a westbound departure at 5:01 PM that will serve San Jose patrons. For service related to weekday evening events, please see Section 6.0 of this document.

Number of Trains

As noted above, the current schedule provides several arrivals and departures at the Stadium. However, the primary arrival train will be the 10:26 AM and most departures will be on the 4:37 PM train.

It should be noted that as part of the collection of annual data described in section 2.1.4, it is expected that Capitol Corridor will collect boarding and alighting data on its trains for the purposes of annual TMOP evaluation. Data is to

be collected before the start of the NFL season (once on a Sunday and once on a Monday), and on all NFL game days at the Stadium.

Train Size

Capitol Corridor trains have five cars, but the trains can operate with up to eight cars, if needed due to demand.

Schedule

As discussed above, the primary arrival train from Oakland and Sacramento will be at 10:26 AM and the departure train at 4:37 PM, with a back-up train at 6:02 PM. If events run long, the 4:37 PM departure can be held for a short period of time to serve patrons.

Loading/Unloading/Schedule

For Capitol Corridor service on event days, loading and unloading will occur at the Great America Station adjacent to the Stadium. After the event, based on the current Capitol Corridor schedule, the regular 4:37 PM will first depart followed by the special ACE service. As such, queuing areas at the Great America Station will be set up such that Capitol Corridor riders are able to board quickly. The regular Capitol Corridor westbound train arrives at 5:02 PM, although that train might need to be delayed to allow for the special ACE train departure.

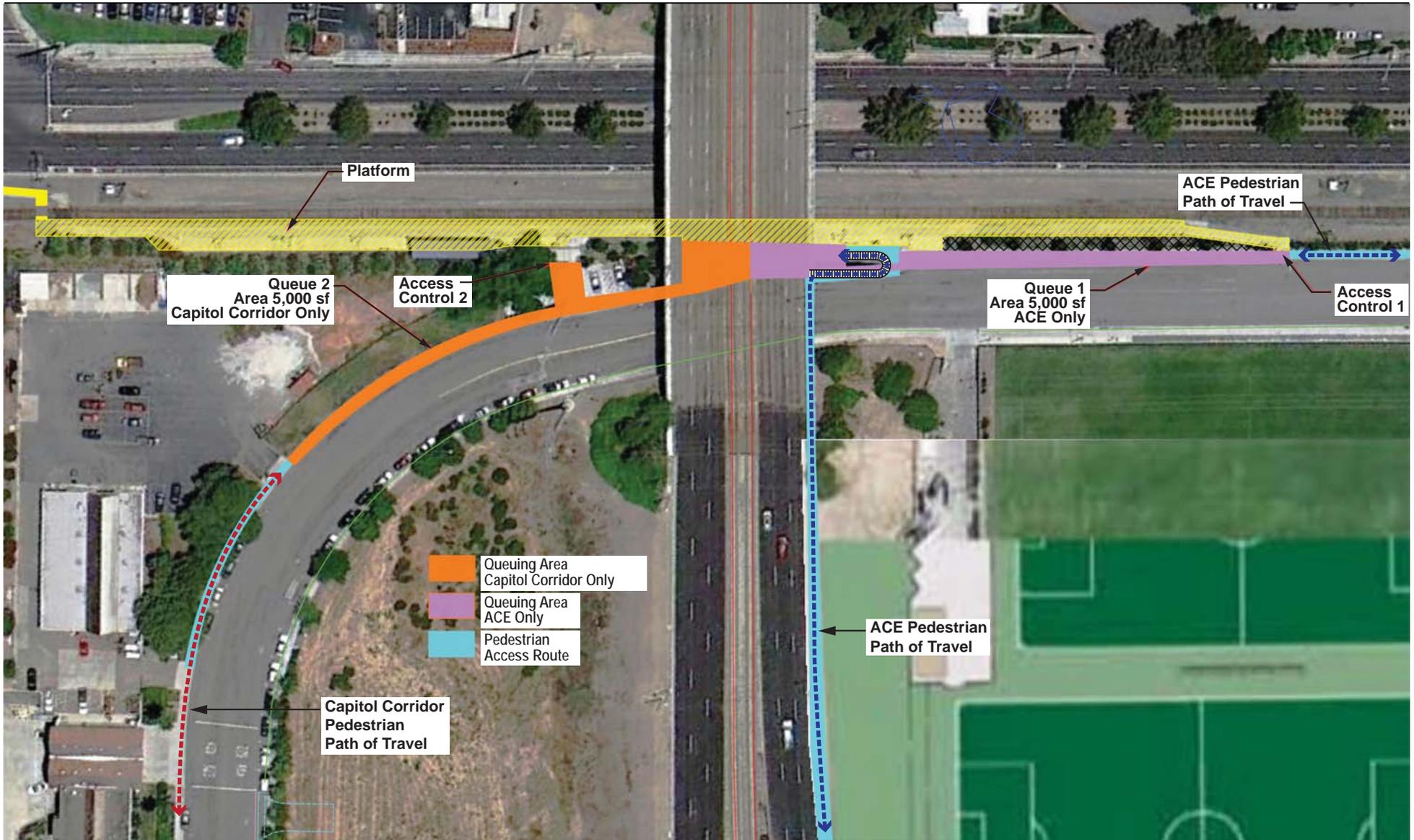
After the event, patrons will walk the short distance to the station. Special queuing areas will be separated by temporary fencing, along with barricades, taping, and signage (identifying where to stand) placed to ensure orderly boarding of trains in both directions. Stadium Management staff will be responsible for implementing the Capitol Corridor queuing area. A layout of this loading area is provided in **Figure 5.2-9**.

Train Storage

Since regular service will be used, there will not be a need for train storage. However, if needed, storage is currently available at the San Jose station.

Passenger Parking

ACE and Capitol Corridor riders who leave a vehicle overnight use the existing parking lot adjacent to the Capitol Corridor Great America Station. As a result, that lot will be substantially occupied during event periods.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.2-9
Great America Commuter Rail Station Platform Configuration**

5.2.7 Altamont Corridor Express

ACE will provide special rail service to Sunday afternoon Stadium events for approximately 700 to 900 Stadium attendees from the Central Valley. The details of ACE service on event days are as follows:

Operations Plan

ACE does not currently operate regular weekend service, but will run a special train to events. For service related to weekday evening events, please see Section 6.0 of this document.

Number of Trains

ACE will operate one special round trip train to Stadium events. As part of the collection of annual data described in section 2.1.4, it is expected that ACE will collect boarding and alighting data on its trains for the purposes of annual TMOP evaluation. Data is to be collected on all NFL game days at the Stadium.

Train Size

ACE currently operates six and seven car trains during weekdays. For special event day service, the train size will be up to seven cars.

Schedule

Special event day train service will be scheduled to best serve the event. Arrivals will occur about one hour and thirty minutes before the start of the event and departures will be timed to leave at a set time (30 to 45 minutes) after the end of the event. Specifically for Sunday afternoon football games, ACE will depart at 4:30 PM for games starting at 1:05 PM.

Loading/Unloading/Schedule

For special ACE service on event days, loading and unloading will occur at the Great America Station adjacent to the Stadium. After the event, based on the current Capitol Corridor schedule, the regular 4:37 will first depart followed by the special ACE service. As such, queuing areas at the Great America Station will be set up such that Capitol Corridor riders are able to board quickly. The regular Capitol Corridor westbound train arrives at 5:02, although that train might need to be delayed to allow for the special ACE train departure.

After the event, patrons will walk the short distance to the station. Special queuing areas will be separated by temporary fencing, along with barricades, taping, and signage (identifying where to stand) placed to ensure orderly boarding of trains in both directions. Stadium Management staff will be responsible for implementing the ACE queuing area. A layout of this loading area is provided in **Figure 5.2-8**.

Train Storage

A special ACE train will be stored during the event in San Jose at the current ACE storage track location.

Passenger Parking

ACE and Capitol Corridor riders who leave a vehicle overnight use the existing parking lot adjacent to the Capitol Corridor Great America Station. As a result, that lot will be substantially occupied during event periods.



5.3 Pedestrian Access

Pedestrians arriving at and departing from the Stadium will be encouraged to use specific routes and designated pedestrian walkways. This goal will be achieved through a combination of permanent signage, temporary signs, changeable message signs, media releases, and mass marketing programs designed to inform the public and Stadium patrons about these travel routes. The use of various temporary traffic control devices, in conjunction with the deployment of gameday traffic control personnel, will give priority to the established travel routes, thereby minimizing the potential for conflict.

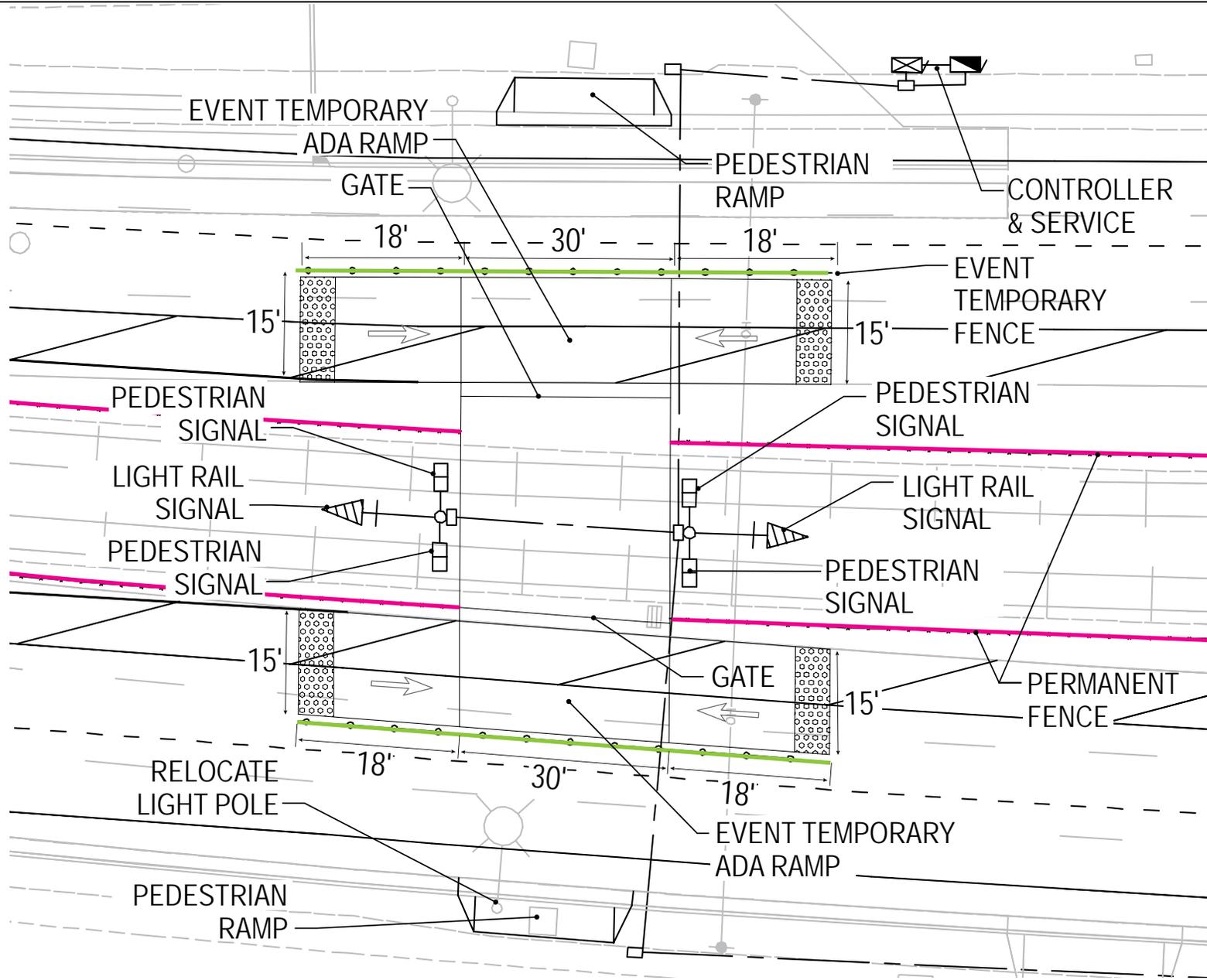
5.3.1 Roadway Closures / Pedestrian Only Areas

As noted in previous sections, Tasman Drive will be closed to vehicles on event days to provide space for transit loading, access to a number of roadways will be restricted to eliminate intrusions into residential neighborhoods and provide safe and adequate pedestrian loading and crossing areas. These closures and the preferred pedestrian walkways are described in this section of the TMOP.

Tasman Drive between the Convention Center Driveway and Centennial Boulevard will be closed to vehicular traffic during Stadium Events with anticipated attendance greater than 20,000 patrons. This area will prohibit vehicular traffic in order to allow for easy, direct access to and from the Stadium for light rail users and other pedestrians. During events in which Tasman is closed, extended queuing areas will be on-street, in the closed section of eastbound Tasman Drive adjacent to the Great America VTA Station. Stadium Management staff will be responsible for implementing the VTA Light Rail queuing areas. New fencing will be in place on both sides of the Tasman median along the extents of this segment to prohibit pedestrians from crossing at prohibited locations. Emergency vehicles will be able to use the closed section of westbound Tasman Drive. The Tasman Drive vehicular traffic closure will be in place from 3:00 AM to 6:00 PM on a Sunday game day, assuming a 1:00 PM afternoon start time.

A new controlled event day at-grade Light Rail train track pedestrian crossing on Tasman Drive, east of the Great America VTA Station, will be in place and operational prior to Stadium opening. This crossing will provide access to the Stadium from the parking areas on the north side of Tasman Drive. The design of the crossing includes standard track panels and control signalization. Fences, with locked gates at the crossing location will be installed on both sides of the trackway. The crossing will operate only for large Stadium events (i.e., events with more than 20,000 attendees), when Tasman is closed to traffic in the crossing location. The Tasman Drive at-grade crossing is shown in **Figure 5.3-1**.

Pedestrian paths of travel to several parking facilities and transit loading areas will not require pedestrians to cross vehicular traffic. Pedestrians traveling to parking facilities north of the Stadium area will walk through the designated "Transit and Pedestrian Area" located north of the Stadium on Tasman Drive, between Convention Circle and Centennial Boulevard.





5.3.2 Access to Transit

The TMOP seeks to make access to transit easy and efficient. Way-finding signage to each transit station will be installed to clearly direct patrons to transit facilities. Pedestrian access routes to transit, including VTA Light Rail, VTA Bus, and ACE / Capitol Corridor, and the locations of directional signage, are illustrated in **Figure 5.3-2**.

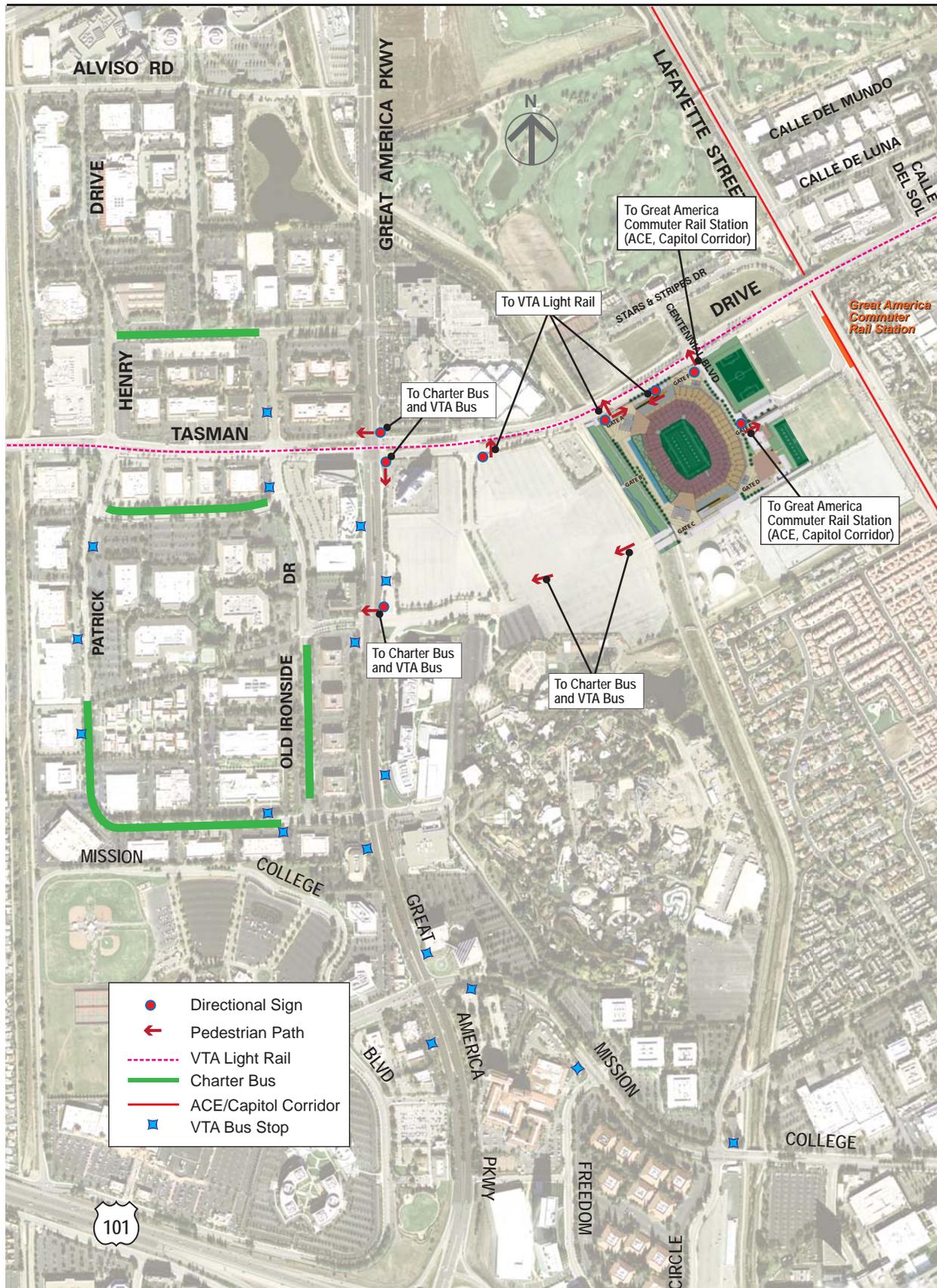
VTA Light Rail

The Great America VTA Light Rail Station and passenger queuing area is shown in **Figure 5.3-3**. As shown, the majority of light rail riders will enter and exit the light rail within the designated “Transit and Pedestrian Area” (i.e., the area along Tasman Drive between Convention Center Circle and Centennial Boulevard, closed to vehicle traffic) located north of the Stadium site on Tasman Drive. The Great America VTA Light Rail Station platform is loaded from the existing west end access for westbound only. Eastbound passengers will use a new “Event Only” platform south of the eastbound track. The platform for westbound trains will load from the west end of the platform, via the east crosswalk of the Convention Center Circle / Tasman Drive intersection. Westbound passenger queuing will occur on-street, within the closed section of eastbound Tasman Drive. The platform for eastbound trains will load from the center of the platform, and at the east side of the platform. Eastbound passenger queuing will also occur on-street, within the closed section of eastbound Tasman Drive. VTA light rail queuing areas will be separated by stanchions and signage (identifying where to stand) placed to ensure orderly boarding of trains in both directions. All stanchions and signage will be implemented by Stadium Management staff six hours prior to the start of an event, and removed after Stadium departure has concluded.

As many as 220 passengers per minute will be able to access the westbound platform, and 400 passengers per minute for the eastbound platform. Based on an expected 7.5-minute service frequency after the conclusion of an event, a maximum of 2,024 passengers are expected to queue for westbound trains, and 1,850 passengers for eastbound trains. Also, although most light rail patrons will utilize the closest station to Great America, the potential exists for riders to attempt to exit one stop east or west prior to reaching the Stadium. As alighting one station from the Stadium will result in increased delay for VTA trains, and will disrupt planned signalization approaching the Stadium, the Lick Mill and Old Ironsides VTA stations can be closed during events. Thus, additional signage will be added at the Lick Mill and Old Ironsides VTA stations and on VTA trains to notify riders of the temporary closure of these two stations.

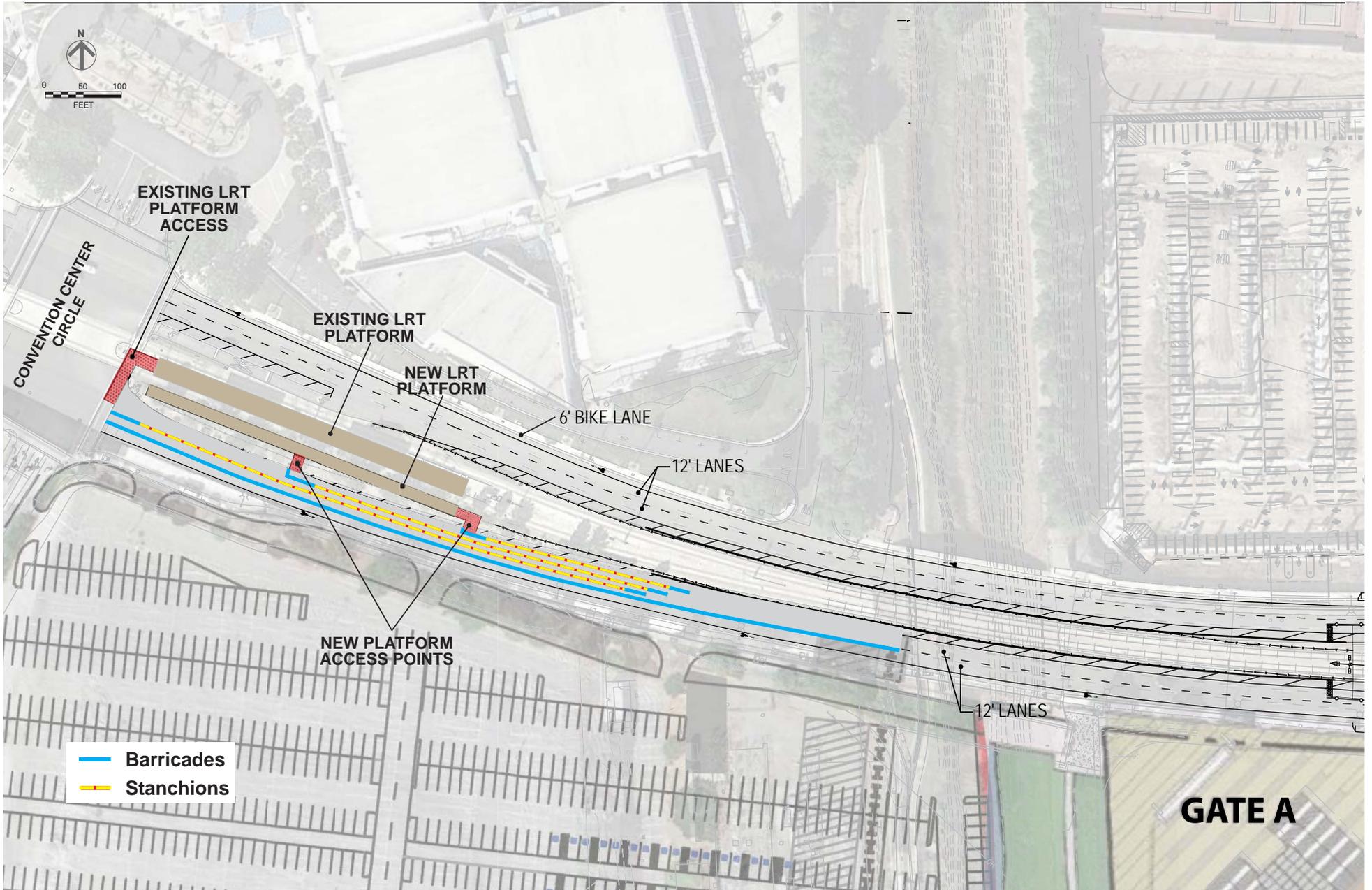
VTA Supplemental Bus Routes

VTA will operate new event-day only bus services, connecting other high-volume locations in the south bay directly with the Stadium. Supplemental Route 251 (Fremont BART) will unload passengers on southbound Great America Parkway, between Tasman Drive and Bunker Hill Lane. Pedestrians walking between the Supplemental Route 251 deboarding stop and the Stadium will use the sidewalk along the west side of Great America Parkway, the sidewalk along the north side of Tasman Drive, and the pedestrian-only zone along Tasman Drive. Route 252 (Vallco) will unload passengers on northbound Great America Pkwy. near Old Glory. Pedestrians walking to the Stadium from this stop would walk on the east side of Great America Pkwy. and the south side of Tasman into the pedestrian zone. The remaining three Supplemental Routes will load and unload passengers east of the Stadium along Tasman Drive, between Calle Del Sol and Lick Mill Boulevard. Pedestrians walking between this deboarding area and the Stadium will use the sidewalk along the south side of Tasman drive, and the pedestrian-only zone along Tasman Drive. The locations of VTA supplemental bus loading and unloading areas are illustrated in **Figure 5.3-4**.



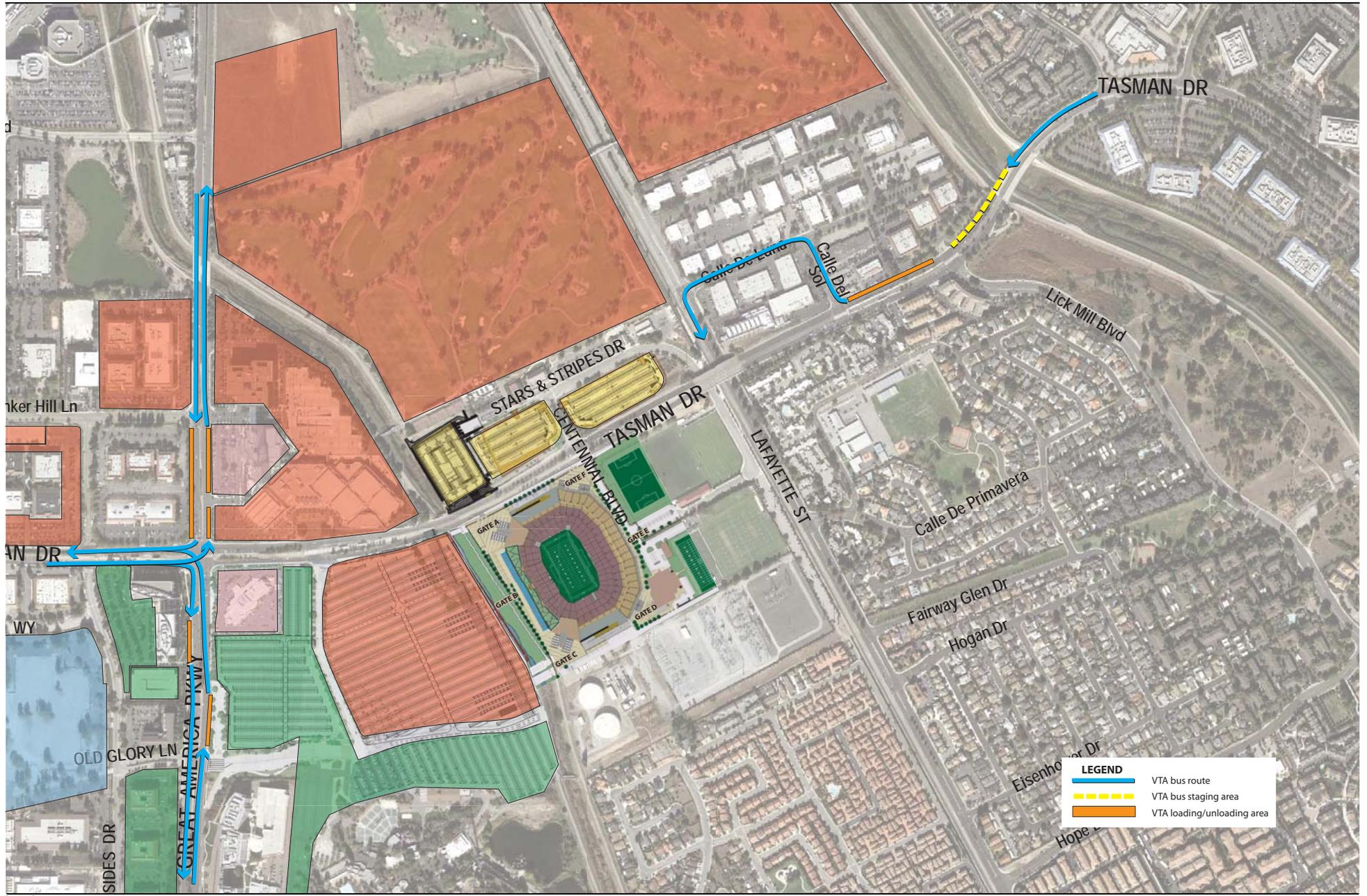
Directional Signage & Access to Transit rev2.ai San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.3-2
Directional Signage and Access to Transit



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.3-3
Great America Light Rail Station Platform Queuing Area



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.3-4

VTA Supplemental Bus Route Staging Area on Event Days

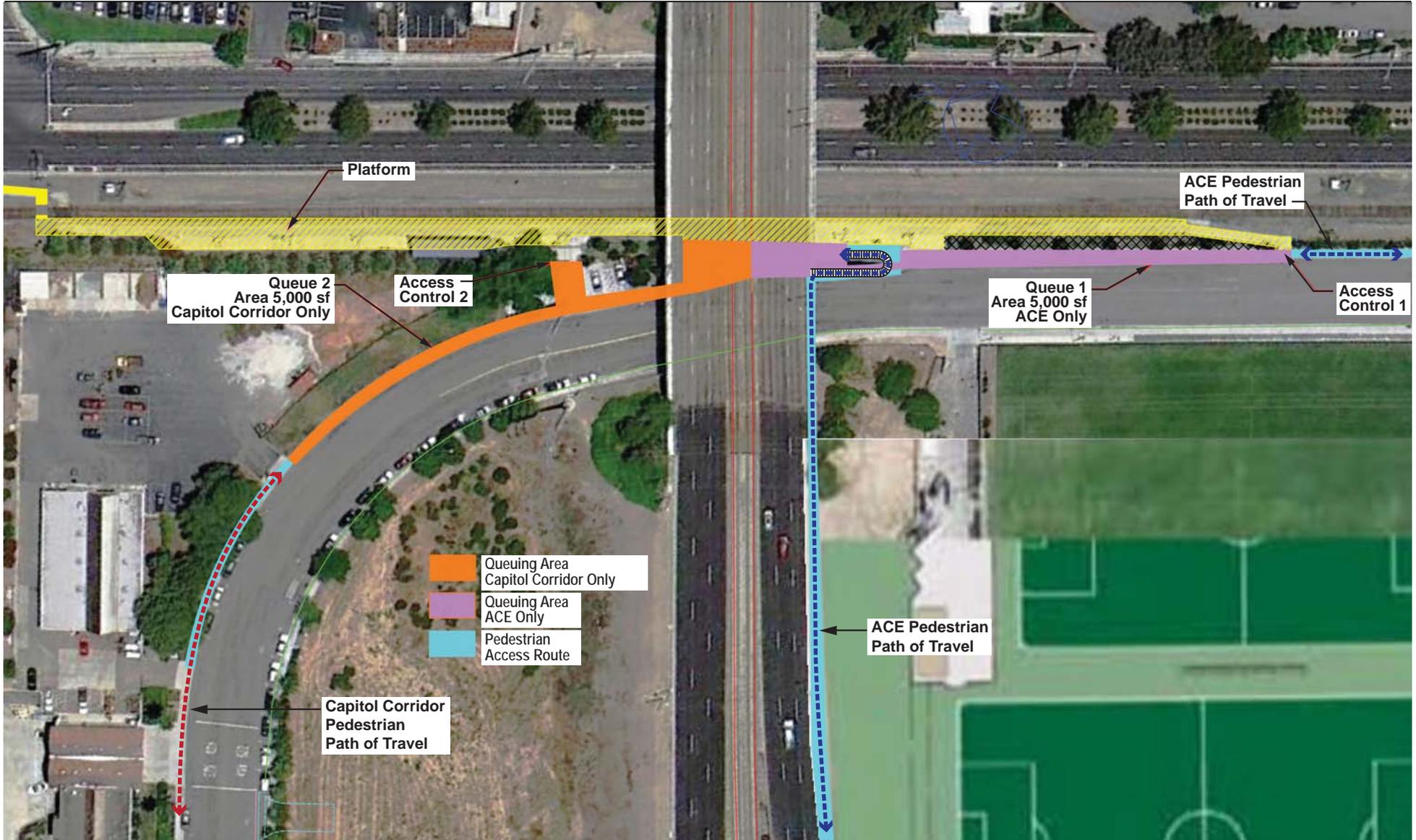


ACE / Capitol Corridor

The Great America Commuter Rail station and passenger queuing area is shown in **Figure 5.3-5**. As shown, ACE and Capitol Corridor patrons will access the station either by walking along Tasman Drive, along Stars & Stripes Drive, or by walking along the new pedestrian pathway along the north edge of the 49ers Training Facility east of the Stadium to the cul-de-sac on Stars & Stripes Drive. Capitol Corridor passenger queuing will occur along the east sidewalk on Stars and Stripes Drive, from the northern end of the platform to the center of the platform. ACE passenger queuing will also occur along the east sidewalk on Stars and Stripes Drive, from the center of the platform to the southern end of the platform. The two queuing areas will be separated by stanchions and signage (identifying where to stand) placed to ensure orderly boarding of trains in both directions. All stanchions and signage shall be implemented six hours prior to the start of an event, and will be removed after Stadium departure has concluded.

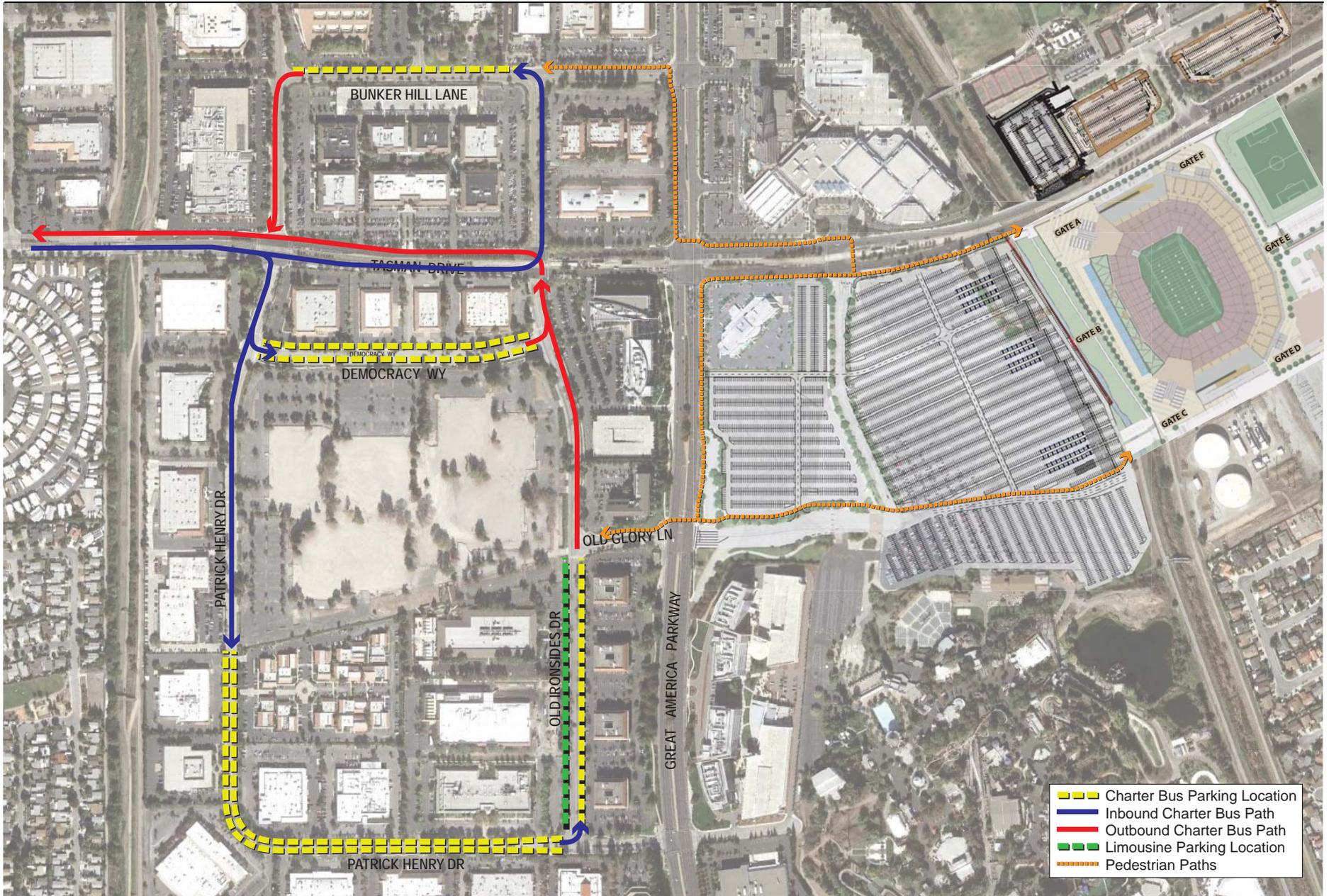
Charter Bus

Charter bus staging areas are shown in **Figure 5.3-6**. Charter buses will be staged on Democracy Way with space for approximately 41 buses, Bunker Hill Lane with space for approximately 16 buses, and overflow along Old Ironsides Drive (between Old Glory Way and Patrick Henry Drive) and Patrick Henry Drive (between Old Ironsides Drive and Democracy Way) with enough space for approximately 97 buses to park. All charter buses will enter and exit the staging area via Tasman Drive from the west. Once parked, the charter buses will stay in place throughout the duration of a game, and only depart once all passengers have returned to the bus they in which they arrived. Based on historical data from Candlestick Park, over 90 percent of charter buses will arrive within two hours of the start of a game, and all charter buses will depart within two hours of the completion of a game. As shown in **Figure 5.3-6**, charter bus patrons will access the staging area from Old Glory Lane, Old Ironsides Drive, and Tasman Drive. Traffic officers will control the pedestrian crossings at the Great America Parkway / Old Glory Lane and Old Ironsides Drive / Tasman Drive intersections.



San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

**Figure 5.3-5
Great America Commuter Rail Station Platform Configuration**



5.2-6) Charter Bus Staging Area.sx

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 5.3-6

Charter Bus Staging Area on Event Day

5.3.3 Access to Parking

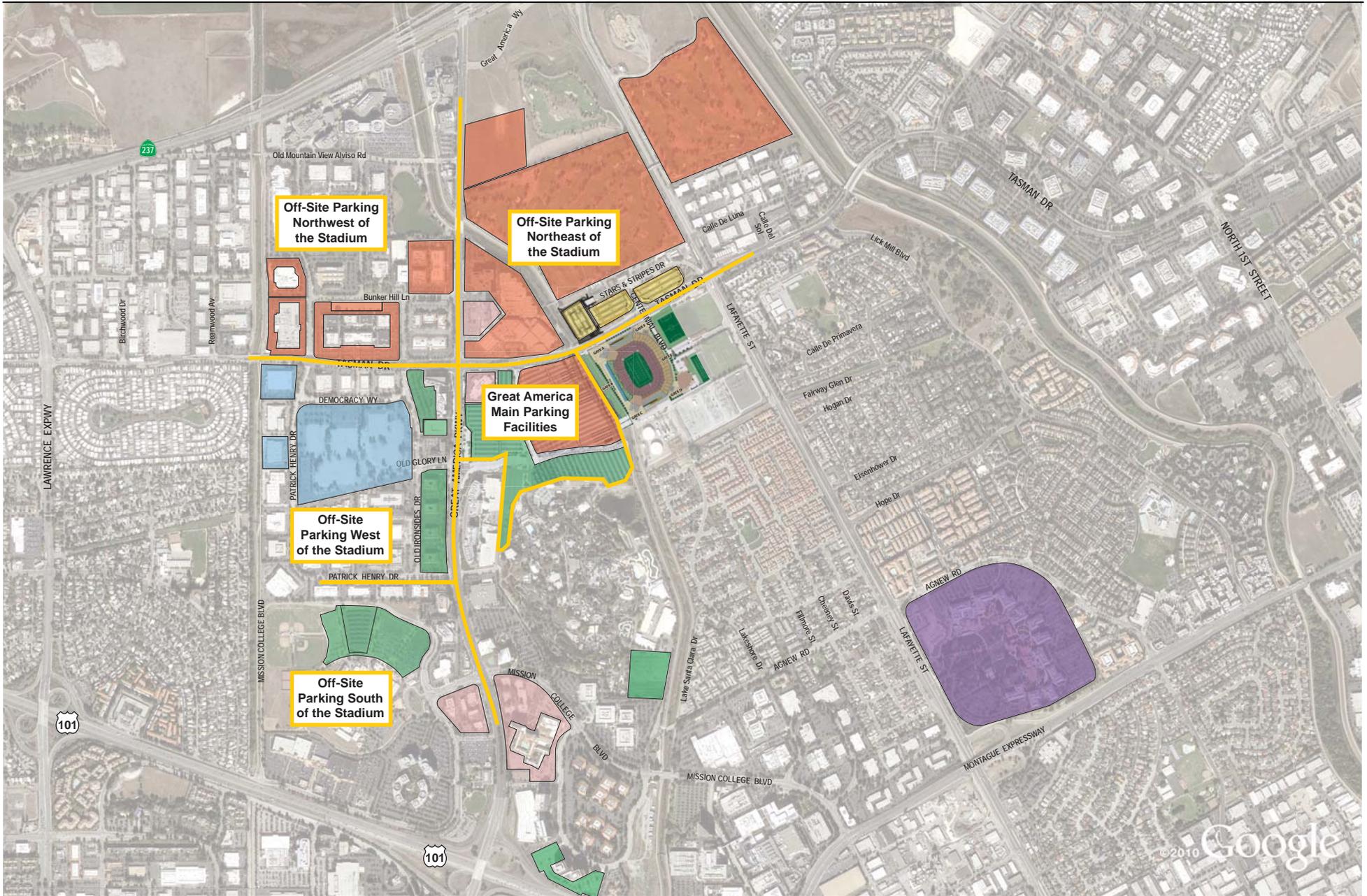
Access to parking facilities may require pedestrians to cross traffic one or more times, or in some cases, not at all. The conflict points will be located at signalized intersections with crosswalks. Pedestrians will be able to access the event day parking facilities in the following ways:

- *Great America Main Parking Facilities* – Pedestrians traveling to the Stadium from Red Lot 1 or Green Lot 1 will utilize one of the pedestrian bridges across San Tomas Aquino Creek.
- *Off-Site Parking Northeast of Stadium* – Pedestrians traveling northeast of the Stadium will travel along Tasman Drive and will not encounter conflicts with vehicular traffic.
- *Off-Site Parking Northwest of Stadium* – Pedestrians traveling to parking areas northwest of the Stadium will cross Great America Parkway at either Tasman Drive or Bunker Hill Lane.
- *Off-Site Parking West of Stadium* – Pedestrians traveling to parking areas west of the Stadium will cross Great America Parkway at Old Glory Lane.
- *Off-Site Parking South of Stadium* – Pedestrians traveling to parking areas south of the Stadium will cross Great America Parkway at Old Glory Lane, and walk along the west sidewalk of Great America Parkway.

Each of these general parking areas are identified in **Figure 5.3-7**. Detailed pedestrian paths to each parking facility is shown in **Figure 5.3-8**.

Crowded conditions are to be expected for each path during peak periods. To further facilitate pedestrian traffic, a new pedestrian crossing is provided on Tasman Drive and three additional pedestrian-only bridges have been constructed over San Tomas Aquino Creek south of Tasman Drive.

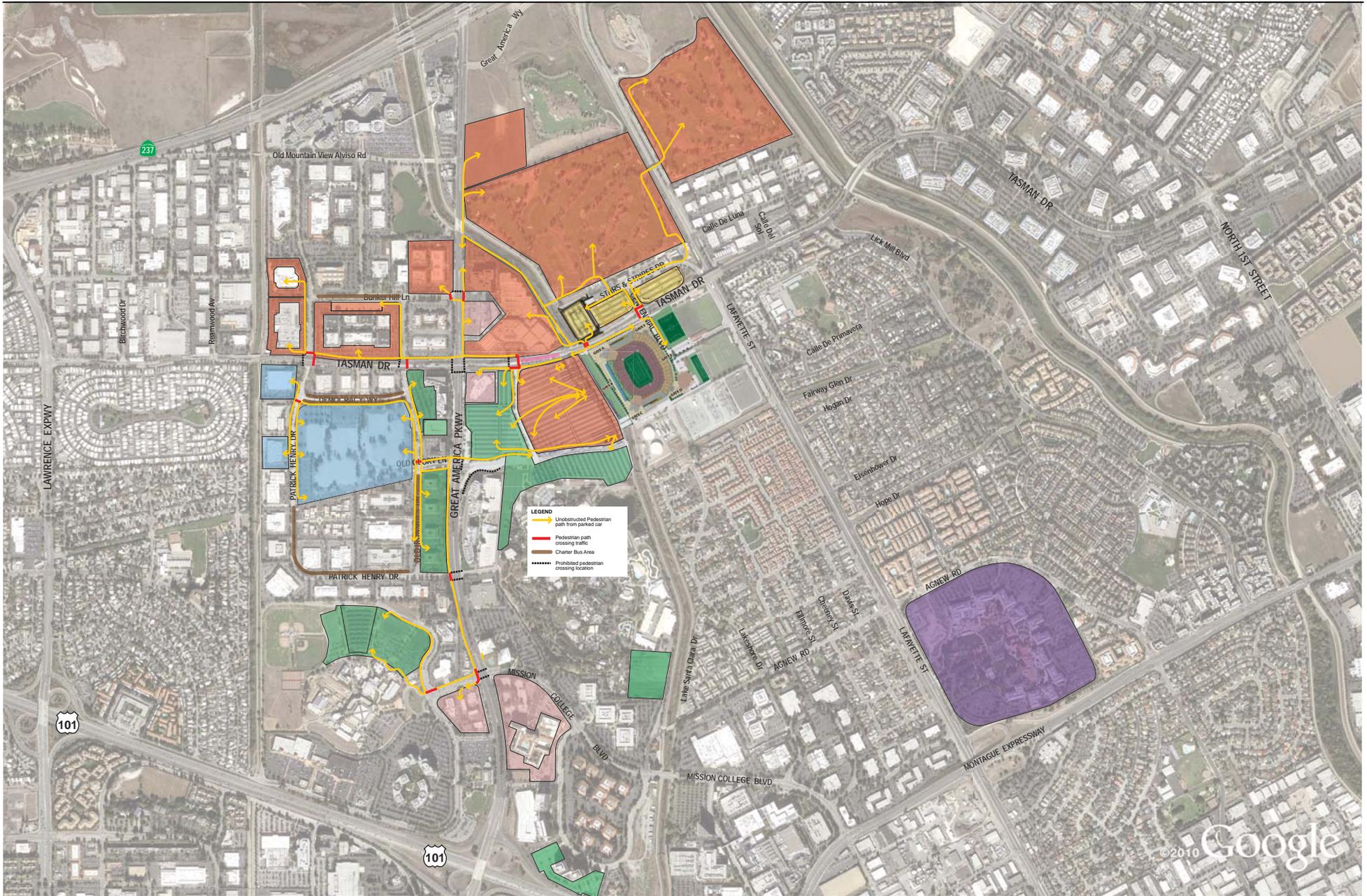
It should be noted that on event days, security screening stations shall be placed ahead of all Stadium pedestrian access points to screen all patrons for unpermitted items. No Stadium patrons will be permitted into the Stadium without first passing through a security screening station. All security screening stations will be placed six hours prior to the start of an event, and removed mid-game in order to maximize pedestrian flow away from the Stadium during the egress period. The Stadium's security perimeter is shown on **Figure 5.3-9**.



5.3-7) Pedestrian Access to Parking,at

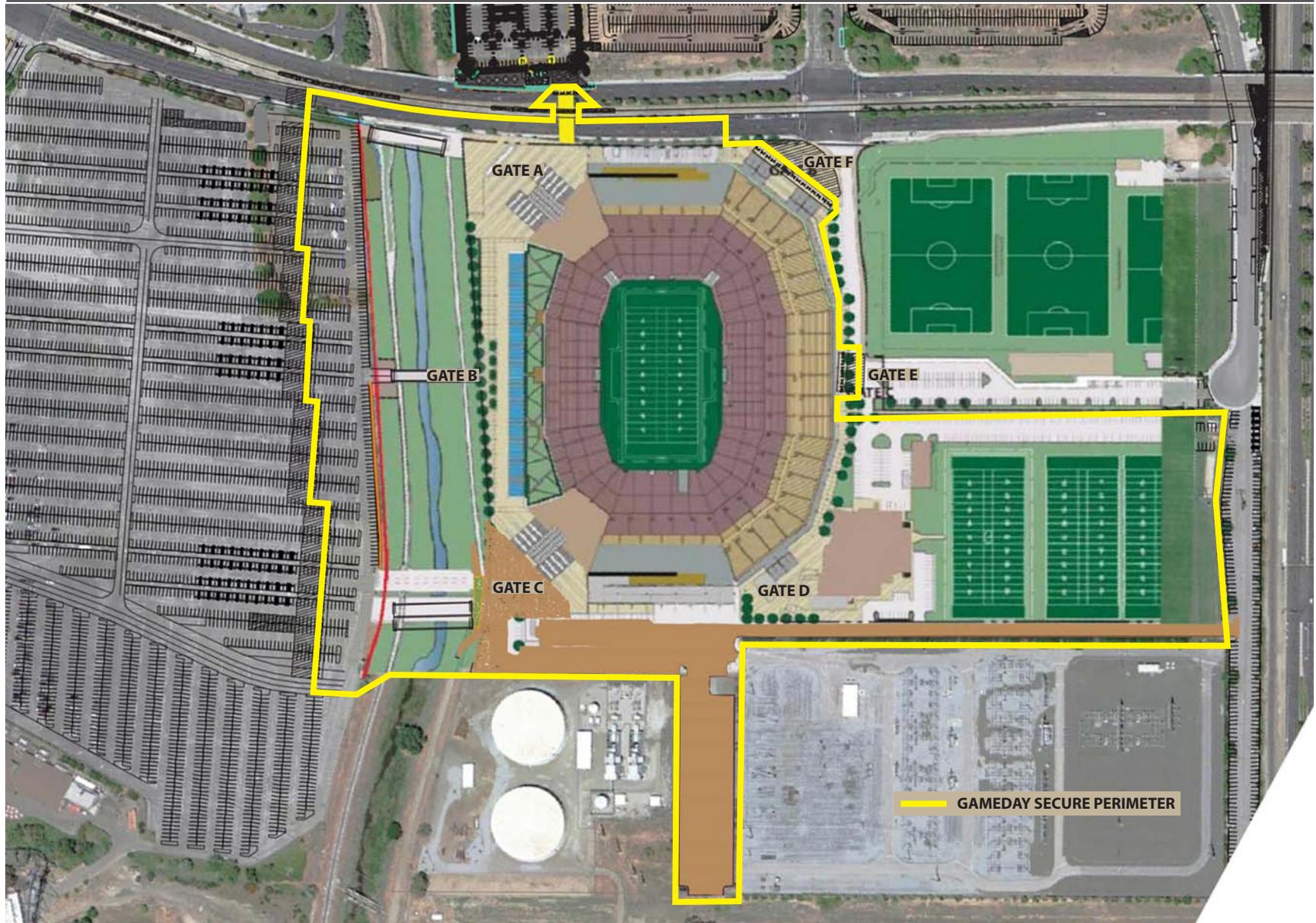
San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.3-7
General Parking Areas**



(5.3-7) Pedestrian Access to Parking.at

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 5.3-8
Detailed Pedestrian Access to Parking Facilities on Event Days



Stadium Security Perimeter rev3.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.3-9
Stadium Security Perimeter

Pedestrian Crossing Areas

Designated crossing areas will be placed at locations so pedestrians can travel to and from parking facilities with a minimal number of roadway crossings. Officers will be located at many of these crossing area locations to assist should any conflicts between vehicles and pedestrian occur. Additionally, pedestrian crossing of roadway or transit rights-of-way will occur at officer-monitored locations, or at intersections with pedestrian signals.

Some locations may include a street crossing prohibition (signage or fencing) in order to minimize conflict points between pedestrians and vehicles, and to focus pedestrians into the safest crossing areas. In these cases, signage will be posted to alert pedestrians regarding prohibited crossing areas, or officers will be directing pedestrians to use designated sidewalks and crosswalks. These locations include:

- Great America Parkway / SR 237 Ramps: North crosswalk, south crosswalk;
- Great America Parkway / Great America Way: North crosswalk, south crosswalk;
- Great America Parkway / Old Mountain View Alviso Road: South crosswalk;
- Great America Parkway / Bunker Hill Lane: North crosswalk;
- Great America Parkway / Tasman Drive: South crosswalk, east crosswalk, west crosswalk;
- Great America Parkway / Old Glory Lane: East crosswalk;
- Great America Parkway / Patrick Henry Drive: North crosswalk, south crosswalk;
- Great America Parkway / Mission College Boulevard: North crosswalk, south crosswalk;
- Patrick Henry Drive / Tasman Drive: West crosswalk;
- Old Ironsides Drive / Tasman Drive: West crosswalk;
- Convention Center Circle / Tasman Drive: West crosswalk;
- Fenced Tasman Drive median between Convention Center Circle and Centennial Boulevard;
- Calle Del Sol / Tasman Drive: East crosswalk, west crosswalk; and
- Lick Mill Boulevard / Tasman Drive: East crosswalk, west crosswalk.

Residential Area Intrusion

Based on the locations of the off-site parking areas and transit stations relative to the Stadium, as well as enforced parking prohibitions within residential areas, and given that pedestrians will choose to take the most direct route to/from the Stadium, it is unlikely that pedestrians will travel through residential areas. Officers will be stationed on either end of Agnew Road, between Mission College Boulevard and Lafayette Street to insure that Stadium-bound cars do not enter and park in the neighborhood. Should local residents have any issue with pedestrian cut-through traffic, signage will be posted at neighborhoods to alert Stadium patrons that residential areas are to be avoided, and to explain that they do not provide quicker paths to the Stadium, parking facilities, or transit facilities. Further, the signage will include the Stadium Operations Liaison's telephone number, should residents want to speak with someone personally to offer input. Based on findings, including feedback from area residents, adjustments to the TMOP will be proposed.

5.3.4 ADA Access

A conscious and ongoing effort will be made to accommodate all fans, including those living with disabilities. The primary supply of ADA parking for the Stadium will be provided within Red Lot 1, comprising a total of 200 spaces. As the legal requirement reserves one percent of the available parking spaces per lot or garage for the vehicles of individuals living with disabilities, the total of 200 ADA parking will be sufficient to meet ADA parking requirements for all patrons expected to arrive at the Stadium by automobile. However, it should be noted that existing ADA



parking spaces within off-site lots contracted for event use will also be available. Additionally, it should be noted that Blue Lot 1 and Green Lot 4 will serve as an additional parking supply for disabled patrons.

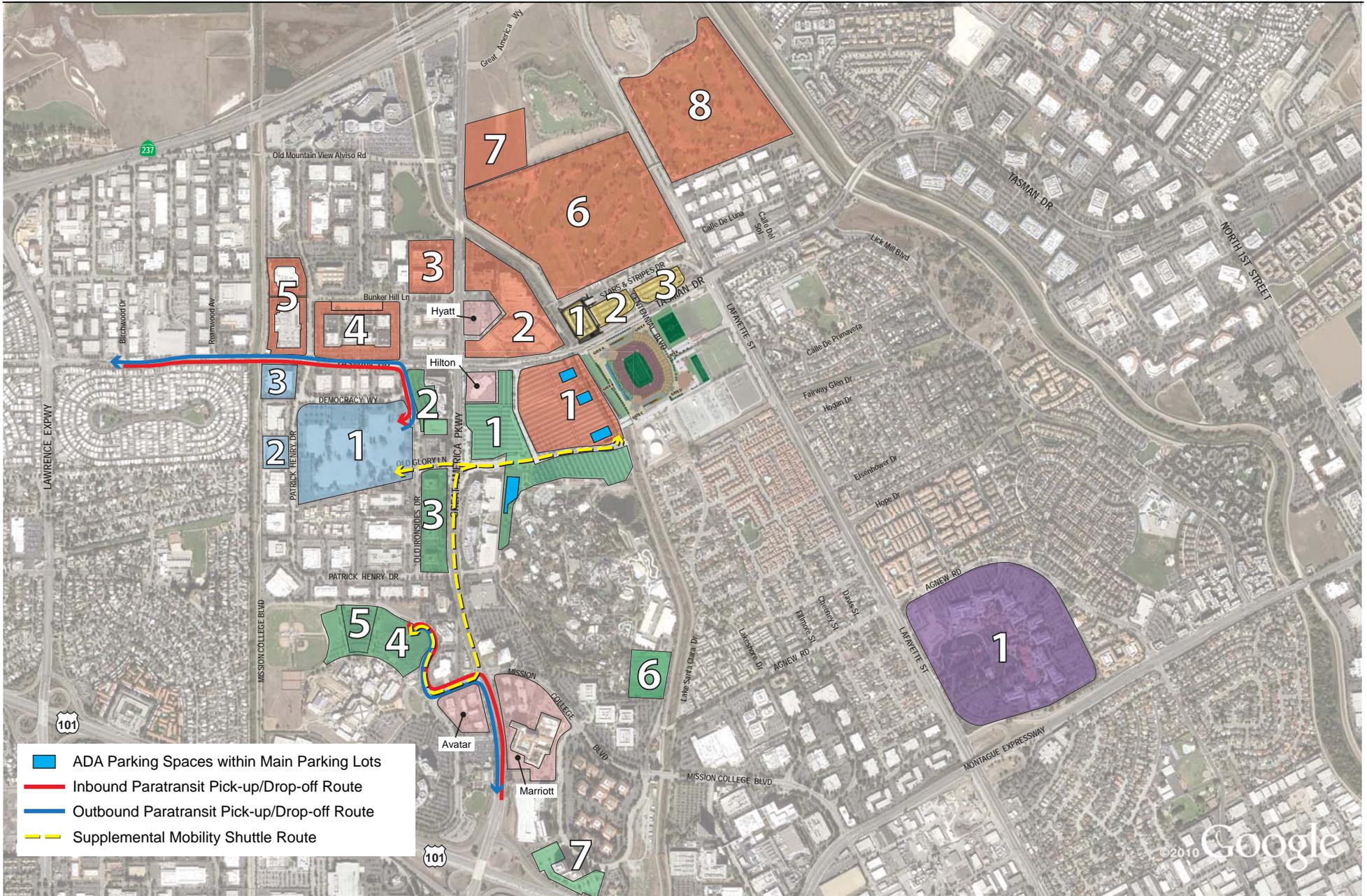
Further, a total of 130 ADA parking spaces will be provided in lots designated specifically for Great America Theme Park use. On days when the Theme Park is in operation during a Stadium event, it is possible that some percentage of this surplus may be used as overflow ADA parking for the Stadium. On days when the Theme Park is not in operation, the 130 ADA parking spaces will be added to the total of 200 ADA parking spaces, allowing for an overall ADA parking supply of 330 spaces within Red Lot 1. Motorized carts will shuttle patrons between the 130-space ADA parking area and the Stadium security perimeter.

Supplemental Mobility Shuttle

Patrons intending to use ADA parking spaces not located within Red Lot 1 or Green Lot 1 will be encouraged to park within Blue Lot 1 and Green Lot 4. As noted, Blue Lot 1 and Green Lot 4 will serve as an additional parking supply for disabled patrons. Additionally, Blue Lot 1 and Green Lot 4 will serve as the Stadium's ADA paratransit pick-up and drop-off location. Disabled patrons parking in Blue Lot 1 or Green Lot 4, or arriving by ADA Paratransit, will be served by a supplemental shuttle offering a direct connection to the Stadium entrance. The supplemental shuttles will be similar to golf carts, and will transport Stadium patrons with special needs from Blue Lot 1 and Green Lot 4 to the Stadium. Additionally, Stadium patrons with special needs parked within Red Lot 1 or Green Lot 1 will receive shuttle service to the Stadium entrance if needed. Shuttle service will be available beginning 1.5 hours prior to event time, with the last drop off occurring one hour following the conclusion of each event.

On-Demand VTA Paratransit Shuttles

Paratransit is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. This demand-responsive transport service will offer on-demand, call-up, door-to-door service from any origin within the Stadium service area to/from the Blue Lot 1 or Green Lot 4 pick-up/drop-off zones, where passengers will transfer to the Stadium's supplemental mobility shuttle to reach the Stadium entrance. Stadium patrons with special needs who require paratransit services will call the Paratransit dispatcher to schedule a pick-up. Both the paratransit route to and from Blue Lot 1 and Green Lot 4, as well as the supplemental shuttle routes to the Stadium, are illustrated in **Figure 5.3-10**.



5.3-10 ADA & Paratransit Shuttle Route.a1

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.3-10
Paratransit and Pick-up / Drop-off Routes, and Supplemental Mobility Shuttle Route



5.4 Bicycle Access

5.4.1 Access Routes

Bicyclists are expected to access the Stadium by way of automobile ingress and egress routes, or via bicycle designated trails and facilities (i.e. the adjacent San Tomas Aquino Creek Trail). In the vicinity of the Stadium, there are several Class I and Class II bicycle facilities.

- San Tomas Aquino Creek Trail is a major north/south, paved, Class I (off-road) bikeway stretching from the central Santa Clara to Sunnyvale/Baylands Park, which intersects with Tasman Drive at the northwest corner of the Stadium. Currently, it is nearly continuous from the Bay Trail to El Camino Real as a multi-use trail for bicycles and pedestrians. South of El Camino Real, the trail is an on-street bicycle route with marked bicycle lanes along the streets. A Spur Trail to Homestead Road is under various stages of design and construction. The Creek Trail is only accessible during daylight hours in the vicinity of the Stadium.
- Guadalupe River Trail is a major north/south, Class I (off-road) bikeway that provides direct access to/from Downtown San Jose and many outlying neighborhoods and intersects with Tasman Drive approximately 0.5 miles east of the Stadium. The Guadalupe River Trail is only accessible during daylight hours in the vicinity of the Stadium. The path is an 11 mile long multi-use trail for bicycles and pedestrians that runs along the banks of the Guadalupe River. Currently, it is composed of three discontinuous segments:
 - The “Upper Guadalupe River Trail” section links to three other trail systems (River Oaks Pathway, Los Alamitos Creek Trail, and Ryland Parkway Trail). The trail’s southern section is paved and runs from its southern terminus at Almaden Lake Park (at Coleman Road) to Chynoweth Avenue.
 - The paved trail resumes just south of Interstate 280 (I-280) at the intersection of Virginia and SR 87 and continues northward and ends just north of the Interstate 880 (I-880) undercrossing.
 - The “Lower Guadalupe River Trail” section connects with the Highway 237 Bikeway. This section is unpaved (gravel) and continues along the border of San Jose International Airport and terminates near the corner of Gold Street and SR 237 in the Alviso neighborhood.
- Great America Parkway is a north/south, Class II (signed and striped) bikeway that provides direct access to/from central Santa Clara and SR 237. The bicycle lane runs along Great America Parkway from Chromite Drive to SR 237. It connects with Lafayette Street south of SR 237 via Great America Way before continuing to its northern terminus, north of SR 237, where it connects via the Gold Street Connector. The Class II bikeway intersects with Tasman Drive at the northwest corner of Red Lot 1.
- Lafayette Street is a north/south Class II bikeway. The on-street, signed and striped bicycle lane runs along Lafayette Street from Agnew Street to its northern terminus, north of SR 237. It connects with Great America Parkway south of SR 237 via Great America Way before continuing to its northern terminus, north of SR 237, where it connects via the Gold Street Connector. The Class II bikeway intersects with Tasman Drive at the northwest corner of Red Lot 1.
- North 1st Street is a north/south Class II bikeway. The on-street, signed and striped bicycle lane runs along N 1st Street from E Brokaw Road/Airport Parkway to its northern terminus, south of SR 237, at Great America Way. It connects with the “Upper Guadalupe River Trail” to the south via Airport Parkway, and connects with “Lower Guadalupe River Trail” to the north via Great America Way. The Class II bikeway intersects with Tasman Drive approximately 1.5 miles east of the Stadium.
- Tasman Drive/Great Mall Parkway/Capitol Avenue is a Class II bikeway that runs along the north side of the Stadium in the east/west direction. The bicycle lane crosses “Lower Guadalupe River Trail” and continues

as Great Mall Parkway to the South Main Street intersection. It runs in the north/south direction and continues as Capitol Avenue to its southern terminates at East Capitol Expressway near the Alum Rock Transit Center.

- John W. Christian Greenbelt Trail/Prestcott is a discontinuous Class I and Class II bikeway that runs in the east/west direction from Duncan Avenue/Garner Avenue, near Moffet Park Station, to Calabazas Creek Trail, a Class I bikeway that connects with Great America Parkway via the Old Mountain View-Aviso Trail to the north. The Great America Parkway bikeway intersects with Tasman Drive at the northwest corner of Red Lot 1.

Bicycle facilities in the vicinity of the Stadium are illustrated in **Figure 5.4-1**.

Bicycle Traffic Diversions

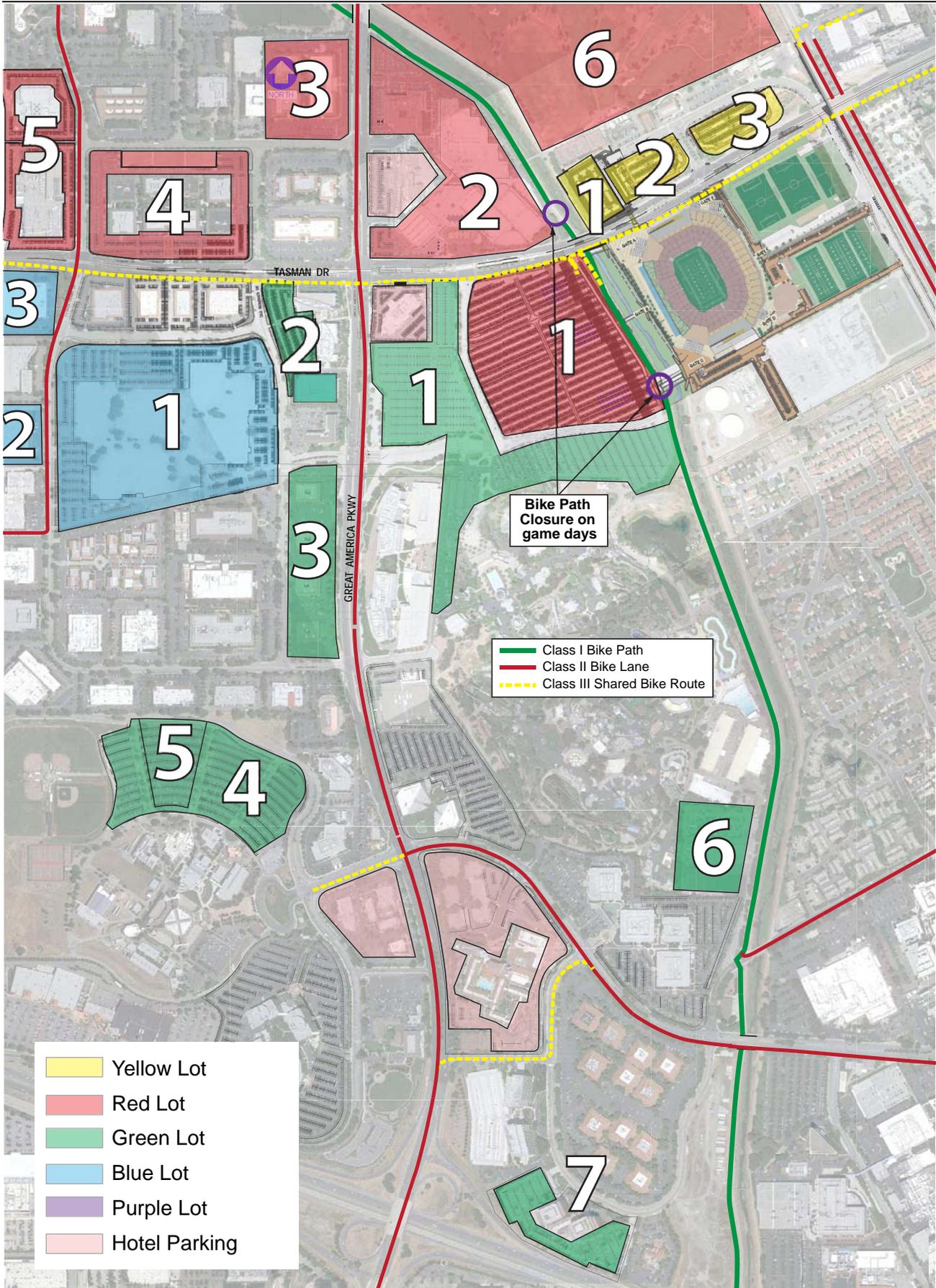
The San Tomas Aquino Creek Trail currently runs between the Stadium, and the location where security screening stations are to be placed on event days. As such, during certain large events (i.e., more than 20,000 patrons), traffic on the San Tomas Aquino Creek Trail will be diverted in order to ensure the integrity of the Stadium's security perimeter. This temporary path diversion will send northbound traveling bicyclists east along Agnew Road, north along Lakeshore Drive, east along Gianera Street, north along the off-street pedestrian and bicycle path at the Gianera Street terminus, north through the VTA Parking Lot, northwest along Stars and Stripes Drive, connecting to the path between the parking structure and the tennis courts, up to the footbridge adjacent to the driving range, where bicyclists will be able to reconnect with the San Tomas Aquino Creek Trail. Bicyclists traveling southbound along the creek trail will use the same diversion, in reverse order. The Creek Trail detour is shown in **Figure 5.4-2**.

The Creek Trail diversions will have multiple wayfinding signs for the Trail users' convenience. The Stadium Manager will work with the Santa Clara Police Department to schedule the closure of the Trail as late as possible before an event and reopen the Trail as soon as possible after the event. Closure of the Creek Trail for events of less than 20,000 attendees is at the discretion of the Santa Clara Police Chief, in cooperation with the Department of Public Works.

Tasman Drive will be closed to vehicles from Convention Center Circle to Centennial Boulevard during large events. Tasman will not, however, be closed to pedestrian or bicycle traffic, enabling commuters and other cyclists to pass through the Stadium area. For safety reasons, cyclists will likely be required to walk their bikes in pedestrian zones at certain peak times, perhaps causing some inconvenience for cyclists, but not prohibiting their passage into or through the area. All major intersections in the area will be controlled by police and standard traffic laws (including the prohibition of bicycle riding on sidewalks, or against traffic) will be in effect.

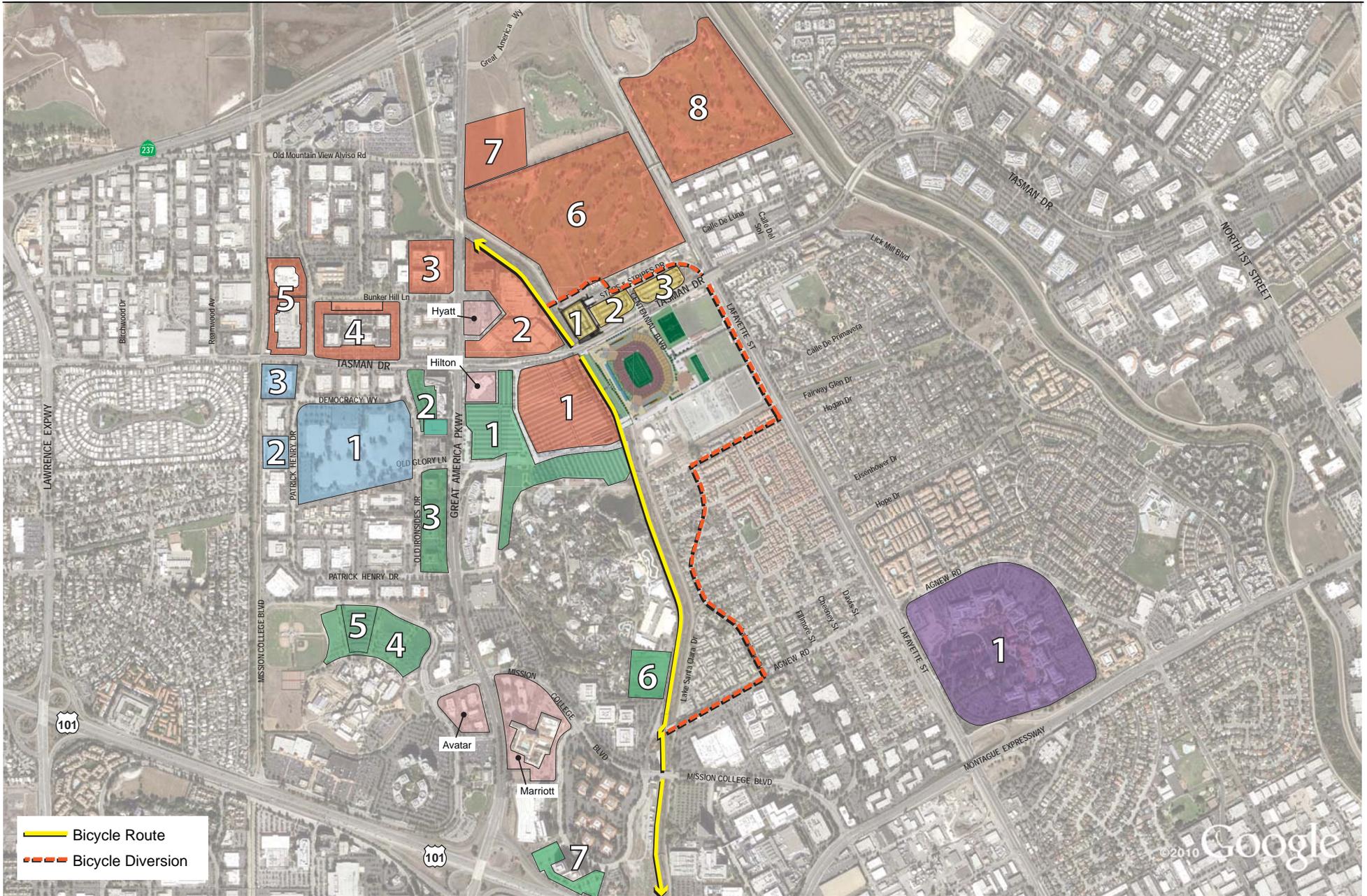
5.4.2 Bicycle Parking

Bicycle parking will be provided within Red Lot 1. For events exceeding 20,000 attendees, a bicycle valet service shall be provided that includes a dedicated, bicycle storage area with valet service for visitors, to the satisfaction of the Director of Public Works. The bicycle storage area shall provide enough space to house a minimum of 750 bicycles. An additional 500 bicycle parking may be provided within Red Lot 6 (should bicycle parking demand warrant it), increasing the Stadium's bicycle parking capacity to 1,250 bicycle parking spaces. As shown in **Figure 5.4-3**, the two designated bicycle parking facilities with attendants/bike valets and secured bicycle racks will be provided in Red Lot 1 and Red Lot 6. It is anticipated that the bicycle parking capacity will exceed the expected bicycle parking demand. Additional bicycle parking facilities may be available in the outer parking lots.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

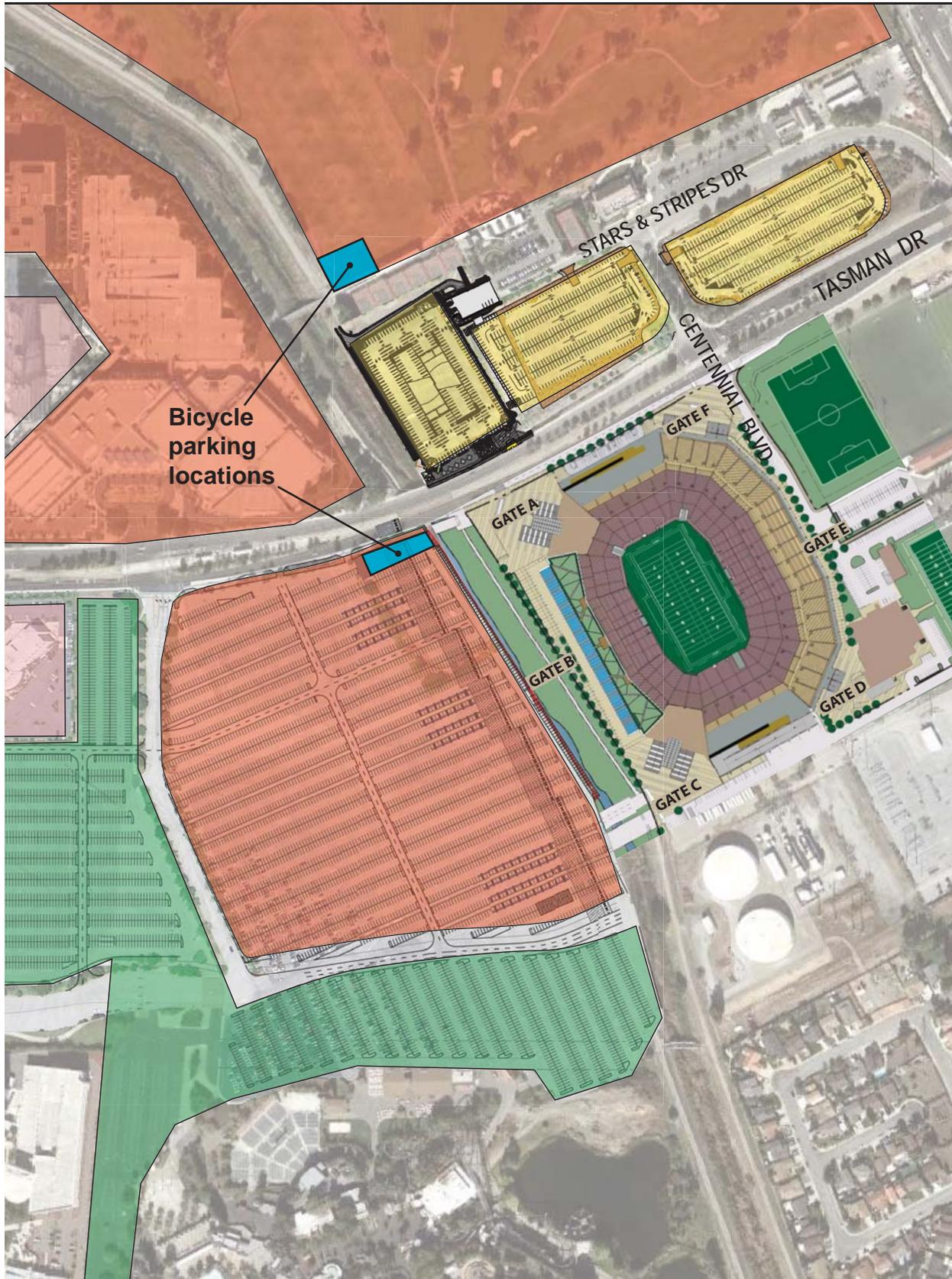
**Figure 5.4-1
Bicycle Routes**



— Bicycle Route
— Bicycle Diversion

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.4-2
Bicycle Diversions on Event Day**



7-11 GA Parking Supply on Event Day

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.4-3
Bicycle Parking Facilities**

5.5 Parking

5.5.1 Employee Parking

Stadium employees will be required to park in designated employee parking areas. The details of employee parking are as follows:

Employee Parking Areas

The employee event day parking demand, as estimated in the Transportation Management Plan, is summarized in **Table 5.5-1**.

Table 5.5-1: Employee Event day Parking Demand

Mode of Travel	Number of Employees	Total Employee Vehicles
Automobile (90%)	2,610	1,740
Transit (10%)	290	0
Total	2,900	1,740

Source: San Francisco 49ers, 2006; AECOM, 2014.

To meet this estimated demand, employees may utilize parking within the following parking facilities:

- The top two floors of Yellow Lot 1 (the City of Santa Clara Tasman Parking Garage located on the north side of Tasman Drive, directly across from the Stadium), including 615 parking spaces;
- Green Lot 6 (the Great America Theme Park parking lot), located southeast of the Great America Theme Park, including 749 parking spaces;
- Green Lot 7 (Santa Clara Towers parking facilities), located along Freedom Circle, including 400 parking spaces;
- Purple Lot 1 (Oracle parking lot), located southeast of the Lafayette Street / Agnew Road intersection, including 2,300 parking spaces;
- 49ers Training Facility parking lot, adjacent to the Stadium, including 195 parking spaces;
- Kaiser Permanente Santa Clara Medical Center parking facilities, located at the southwest corner of the Lawrence Expressway / Homestead Road intersection, including 400 parking spaces; and
- San Jose Earthquakes Stadium parking lot, located along Coleman Avenue, including 800 parking spaces.

It is expected that event day employee parking demand will be met by the 49ers Training Facility parking lot, Yellow Lot 1, Green Lot 6, Green Lot 7, and Purple Lot 1. Employees driving to and from parking facilities will follow the vehicular paths of travel defined in Section 5.1 for ingress and egress. The Stadium will be directly accessible from Yellow Lot 1 by way of a mid-block crossing on Tasman Drive. The Stadium is also directly accessible from the



49ers Training Facility parking lot, as it is located adjacent to the Stadium. From Green Lot 6, Green Lot 7, and Purple Lot 1, employees will reach the Stadium via employee shuttles, which will drop employees off at the Stars and Stripes Drive cul-de-sac, east of the Stadium.

For Stadium employees who choose to bike to the Stadium, bike racks will be provided at Gates A and F, 10 bike lockers and 10 bike racks will be provided near Gate E, and 40 bike lockers will be provided near Gate A. Employees using this bicycle parking facilities will have direct access to Stadium entry points, as each employee bicycle parking location will be directly adjacent to the Stadium.

Hours of Arrival and Departure

Per the *Transportation Management Plan for a New San Francisco 49ers Stadium in Santa Clara, CA* (AECOM, 2009), 95 percent of employees are expected to arrive over three hours in advance of a Stadium event, which is before the heavy ingress period for patrons of a given event. Also, employees will depart after the heavy egress period of a Stadium event has concluded. Thus, ingress and egress conflicts are not anticipated.

5.5.2 Patron Parking

Parking for patrons is to be provided in numerous locations, all within a reasonable walking distance to the Stadium. Approximately 19,000 parking spaces will be provided for patrons, approximately half of which will be located in parking facilities controlled by the City of Santa Clara. The remaining half of the parking supply will be provided off-site by permits with property owners for use on event days.

Patron Parking Areas

Patron parking will be provided in a number of surface parking lots and garages located in the vicinity of the Stadium. During event days, approximately 26,500 spaces are expected to be available for patrons across as many as 28 parking facilities surrounding the Stadium. As the estimated parking demand is approximately 19,000 spaces, the remainder of the parking supply is for contingency purposes should actual demand exceed estimated demand as a result of patron travel behavior (e.g., higher automobile mode shares) or other factors.

Season Ticket Holder Parking Areas

It is estimated that approximately 75 percent of all Stadium patrons during 49ers games will be season ticket holders, who will be assigned to specific parking lots through designated access routes, no matter their origin. For example, parking pass holders parking in Red Lot 1 will need to access this lot via a certain route, regardless of whether their origin is north, south, east, or west of the Stadium. All parking lots in the immediate vicinity of the Stadium will be designated for season ticket holders, with a small number of premium ticket holders (e.g., suite and club patrons) provided with designated spaces in certain lots closest to the Stadium. Spaces will not be designated for most other ticketholders, who will be permitted to park in any space in their assigned lot. During event days, approximately 15,000 spaces will be provided for season ticket holders.

Season ticket holders will be notified of their assigned parking lot or facility (and assigned parking space, if appropriate) in detailed informational packets to be mailed out with their tickets, including the associated ingress and egress routes for their assigned parking facility. Additional information, in abbreviated format, will be printed on the reverse side of tickets, and be disseminated on www.LevisStadium.com and in various other mass media.

Cash Parking Areas

Cash parking will primarily be located in facilities further from the Stadium, although some parking spaces in close proximity to the Stadium may also be open to cash parkers. During events, general admission parking spaces will be provided for patrons paying with cash, distributed along each compass direction to accommodate vehicles coming from any direction. Locations of lots offering cash parking spaces will be clearly identified by event day signage.

Hotel Parking Areas

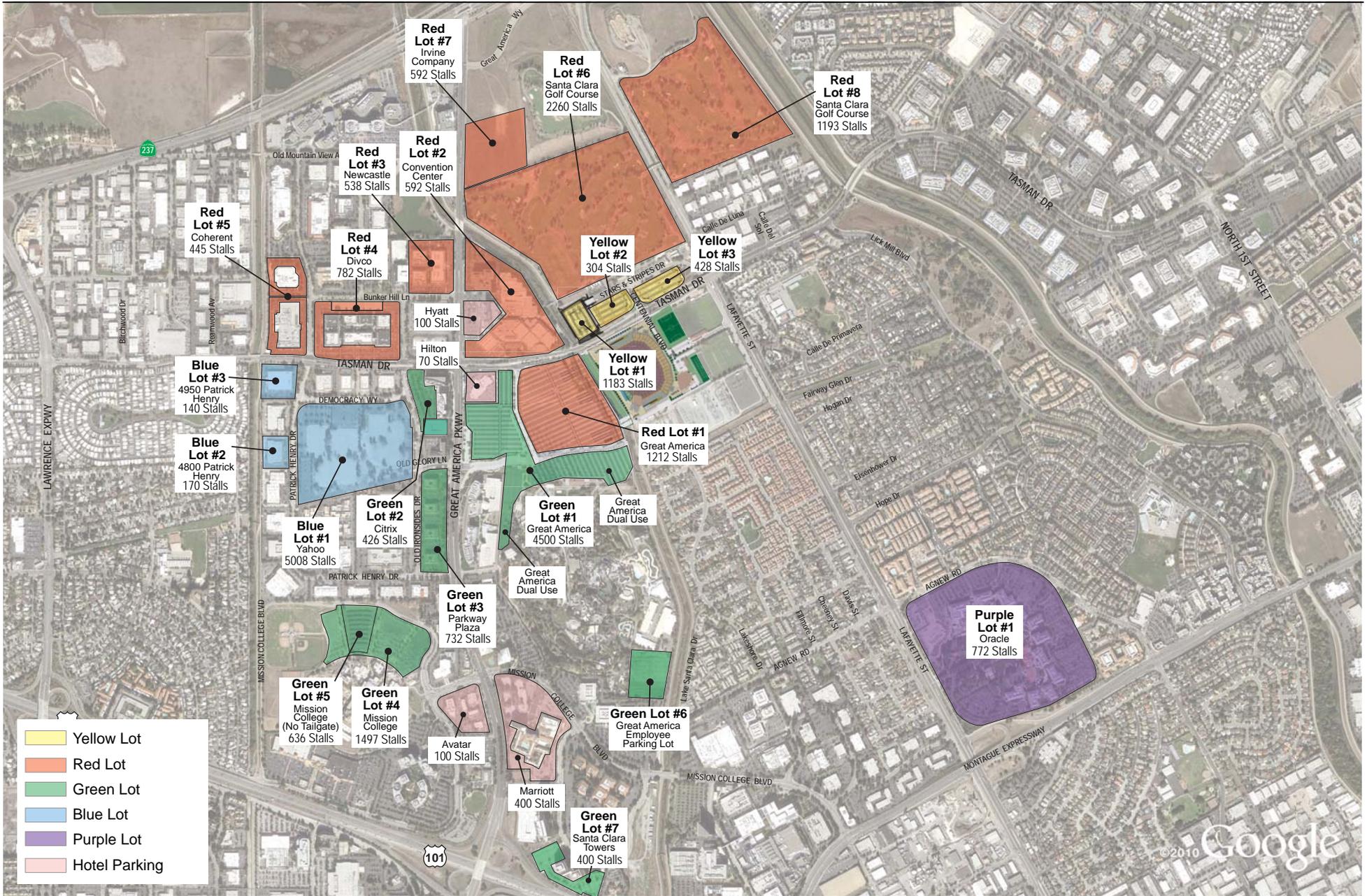
In addition to ticketed and cash parking, additional parking spaces will be located in hotel parking areas operated owned and operated by nearby hotels. While these parking facilities will not be under the control of the City of Santa Clara or offered through permits with the Stadium Manager for use by Stadium patrons, it is expected that a substantial portion of the parking spaces in these facilities will be used by Stadium patrons, either as privately-operated event-day parking or as parking for Stadium patrons who choose to stay at these hotels. However, it should be noted that if a hotel choose to rent their parking spaces out for Stadium event use, that hotel will be required to enter into parking contracts and obtain City off-site parking permits. Because of the proximity of these hotels to the Stadium, the majority of guests at these hotels on event days are expected to be Stadium patrons. These parking areas account for a total of 2,926 parking spaces in the vicinity of the Stadium, per **Table 5.5-2**.

Off-Site Parking Lot Standards

The off-site parking permits include conditions and restrictions for the use of the lot as outlined in the Planning Application and Santa Clara Zoning Code (SCCC 18.86). These include, but are not limited to permitted tailgating area, security requirements and restrooms.

Parking Supply and Locations

Approximately 27 parking facilities could be in use on event days, and are summarized in **Table 5.5-2**. The location of these facilities is illustrated in **Figure 5.5-1**. It should be noted that Lots immediately adjacent to the Stadium or 49ers Headquarters (player parking, Fire Department, Police Department, public relations staff, medical teams, TV production trucks, and administrative staff) may not be open to Stadium patrons.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5-1
Gameday Parking Facilities**

Table 5.5-2: Stadium Parking Program

Parking Facility	Facility Use	Parking Spaces	
		Total Supply	Available to Patrons on Event Days
Adjacent Parking Facilities			
Yellow Lot 1	Ticketed	1,798	1,183
Yellow Lot 2	Ticketed	314	304
Yellow Lot 3	Ticketed	444	428
Red Lot 1	Ticketed	1,220	1,212
Red Lot 2	Ticketed	2,173	592
Green Lot 1	Ticketed	4,997	4,500
Subtotal		10,946	8,219
Outer Lots			
Red Lot 3	Ticketed / Cash	606	538
Red Lot 4	Ticketed / Cash	825	782
Red Lot 5	Ticketed / Cash	477	445
Red Lot 6	Ticketed / Cash	2,583	2,260
Red Lot 7	Ticketed / Cash	600	592
Red Lot 8	Ticketed / Cash	1,724	1,193
Green Lot 2	Ticketed / Cash	500	426
Green Lot 3	Ticketed / Cash	758	732
Green Lot 4	Ticketed / Cash	1,577	1,497
Green Lot 5	Ticketed / Cash	672	636
Blue Lot 1	Ticketed / Cash	5,081	5,008
Blue Lot 2	Ticketed / Cash	180	170
Blue Lot 3	Ticketed / Cash	225	140
Avatar	Hotel Parking	--	300
Hilton	Hotel Parking	--	200
Hyatt	Hotel Parking	--	295
Marriott	Hotel Parking	--	1,200
Biltmore	Hotel Parking	--	254
Embassy Suites	Hotel Parking	--	291
Hyatt House	Hotel Parking	--	164
Plaza Suites	Hotel Parking	--	222
Subtotal		15,808	17,345
Total		--	25,564

Source: San Francisco 49ers, 2014.

Notes: The parking program is subject to minor changes throughout the year.



Parking Access Plan

On all event days, parking facilities will be configured to control access, similar to the roadway network. However, the number of parking facilities used for a given event will vary depending on the size of the event. Where necessary, driveways may be coned off, and signage will be placed to direct patrons to proper access points. Access routes to the Stadium parking facilities are illustrated in **Figures 5.5-2a** and **5.5-2b**.

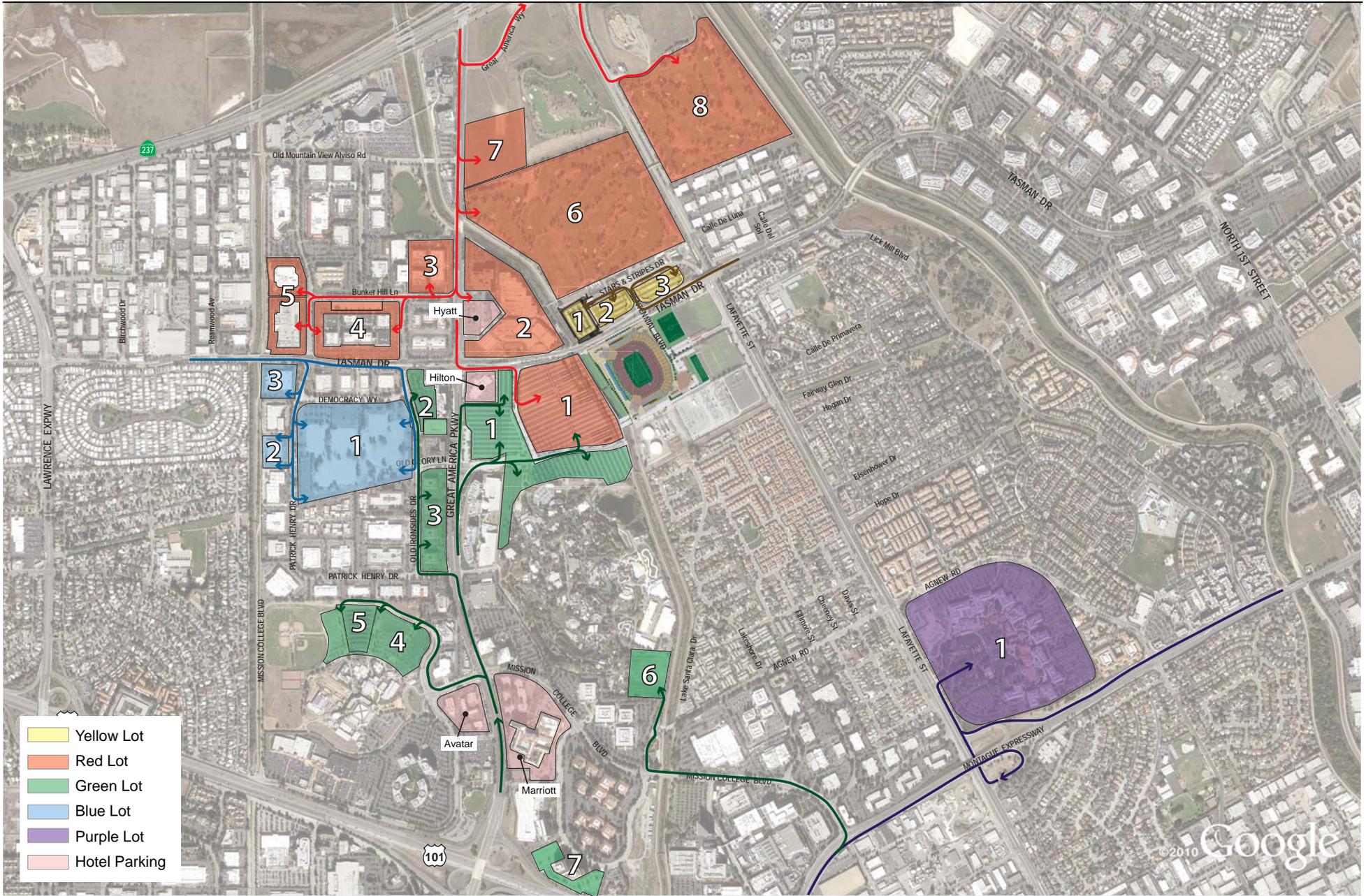
Parking Hours

In general, Stadium parking will be permitted approximately four hours before the start of an event start. Stadium parking will be prohibited before and after these periods to minimize the period of potential disturbance (subject to approval by the City of Santa Clara Chief of Police). Assuming a 1:00 PM to 1:30 PM start for Sunday games, parking will be permitted from 9:00 AM to 7:00 PM. For Saturday evening games beginning at 5:00 PM to 5:30 PM, parking will be permitted from 1:00 PM to 11:00 PM. However, it should be noted that this policy is subject to change based on the discretion of the Santa Clara Chief of Police, or his/her designee.

Parking hours for weekday games on Mondays, Thursdays, or Fridays are discussed in more detail in Chapter 6. In general, arrivals are expected to be more concentrated, and the designated hours for parking will begin later than for weekend games.

Areas of Parking Restrictions

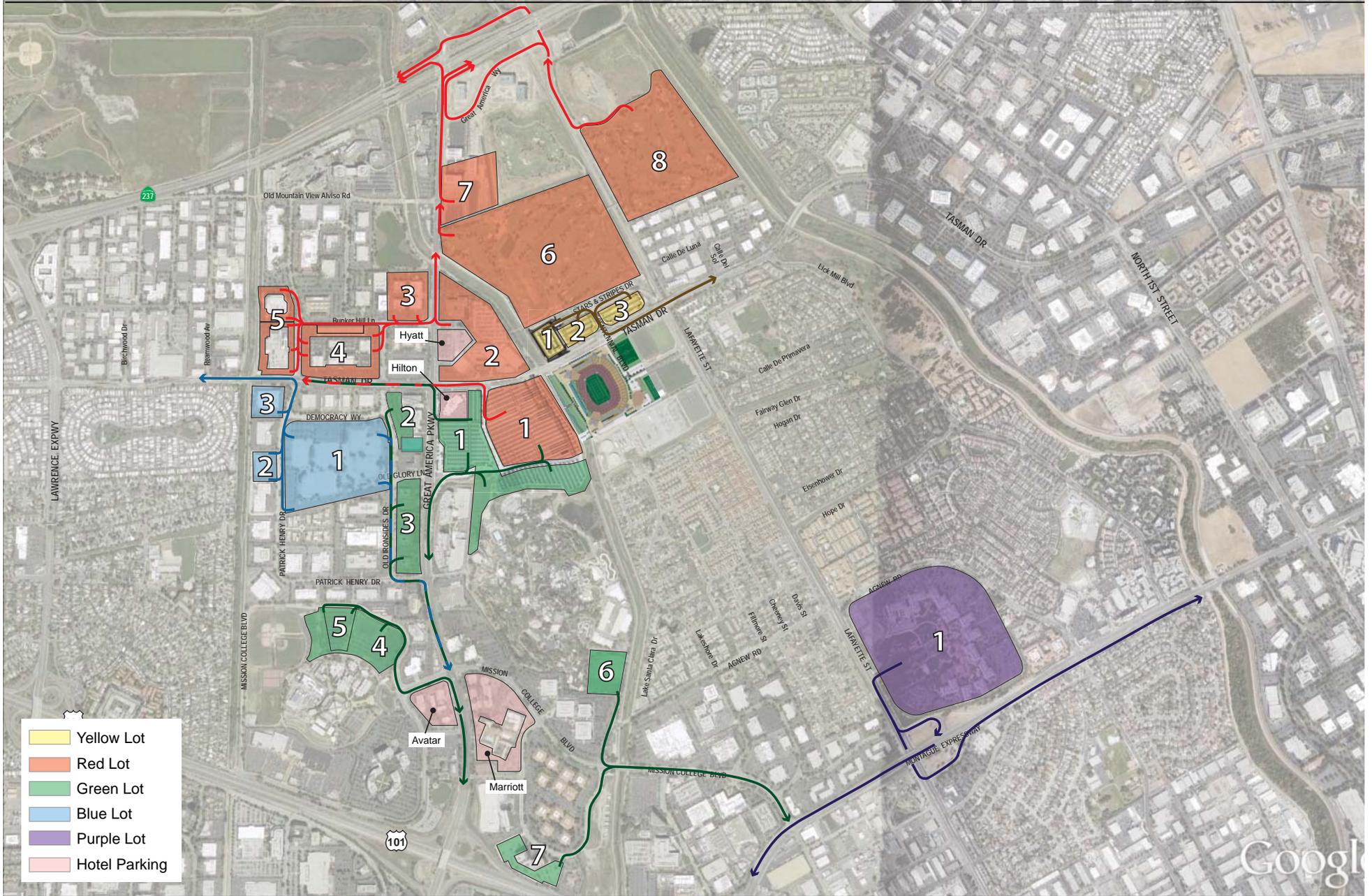
Stadium parking will be restricted in all areas where it is not expressly permitted. These areas include residential neighborhoods, certain areas within off-site parking lots and other nearby facilities not designated for event day parking use. Additionally, individual residents will not be permitted to sell parking within their driveways, or elsewhere on their property. Areas where parking will be restricted are illustrated in **Figure 5.5-3**. Restriction of parking in these areas by Stadium patrons will be implemented through use of street closures to Stadium traffic (e.g., to restrict parking in on-street spaces in residential neighborhoods) and the hierarchy of control measures described in Section 5.1.1 (to restrict parking in off-site parking facilities for which permits for event day parking use have not been secured). It is recommended that business property owners whose parking facilities are not designated for event day parking use should consider purchasing and installing "NO EVENT DAY PARKING" signage, as discussed in section 2.2.3, as well as private security.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.5-2a

Vehicular Paths of Travel - Ingress



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.5-2b

Vehicular Paths of Travel - Egress



(5.5-3) Areas of Parking Prohibitions.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.5-3

Areas of Parking Prohibitions during 2014 Game Days



Measures to Protect Property Owners

Parking intrusion into restricted areas will be controlled and enforced via a hierarchy of control measures that escalates in effectiveness until intrusion is minimized to an acceptable level:

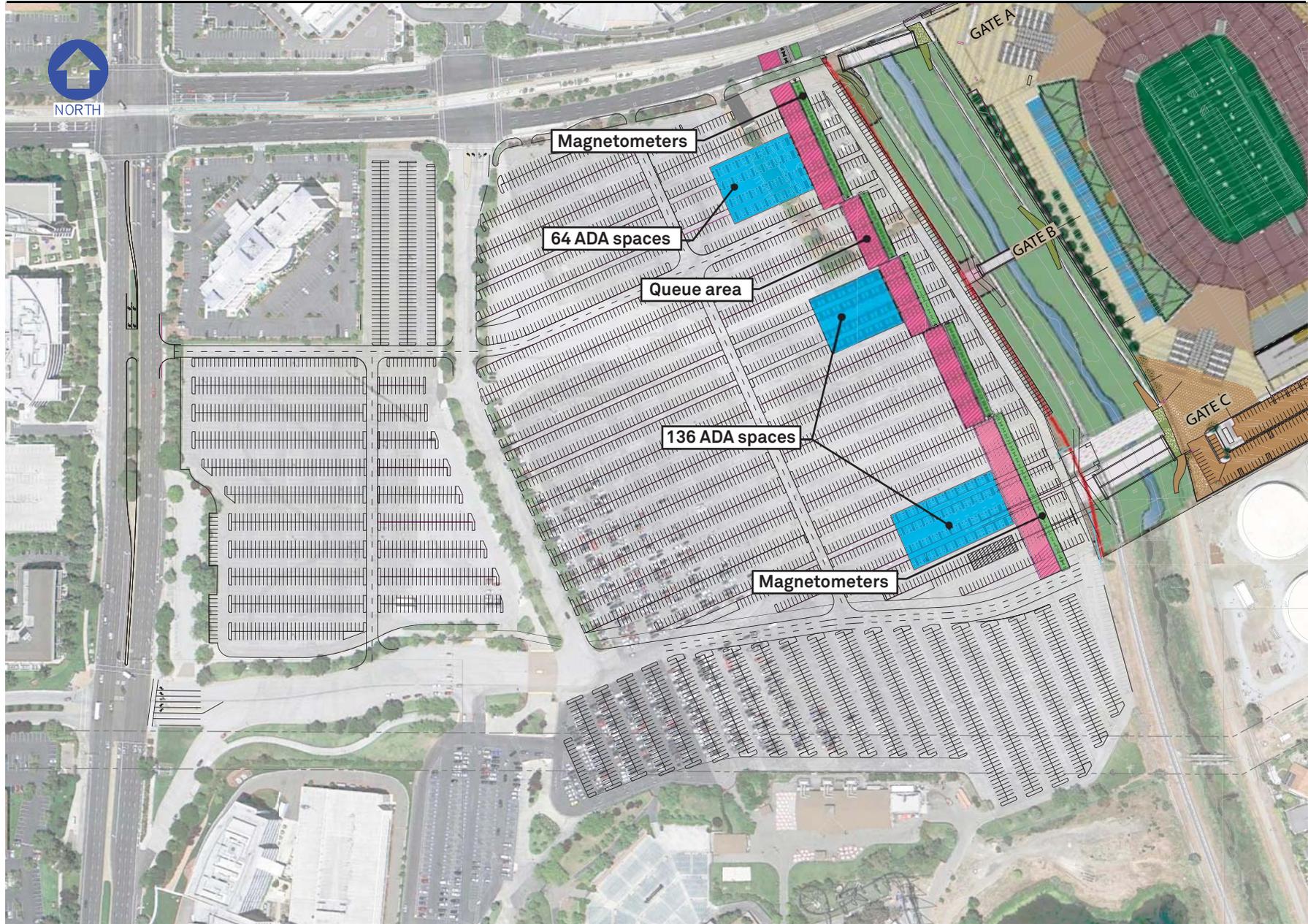
1. Initially, cones and “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs shall be placed at the appropriate residential streets.
2. Should unacceptable levels of neighborhood intrusion occur (based on the judgment of the Santa Clara Chief of Police), curbside signage shall be provided noting that on-street parking is prohibited for Stadium traffic, in addition to the placement of cones and “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs.
3. Should unacceptable levels of neighborhood intrusion continue to occur (based on the judgment of the Santa Clara Chief of Police), traffic control officers will be assigned to neighborhood entrances to monitor all vehicle entry to residential streets, in addition to the placement of cones, “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs, and curbside signage.
4. Finally, should unacceptable levels of neighborhood intrusion continue to occur (based on the judgment of the Santa Clara Chief of Police, and the director of public works), a Residential Permit Parking program may be instituted if requested by the impacted neighborhoods, and should the affected city concur. In addition to the placement of cones, “NO STADIUM PARKING – RESIDENT PARKING ONLY” signs, curbside signage, and the assignment of officers to monitor vehicle entry, signage noting that the area is designated for Residential Permit Parking only shall be installed.

ADA Parking

The primary supply of ADA parking will be provided within Red Lot 1 (i.e., the parking facility located directly adjacent to the Stadium, along its west side), comprising a total of approximately 200 spaces—sufficient to meet ADA parking requirements for all patrons expected to arrive at the Stadium by vehicles. However, it should be noted that existing ADA parking spaces within off-site lots contracted for event use will also be available. On days when Great America is not open, an additional 130 ADA spaces in the Great America-only lot will be available for use by Stadium patrons with disabilities, bringing the total supply of ADA parking to 330 spaces (Red Lot 1 and Green Lot 1 combined).

Motorized carts will shuttle patrons with disabilities between the ADA parking area and the Stadium security perimeter. These measures will be in compliance with ADA accessibility requirements for parking and Stadium access. The location of ADA parking spaces in Red Lot 1 is illustrated in **Figure 5.5-4**.

ADA parking already provided in existing off-site parking facilities will also be available for use by patrons with disabilities. However, patrons intending to use ADA parking spaces (not located within Red Lot 1 or Green Lot 1) will be encouraged to park within Blue Lot 1 or Green Lot 4, as disabled patrons parked within these lots will be served by a supplemental shuttle offering a direct connection to the Stadium.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

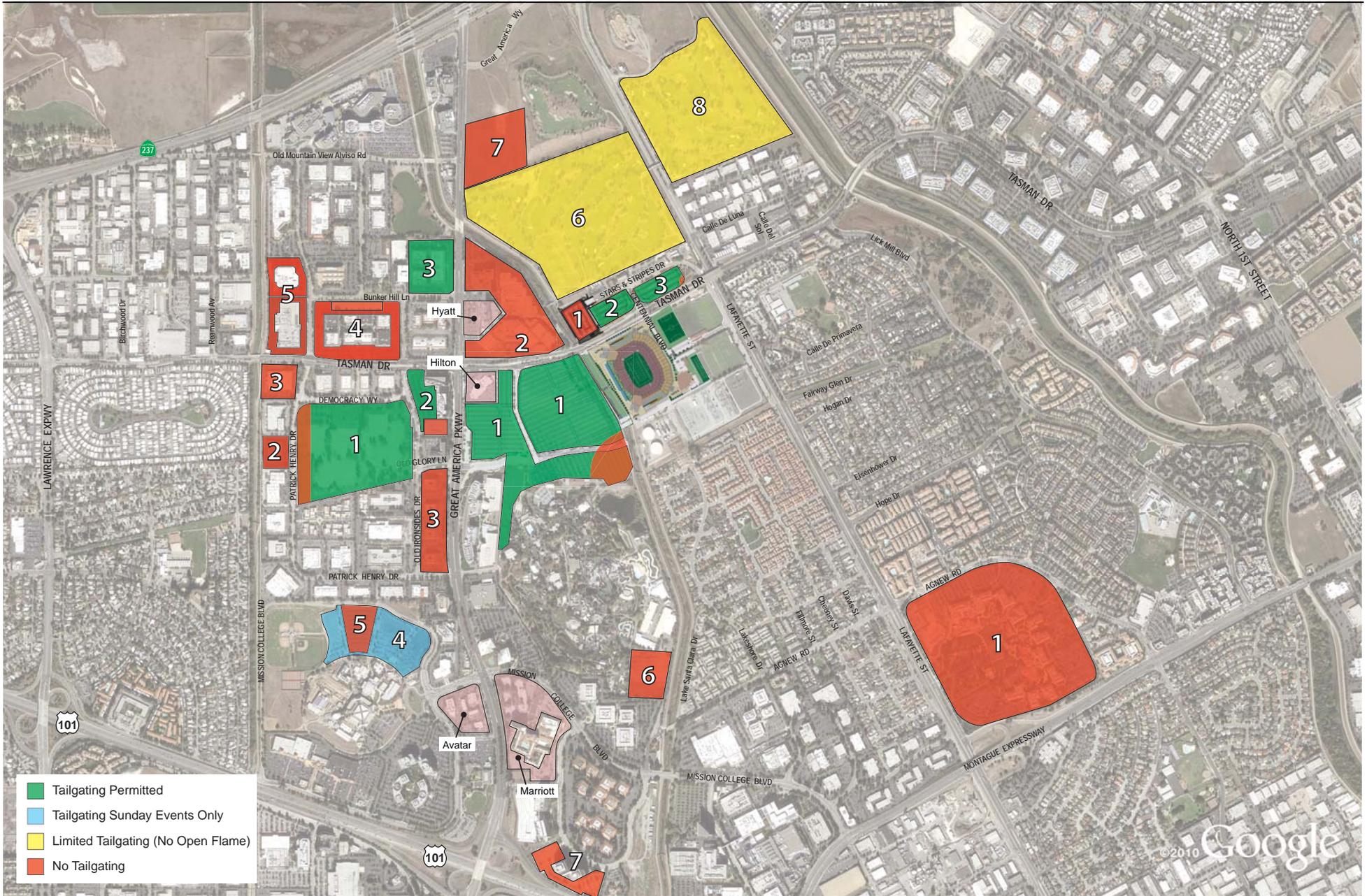
Figure 5.5-4
Red Lot 1 ADA Parking



Tailgating

“Tailgating” is defined as the use of any item (including tables, chairs, free-standing canopies or umbrellas, awnings attached to recreational vehicles, coolers, barbeques, grills, games, generators, televisions, sound systems, food or drink, food or drink preparation or serving equipment, or other items as identified by the City Manager or designee) for the purpose of an outdoor gathering by one or more people prior to, during or after a scheduled stadium event. Tailgating will be permitted only within the designated event day parking facilities, and only in areas within these facilities where it is not expressly prohibited. Areas where tailgating will be prohibited are illustrated in **Figure 5.5-5**. Tailgating will be prohibited in parking structures, in surface lots within 750 feet of residences, and in surface lots within 750 feet of school buildings on weekday evenings and Saturdays (tailgating will be permitted in surface lots within 750 feet of school buildings on Sundays). Posted signage and security patrols of parking areas prior to, during, and after events will enforce these restrictions.

All tailgating equipment must be confined within each party’s parking space, and amplified music or sound is not permitted (specifically within the Great America parking lot, the Golf and Tennis Club area, and lots within the Stadium security perimeter). Tents or canopies exceeding an eight-foot by eight-foot footprint and vehicles measuring more than 17 feet in length and / or eight feet in width will also not be permitted. Appropriate provisions (charcoal disposal, etc.) will be provided in the designated tailgating areas.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.5-5
Tailgating Regulations**



5.6 Taxi and Pedicab Access

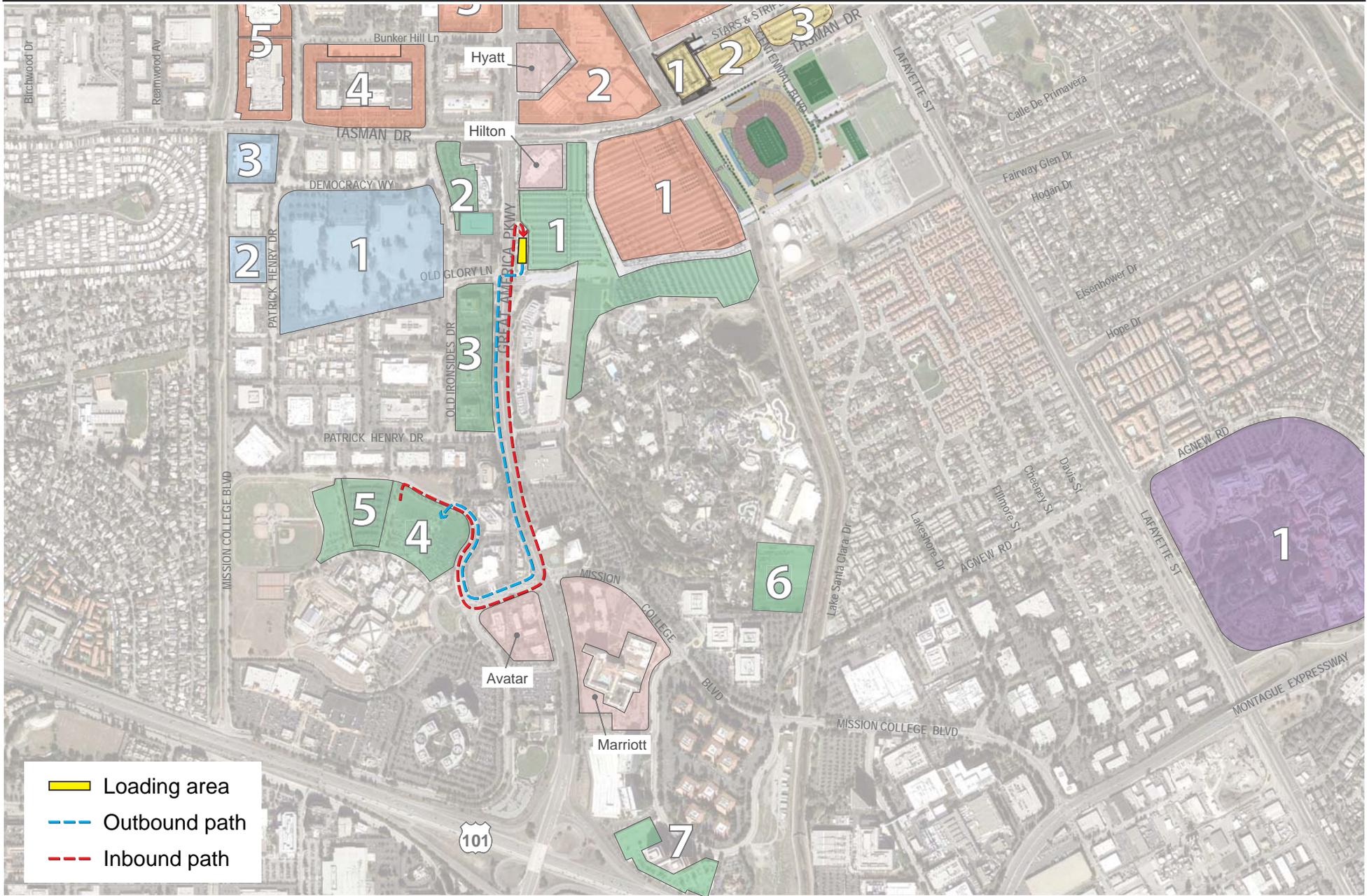
Taxi and Uber Service Access

The Stadium will be served by taxi and Uber, based on demand. Taxis will load, unload, and stage along Calle De Luna, east of Calle Del Sol. Uber vehicles will load, unload, and stage along Calle De Luna, west of Calle Del Sol. Both taxis and Uber vehicles will enter these specified areas via Lafayette Street and Calle Del Mundo. Taxis and Uber vehicles will exit the area by traveling west along Calle De Luna, and turning onto Lafayette Street. The taxi and Uber staging areas are illustrated in **Figure 5.6-1**.

It should be noted that all taxi and uber services must have a City of Santa Clara permit to operate. These permits are granted through the City of Santa Clara Police Department.

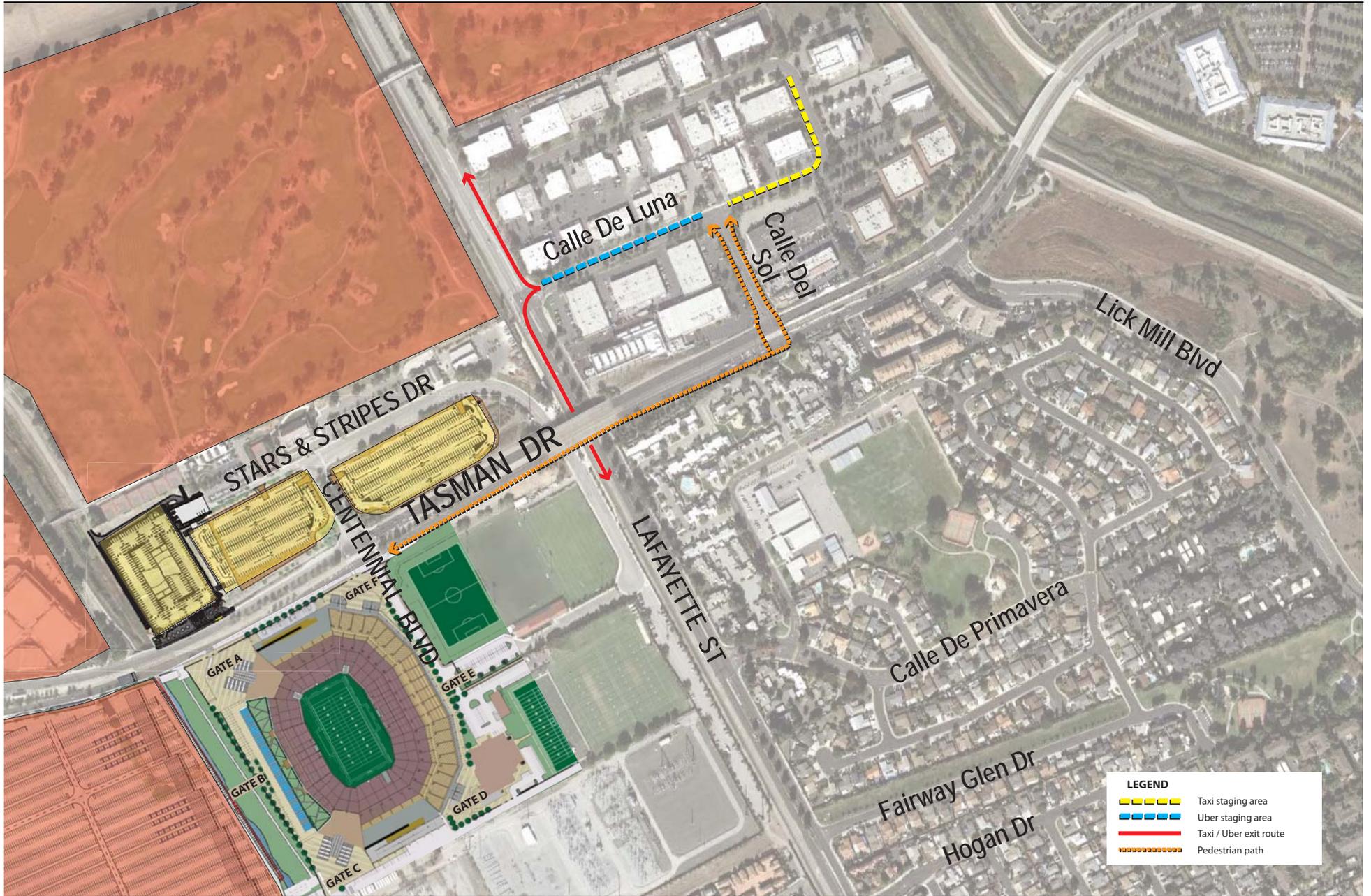
Pedicab Service Access

The Stadium will be served by Pedicabs (i.e., a bicycle taxi service), based on demand. Pedicab operators will enter the Stadium area via northbound Great America Parkway, and park within the Great America Theme Park passenger pick-up / drop-off area located along Great America Parkway (north of Old Glory Lane). Pedicabs will load, unload, and stage within the Great America Theme Park passenger pick-up / drop-off area, and transport patrons to parking facilities, as requested. Pedicab staging area and routes are illustrated **Figure 5.6-2**.



San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.6-2
Pedicab Staging Area and Routes**



5.6-1 Taxi Staging.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 5.6-1
Taxi and Uber Staging Area on Event Days

5.7 Emergency Vehicle Access Plan

5.7.1 Ambulance

Ingress and Egress Plans

Emergency vehicles will be permitted to use the restricted section of Tasman Drive immediately adjacent to the Stadium, although they will be required to travel at slow speeds to ensure pedestrian safety. Access to all gates to the Stadium will be provided via the Stadium's Main Lot (Red Lot 1 and Green Lot 1), Tasman Drive, and Centennial Boulevard. Traffic control officers will be directed to prioritize emergency vehicle access through officer-controlled intersections during events.

Emergency vehicle access routes from both Tasman Drive and Great America Parkway are illustrated in **Figure 5.7-1**.

Staging Areas

Parking immediately to the south side of the Stadium will be dedicated for use by the Police Department, Fire Department, medical / ambulance providers, and other designated users. Specific staging areas for storage of ambulances and other emergency vehicles will be identified by the relevant agencies and providers.

Providers

Event providers of ambulance service, along with their contact information, responsibilities and representatives will be identified by the Stadium Manager.

5.7.2 Police

On-Site Facilities

The Santa Clara Police Department will operate a Temporary Holding Facility (THF) on-site for the purpose of processing event arrestees. Adjacent to the THF will be a conference room that will be used for briefing staff prior to deployment, report writing and issuing equipment. The Police Department will also staff several stations in the Stadium Command Center to oversee Stadium Law Enforcement Operations and the TMOP.

Off-Site Facilities

As part of the Public Safety Plan the Police Department will identify specific locations outside the Stadium for staging mutual aid.

Ingress and Egress Plans

As part of the TMOP's traffic plan, any closed street will have a designated emergency vehicle lane which will be coned off and used exclusively for that purpose. Responding emergency personnel will coordinate with the Stadium Command Post and officer controlled intersections to facilitate emergency vehicle movement.



(5.7-1) Emergency Vehicle Access.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

**Figure 5.7-1
Emergency Vehicle Access**

5.7.3 Fire

Deputy Fire Marshalls will be deployed inside the Stadium to monitor fire alarm systems in the lower-level Fire Command Center and to report emergency situations to the Fire Department representative in the Stadium Command Center. Deputy Fire Marshals will also roam the Stadium to ensure compliance with fire and life safety regulations. The Fire Department will also staff a station in the Stadium Command Center to oversee Stadium Fire Operations including medical responses.

Off-Site Facilities

The Fire Department will deploy Fire Fighting assets in the Main Parking Lot of the Stadium. They will have the ability to respond to calls for service in the surrounding parking lot area, utilizing a Fire Department parking lot patrol vehicle.

Ingress and Egress Plans

As part of the TMOP's traffic plan, any closed street will have a designated emergency vehicle lane which will be coned off and used exclusively for that purpose. Responding emergency personnel will coordinate with Stadium Command Post and officer controlled intersections to facilitate emergency vehicle movement.

5.7.4 Stadium Command Post

The Stadium's Command Post will be a designated space within the Stadium (connected with the Traffic Operations Center at the Santa Clara City Hall) that is linked to cameras and signal controllers at specific intersections, allowing for remote changes to signal operations to occur. In addition to Stadium operations staff, it is expected that Police staff, Fire staff, City planning staff / engineering staff, and Stadium Authority staff will have access to the Stadium's Command Post.



5.8 TMOP Contingency Planning

Instances may occur where transit use is higher than anticipated, and/or vehicular arrival patterns and parking facility use are different than expected. The TMOP must be flexible enough to account for these instances, and contingency plans must be implemented.

5.8.1 Transit Access

Transit ridership during ingress will be closely monitored in order to determine transit capacity needs during egress. If ingress transit ridership totals are greater than anticipated, transit capacity for egress will be expanded to ensure that patrons leaving an event by transit are able to do so in a safe and efficient manner.

Given that Capitol Corridor and ACE will be expected to offer one train each to and from the Stadium, it is expected that riders arriving by these transit providers will also depart by these transit providers. Should higher-than-expected ridership by VTA light rail occur (including riders transferring from Caltrain to VTA), VTA will supplement its light rail service with special express buses carrying passengers directly from the Stadium to the Mountain View VTA / Caltrain Station during egress. The number of supplemental express buses to be provided will be determined by the Stadium Manager and VTA, based on the number of passengers arriving by VTA light rail. VTA supplemental express buses will stage within the closed section of Tasman Drive, in the westbound direction, adjacent the Great America VTA Station. During egress, patrons will be directed either into westbound VTA trains, or into supplemental express buses.

5.8.2 Vehicular Access and Parking

The potential exists for patrons to fill lots unevenly (i.e., lots north of the Stadium may be filled faster than lots south of the Stadium). Given that ingress routes are designed to direct patrons to a specific set of parking facilities, we must have a plan to re-route patrons to other lots without substantially disrupting the TMOP's ingress plan.

For each event, the Stadium Manager will identify lots where cash and / or overflow vehicles will be accommodated, and will communicate the location of these lots to traffic personnel. If the circumstance arises where lots are filling unevenly, and / or it becomes apparent that particular cash lots will soon likely be full and unable to accommodate additional vehicles while ingress is still underway, cars will be directed to alternate cash lots via identified routes on the streets or highways surrounding the Stadium.

Redirecting Patrons from North of the Stadium

1. Highway Changeable Message Signs (CMS) directing cash customers to the Great America Parkway / SR 237 ramps south will be adjusted such that they are no longer reflect this. Cash customers will instead be directed towards cash lots via the Lawrence Expressway / SR 237 ramps, the Lawrence Expressway / US 101 ramps, or the Great America Parkway / US 101 ramps.
2. Cash customers that continue to come from SR 237 will be directed south along Great America Parkway, right onto Old Mountain View Alviso Road, left onto Patrick Henry, and across Tasman Drive to cash lots south of the Stadium. Street CMS directing cash customers to lots north of the Stadium will be adjusted to reflect this as well.

Redirecting Patrons from South of the Stadium

1. Highway CMS directing cash customers to the Great America Parkway / US 101 ramps will be adjusted such that they are no longer reflecting this. Cash customers will instead be directed towards cash lots via the Lawrence Expressway / SR 237 ramps, the Lawrence Expressway / US 101 ramps, or the Great America Parkway / SR 237 ramps.
2. Cash customers that continue to come from US 101 will be directed north along Great America Parkway, and across Tasman Drive to cash lots north of the Stadium. Street CMS directing cash customers to lots south of the Stadium will be adjusted to reflect this re-route.

Redirecting Patrons from West of the Stadium

1. Highway CMS directing cash customers to the Lawrence Expressway / SR 237 ramps or the Lawrence Expressway / US 101 ramps will be adjusted such that they are no longer reflecting this. Cash customers will instead be directed towards cash lots via the Great America parkway / SR 237 ramps, or the Great America Parkway / US 101 ramps.
2. Cash customers that continue to come from Lawrence Expressway will continue east along Tasman Drive, and be directed either left or right at Great America Parkway towards cash lots north or south of the Stadium. Street CMS directing cash customers to lots west of the Stadium will be adjusted to reflect this re-route.

Additionally, as a final measure, the Santa Clara Police Department may identify on-street parking along Patrick Henry Drive, Old Ironsides Drive, Old Glory Way, Old Mountain View Alviso Road, Betsy Ross Drive, Bunker Hill Lane, Freedom Circle, or Highborn Drive for parking purposes. These streets will be designated as restricted on event days, and will only be available if absolutely necessary.



6.0 Weekday Considerations

In addition to planned procedures for event days, the TMOP provides a plan for weekdays leading up to events, and instances where events are to occur on a weekday. Though most NFL games are scheduled for Sunday afternoons, there is the potential for some games to occur on Monday or Thursday evening, and pre-season games could also occur on Friday or Saturday evening.

6.1 Advance Communication

6.1.1 Patrons

Stadium patrons attending weekday events will be given substantial advance notice regarding entrance and exit procedures, including acceptable hours to arrive at parking facilities (so as not to interfere with weekday business). Patrons should expect substantial delays traveling to weekday events, so patience, early arrival, and use of transit (including VTA light rail and buses, Caltrain, and Capital Corridor trains) will be encouraged and emphasized. In particular, specific details on gameday transit service to and from the stadium will be provided to encourage patrons to use public transportation in lieu of private vehicles.

This information will be contained in the information packets mailed to season ticket holders, and disseminated on www.LevisStadium.com and via print (newspaper) and media outlets. Ticket holders with email addresses on file will also receive email notification of special weekday rules regarding arrival and parking.

6.1.2 Area Businesses

Area businesses that anticipate providing parking for events will be required to obtain an off-site parking permit from the City. These area businesses regularly using any of the off-site parking facilities designated as event day parking will need to vacate these spaces approximately five hours prior to the start of an event. Setup of trash, portable toilets, and other facilities at off-site event day parking facilities will take place the night prior to the event. Contracts secured by the Stadium Manager for use of off-site parking facilities on weekdays will include provisions to this effect in order to provide adequate patron parking for weekday events and minimize conflicts between area businesses and Stadium traffic. Should any of the property owners agreeing to provide their parking facilities for use on weekend events refuse to provide their parking on weekday events, the Stadium Manager will contract with other property owners with parking facilities in the vicinity of the Stadium or make other arrangements as needed to ensure that an adequate supply of patron parking is provided for weekday events.

Contracts signed between the Stadium Manager and nearby property owners for use of their parking facilities will include requirements for property owners to ensure that businesses and employees regularly using their facilities are notified of the need to vacate parking spaces approximately five hours prior to the start of a game, in advance of weekday events. These notices will also include information regarding alternative options for travel (e.g., transit) and recommended ingress and egress routes arriving in and leaving the area before and during the pre-game period. VTA light rail and bus vehicles will also begin advertising these special provisions one week before weekday events via in-vehicle public announcement (PA) systems and / or paper flyers or advertisements. Area businesses with parking that is not included among the Stadium's weekday event day parking facilities will not be subject to provisions to vacate parking spaces approximately five hours prior to the start of a game, but will be similarly notified of Stadium-related impacts to the transportation network in advance of weekday Stadium events through emails, fliers, newspaper, and media outlets.

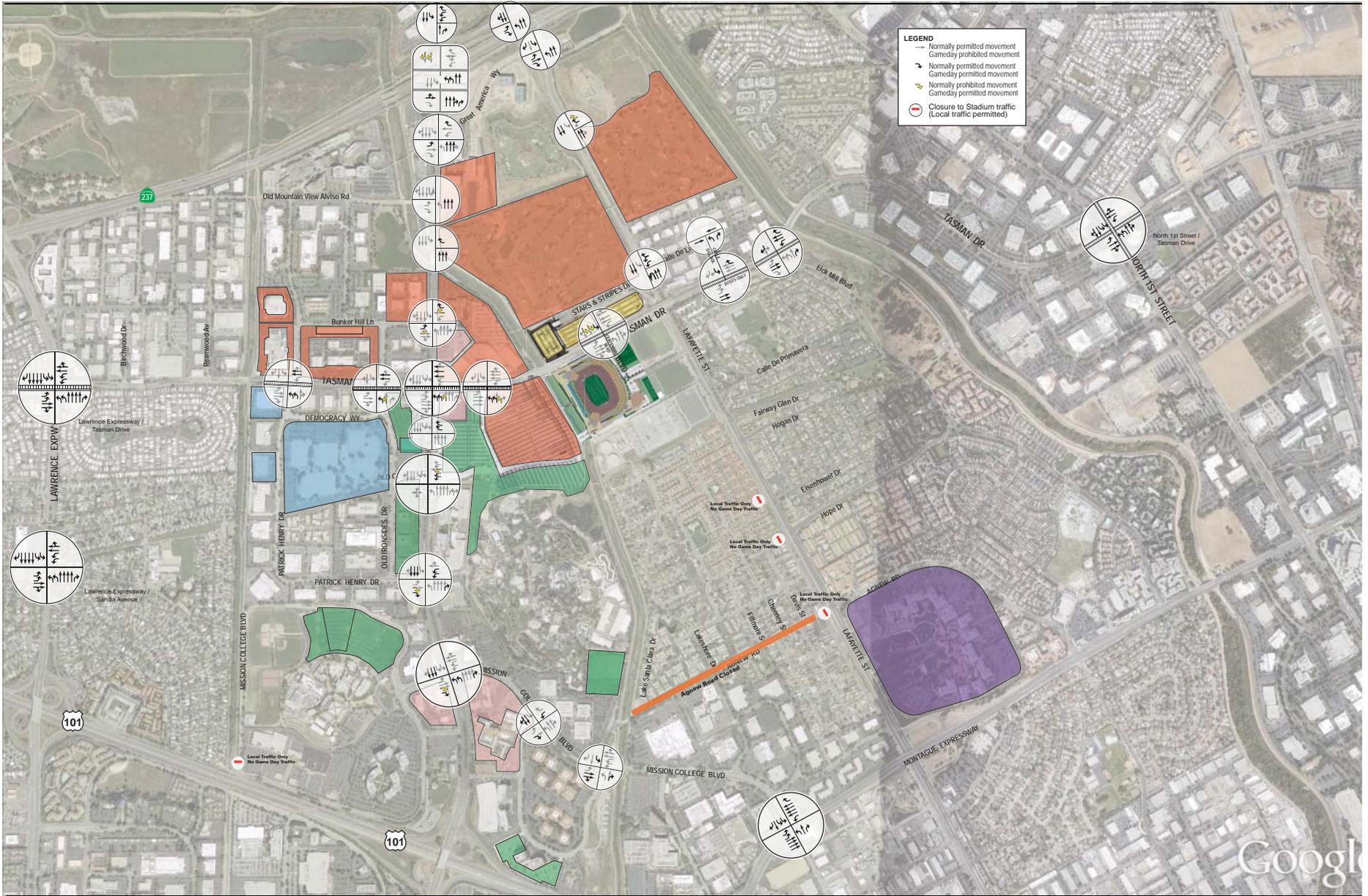
6.1.3 Changeable Message Signs

Four days in advance of a weekday event, changeable message signs are to be placed at key locations (e.g., nearby freeway ramps and key roadways) to warn drivers to expect traffic congestion due to stadium-related traffic. Signs will indicate the day and time of the event, warn drivers that substantial congestion is expected, and recommend alternative routes using other freeway ramps or streets to avoid stadium-related traffic. The locations of the message signs are shown in **Figure 5.1-2**. These locations have been selected for sign placement because they serve high volumes of traffic, and because they offer direct access to the Stadium site.

6.2 Vehicle Access

Lane adjustments implemented for weekend events for the vehicle ingress period may not be possible for weekday events given the large number of employees needing to leave the area. Though area businesses whose parking facilities will not be used for event parking will be provided with advance communication and instructions, employees of these businesses may not choose to vacate the area five hours prior to the start of an event, which may place them in conflict with stadium-related traffic flows entering the area. Retaining inbound and outbound access on the surrounding roadway network will minimize the impact of weekday events on these employees and provide them with a means of leaving the area. However, the transit- and pedestrian-only zone along Tasman Drive between Convention Circle and Centennial Boulevard must be in effect for large events on weekdays, beginning five hours before the start of an event, to ensure adequate pedestrian space for stadium patrons arriving by foot from surrounding parking facilities and allow for the efficient discharge of passengers arriving by light rail and bus. While inbound lane reconfigurations will not occur, changes to signal timing will be implemented to optimize stadium-bound traffic flows as well as normal weekday traffic patterns.

While lane adjustments during the vehicle ingress period (other than the Tasman Drive closure) will not be implemented for weekday events, it is expected that the majority of employees in the surrounding area will have departed by football game halftime (two hours after the start of an evening event). All other provisions for the vehicle egress period for weekend events will be in effect for weekday events. Any employees remaining in the area will still be able to leave the stadium area by following the designated vehicle egress routes for stadium traffic, as shown in **Figure 6-1**.



Egress.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 6-1
Proposed Outbound Lane Configurations and Control

6.3 Transit Access

Similar to automobile considerations, special measures on transit services and facilities will be required before and after weekday events. This will primarily affect arrivals for weekday evening events by all modes of transit service, as event arrivals could coincide with PM peak commute traffic for surrounding uses. Weekday event departure activity could occur after typical commute hours. The available capacity of transit service for the inbound movement could be limited by the demands of regular transit riders during the evening peak commute period.

Post-game VTA light rail service for weekday stadium events will be similar to that for weekend stadium events. Regular weekday evening service after 8:00 PM on VTA's Mountain View – Winchester light rail line currently operates on 30-minute headways in each direction, but special event service will be provided for weekday stadium patrons based on demand. These provisions could include longer trains (three cars) and increased frequencies, in line with gameday transit service for weekend Stadium events. Special event trains could also be scheduled which will provide direct service to the stadium from nearly every station in the light rail system, thus, eliminating the need for a transfer. Similarly, as ACE can provide special weekend service to accommodate demand to the Stadium for Sunday football games. However, ACE will run its normal schedule on weekdays.

Other transit services, such as VTA buses, Caltrain, and Capitol Corridor, will provide their regular service on weekday evenings. Currently, three VTA bus lines serve the Stadium area, the 55, 57, and 60. During Stadium ingress, the 55 provides four buses per hour, the 57 provides two buses per hour, and the 60 provides two buses per hour. During Stadium egress, all three bus lines provide one bus per hour. Assuming a carrying capacity of 45 passengers per bus, VTA buses can transport 360 patrons per hour during ingress, and 135 patrons per hour during egress assuming service will not be augmented for the weekday event. This level of ridership would be lower than what would be expected for football games on Sunday afternoons when additional rolling stock will be available. VTA could also provide special event-day Express Bus services from locations around the County depending on the outcome of transit demand forecasting.

During weekday games and major events when Tasman Drive is closed, VTA Bus lines 140 and 330 will need to be rerouted as they currently operate along Tasman Drive. These two bus lines will be rerouted from Tasman Drive to Great America Parkway, Great America Way, Lafayette Street, Calle De Luna, and Calle Del Sol before resuming their normal route on Tasman Drive.

6.4 Parking

While most commercial parking in the stadium area is vacant during weekend events, this will not be the case during weekday events. During weekday events, parking lots intended for use as event parking in commercial areas near the Stadium, outside of stadium controlled and owned spaces, will need to be vacated prior to the beginning of stadium ingress. Thus, as stated previously, special agreements with these commercial properties will be required in order for a large weekday event to occur. Daytime users of parking spaces in these facilities will be directed by their respective employers and/or property owners to vacate the facility approximately five hours prior to the start of an event. While it is likely that not all spaces will be vacated before the pre-game arrival of stadium patrons, the standard roadway network (except minor changes to signal timing and the closure of Tasman Drive between Convention Center Circle and Centennial Boulevard) will remain in effect until football halftime to allow any remaining employees of these businesses to easily leave the area in any direction. After halftime, lane adjustments will be implemented similar to weekend events, but employees would still be able to leave the area using the designated vehicle egress routes for stadium traffic.



Based on historic information on stadium patron travel and parking behavior at Candlestick Park, a weekday evening game will generate a demand for approximately 1,500 additional parking spaces above a weekend game. As such, the Stadium Manager will need to provide additional parking beyond the parking program for weekend events, by securing the use of additional parking spaces in existing off-site parking facilities.

6.5 Residential/Business Notifications and Communications

Communication regarding anticipated traffic and parking will be a key to holding a successful large-scale weekday event in the Stadium. This includes advance proactive communication with both residents and businesses to inform them of the event, date and measures to be taken during these periods. To enable maximum capacity, and thus reduce the period of congestion during a weekday event, residents and businesses in the surrounding area will need to adjust their travel behavior accordingly.

Prior to a large-scale weekday event, potentially impacted business property owners as well as residents in the area bounded by Lawrence Expressway, Guadalupe River, SR 237, and US 101 will be notified by the Stadium Manager either by email or regular mail (the Stadium Manager may also consider circulating an annual schedule of events to residents). Additionally, as part of the community outreach for businesses and residents, the Stadium Manager will develop a smartphone application that community members can sign up for to receive recorded telephone messages or text messages containing information regarding the event time as well as the extent of any expected lane or street closures, as well as designated local access routes to avoid Stadium-related traffic, before, during, and after weekday-events. The notices will also contain information regarding which off-site parking facilities will need to be vacated approximately five hours prior to the start of an event, as employees and visitors of other businesses in the area may otherwise regularly use these designated off-site Stadium parking facilities.

Information disseminated through changeable message signs or other signage, online via the 49ers website, via media, or in print as part of the Stadium's general communications program as described in Section 6.1 will also serve to notify residents and businesses of the associated effects of weekday stadium events on local transportation conditions.

This page intentionally left blank.



7.0 Integration/Coordination with Nearby Facilities

7.1 Great America Theme Park

Stadium activity may coincide with Great America Theme Park activity. In the event that this occurs, safe and efficient access for Great America Theme Park patrons must be maintained. To accommodate this level of event traffic, reconfiguration of the surrounding roadway network for some period of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to Great America Theme Park can be made most efficient by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on Stadium event days, and how access to Great America Theme Park will be provided.

7.1.1 Great America Theme Park Parking During Events

As detailed in section 5.5 of the TMOP, parking on event days for patrons is expected to occur in numerous parking lots within walking distance of the Stadium, including the shared Stadium / Great America Theme Park parking lot. The Theme Park is open on weekends from late March in the spring until late May, plus Spring Break week; every day from late May until late August; and thereafter on weekends until Halloween. In addition, the Theme Park will be open for other special events through agreement that may be held throughout the year. Of this total (approximately 150 operating days), 6-12 of those days may coincide with NFL events (depending on whether one or two teams use the stadium as a home venue). Of those 6-12 NFL events, 2-4 of those days will be pre-season games which typically will have lesser impacts on parking and traffic). The possibility of NFL-Theme Park conflicts could be restricted to those few days (6-12 maximum) in August, September, and October (toward the end of the Theme Park's season) when the Park will be open and events could occur on the same days. Other events (less than 20 per year) could be scheduled by the Stadium Manager in cooperation with the Theme Park to minimize access and parking conflicts. On occasions when the Theme Park is operating and a Stadium event is scheduled, coordination between both parties is necessary to ensure efficient flow of vehicles into and out of the two adjacent venues. This section of the TMOP outlines procedures for Great America Theme Park attendee parking during Stadium events.

Parking Supply

Upon completion of Stadium construction, the Great America parking lot will contain approximately 6,500 parking spaces. On occasions when the Theme Park is operating and a Stadium event is scheduled, the Stadium will have access to 5,000 of these spaces, and Park patrons will have access to two designated parking lot subsections with approximately 1,500 parking spaces. The designated Great America Theme Park parking supply on event days is illustrated in **Figure 7-1**.



7-1) GA Parking Supply on Event Day

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-1

**Great America Theme Park Parking Supply on Event Day
when Great America is open on Event Day**



Event Day Parking Lot Operations

Given the lower cost of Great America Theme Park parking (daily parking passes range from \$15 to \$22, season parking passes range from \$55 to \$75, or free season parking with other passes) versus Stadium event parking, and the proximity of the designated Theme Park parking lot to the Stadium, it is possible that some Stadium patrons may attempt to park in the designated Theme Park parking lot. Methods to prevent Stadium patrons from parking in the designated Theme Park parking lot will be determined through ongoing meetings between Great America staff, the Stadium Manager, and the City of Santa Clara Police Department; and will be implemented ahead of dual-use events.

At this time, two potential event day parking lot operations plans are being considered. The two options are as follows:

Option A:

“Proof of Admittance” options, such as numbered spaces with payment upon entry, or proof after entry via various means are available. Parking attendants will be required to monitor the parking facility, check passengers in all exiting vehicles, and report any violators. Cooperation between the Stadium Manager, Santa Clara Police Department, and the Theme Park will be required to determine an appropriate course of action for violators. Based on findings, adjustments to the TMOP will be proposed.

Option B:

Temporary fencing could be introduced to limit pedestrian access points, and allow for monitoring of pedestrians exiting their vehicles. Such a plan will allow for parking attendants to be able to identify parking violations without slowing traffic flow to parking spaces. Cooperation between The Stadium Manager, Santa Clara Police Department, and the Theme Park will be required to determine an appropriate course of action for violators. Based on findings, adjustments to the TMOP will be proposed.

7.1.2 Great America Theme Park Vehicle Access during Events

It is a goal of the TMOP to ensure safe and efficient access for Great America patrons on Stadium event days coinciding with Great America operation. This section of the TMOP describes a detailed access plan specifically for Great America patrons, identifies where advance signage will be placed, and outlines how the message of event day access will be relayed to patrons.

Access Plan

The Stadium is located northeast of the Great America Theme Park on Tasman Drive, adjacent to the Great America parking lot. In general, Stadium-related traffic is expected to use the same major access routes to and from the Stadium as Great America Theme Park patrons. In the event that Stadium activity coincides with Great America Theme Park activity, safe and efficient access for Great America Theme Park patrons must be maintained. To accommodate the level of Stadium event traffic, the reconfiguration of the surrounding roadway network will be required for some periods of time before and after events to ensure safe and efficient travel to and from the Stadium. As a result, access to the Great America Theme Park can be achieved most efficiently by entering and exiting via designated roadways and directions. This section discusses changes to the roadway network and circulation patterns that will occur on Sunday afternoon event days, and details how access to Great America Theme Park will be provided.

Entering the Theme Park

Automobiles destined for the Theme Park parking lot will be able to enter the designated parking facilities via Great America Parkway from the south. However, Theme Park patrons will be encouraged to enter from the south, via U.S. 101 and Great America Parkway, as this is the easiest access route. Theme Park patrons will be encouraged to enter from the south by way of posted signage, as well as via online notifications on the Great America website. Automobiles approaching from the east on Tasman Drive will be diverted towards Mission College Boulevard via Lick Mill Boulevard and Montague Expressway.

It should be noted that the majority of Theme Park patron arrivals for typical Theme Park operation days are unlikely to conflict with the Stadium egress period, as Stadium events will typically conclude between 4:00 PM and 5:00 PM, when Theme Park arrivals tend to be very low. However, some degree of Theme Park patron arrivals will occur during the Stadium egress period. Further, special events at the Theme Park, such as the "Halloween Haunt," may begin at 5:30 PM, conflicting with the Stadium's egress period for Sunday afternoon events. In those instances where Theme Park patron arrival will occur during Stadium egress, patrons destined for the Theme Park parking lot will continue to be able to enter the designated parking facilities via Great America Parkway from the south, with entry from the south being the preferred point of entry. Automobiles approaching from the east on Tasman Drive will continue to be diverted towards Mission College Boulevard via Lick Mill Boulevard and Montague Expressway, as the Tasman Drive closure will remain in effect during Stadium egress.

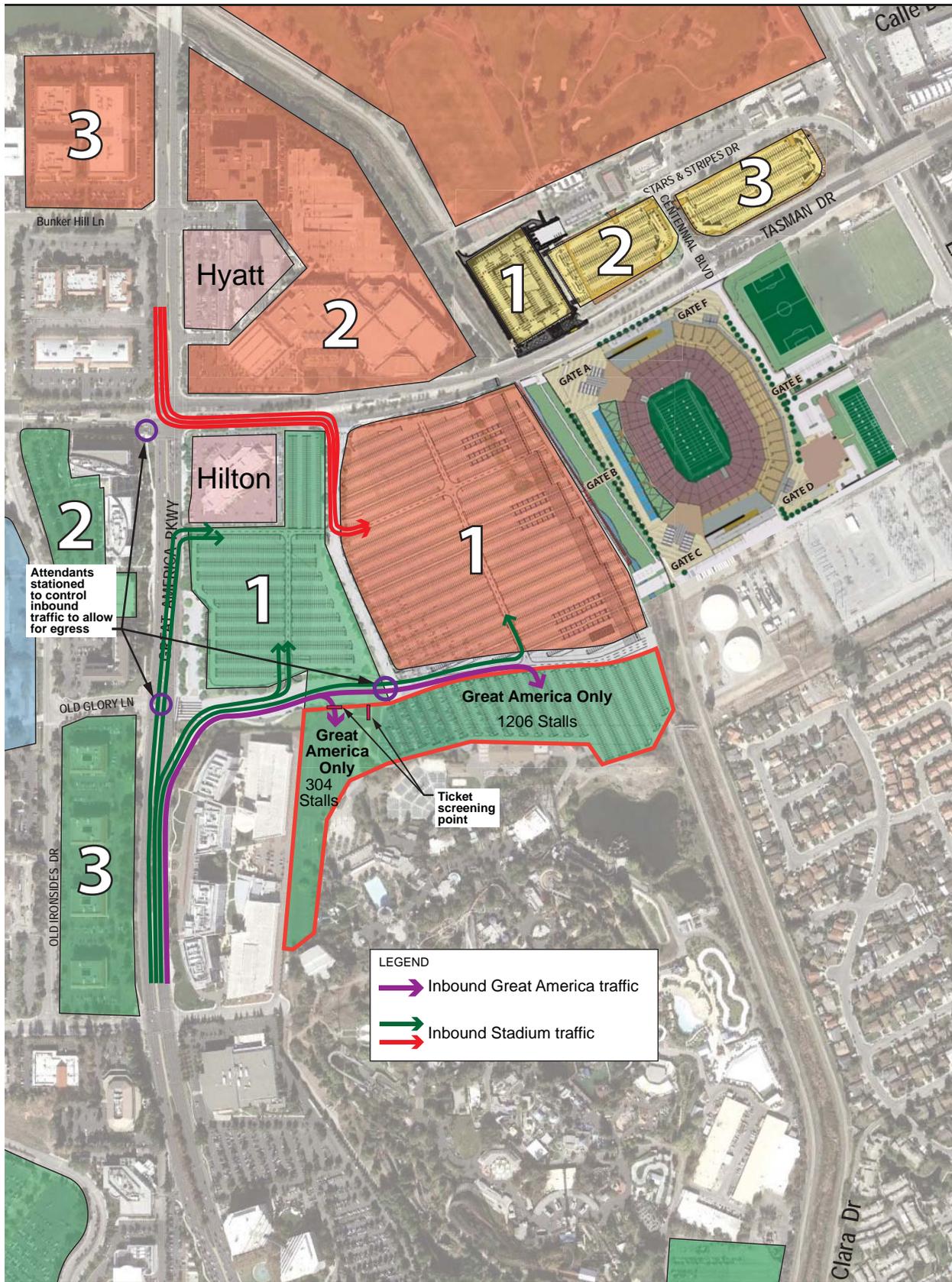
Exiting the Theme Park

Theme Park patron departure is unlikely to substantially conflict with the Sunday afternoon Stadium ingress period, as Stadium ingress will typically occur between 8:00 AM and 1:00 PM, when Theme Park departures tend to be minimal. Based on traffic counts collected at all Great America vehicular access points, only a small percentage of Great America departures occur between the hours of 8:00 AM and 1:00 PM on Sundays. Automobiles exiting the Great America Theme Park designated parking facility during the Stadium ingress period must do so from the driveway at the Great America Parkway / Old Glory Lane intersection, where they will be required to turn left onto southbound Great America Parkway towards U.S. 101.

Automobiles exiting the Great America Theme Park designated parking facility from the driveway at the Great America Parkway / Old Glory Lane intersection during the Stadium egress period, or after the egress period has concluded will be able to:

1. Exit north along Great America Parkway then west along Tasman Drive towards the Lawrence Expressway;
or,
2. Exit south along Great America Parkway to US-101.

An illustration of traffic flow in the vicinity of the Great America Theme Park on event days is provided in **Figures 7-2a** and **7-2b**. It should be noted that Great America traffic flow is shown against the Stadium ingress period.



(7-2a) GA Parking Supply on Event Day-Inbound | San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-2a

Access to Great America Theme Park on Event Day when Great America is open on Event Day - Inbound



(7-2b) Access to GA on Event Day-Outbound.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-2b

Access to Great America Theme Park on Event Day when Great America is open on Event Day - Outbound



Advance Signage

In order to notify traffic approaching the impacted area of event day roadway configuration and access changes, changeable message signs and directional signage are to be used. Changeable message signs will be posted at each of the area's major access roadways. Each sign will indicate that a Stadium event will be occurring, and will recommend an alternate route. The locations of the changeable message signs is shown in **Figure 7-3**.

Temporary directional signage will be placed throughout the Stadium area, in areas where signage currently exists, to clearly identify alternate routes for Great America Theme Park related traffic.

Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and the Theme Park will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. Public awareness strategies and communications strategies for implementation include:

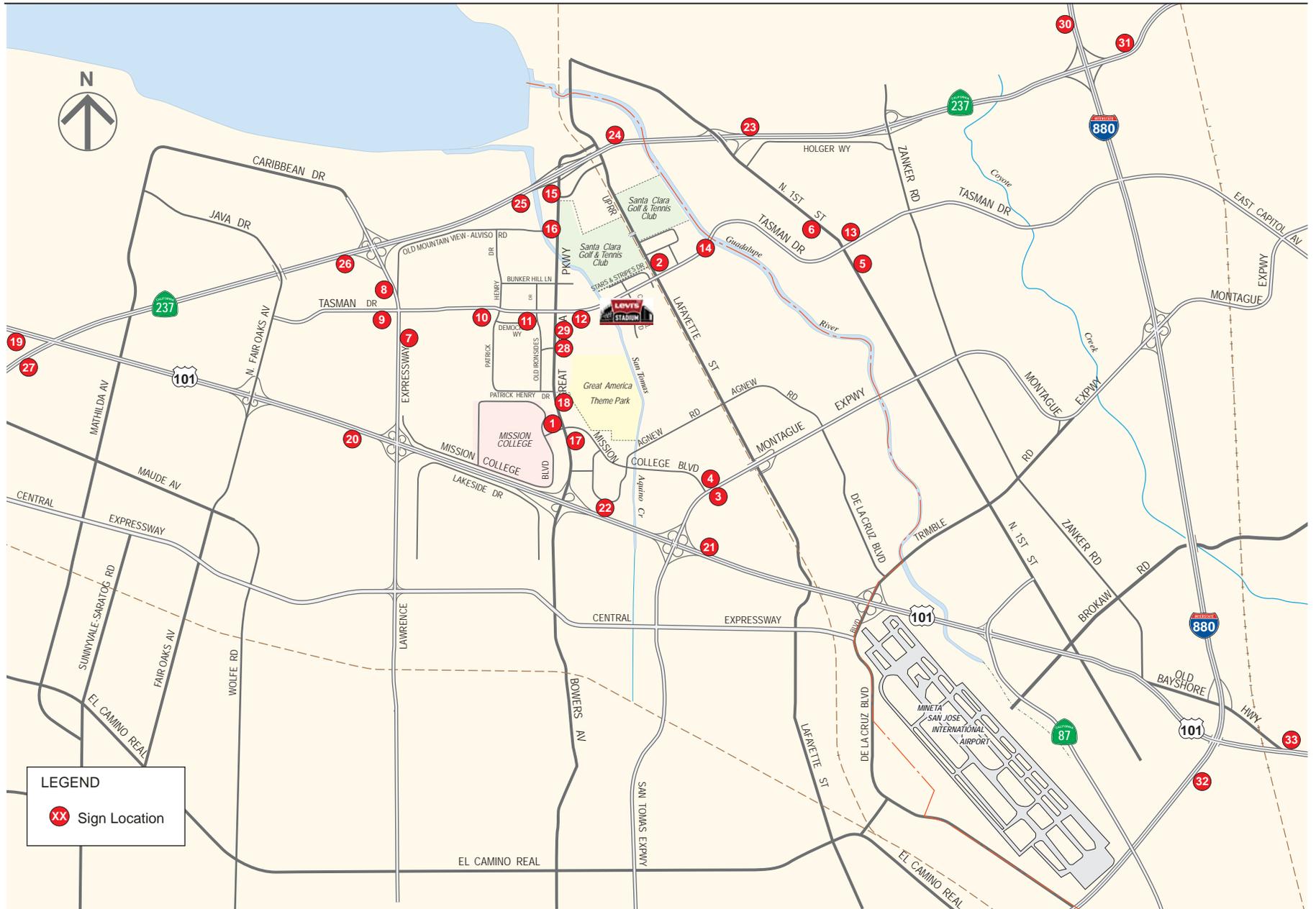
- Education on ticket purchase and/or with tickets
- Brochures and mailers
- Press releases and media alerts
- Telephone hotline
- Smartphone application
- Web-based dissemination

7.2 Techmart and Convention Center Vehicle Access during Events

Similar to Great America, Stadium activity may coincide with Techmart and Convention Center activity. In the event that this occurs, safe and efficient access for Techmart and Convention Center patrons must be maintained. To accommodate this level of event traffic, reconfiguration of the surrounding roadway network for some periods of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to the Techmart and Convention Center, can be achieved most efficiently by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on Stadium event days, and how access to Techmart and the Convention Center will be provided.

Access Plan

The Stadium is located southeast of the Techmart and Convention Center on Tasman Drive, adjacent to the Great America parking lot. Vehicular access to the area east of the Convention Center's Tasman Drive entrance will be strictly prohibited on event days, as the area along Tasman Drive between the Convention Center Tasman Drive entrance and Centennial Boulevard will be designated for pedestrian and light rail transit use only. On event days, police officers will regulate traffic flow at the Great America Parkway / Bunker Hill Lane intersection and ensure that patrons of Techmart and the Convention Center can gain access to these facilities.



Advance Event Message Signs (7-3).ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-3

Advance Event Message Signs



Entering Techmart and the Convention Center

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, the most efficient method of accessing the Techmart and Convention Center parking areas is by entering from the north on southbound Great America Parkway, and turning left at the Bunker Hill Lane entrance. Access to the Techmart and Convention Center entrance on Tasman Drive and the eastbound left-turn at the Tasman Drive/Convention Center entrance will be prohibited as part of the Tasman Drive closure.

Exiting Techmart and the Convention Center

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Techmart and Convention Center patrons will be required to make a right-turn out of the parking lot and exit onto northbound Great America Parkway towards SR 237. An illustration of traffic flow in the vicinity of Techmart and the Convention Center on event days is provided as **Figure 7-4**.

Advance Signage

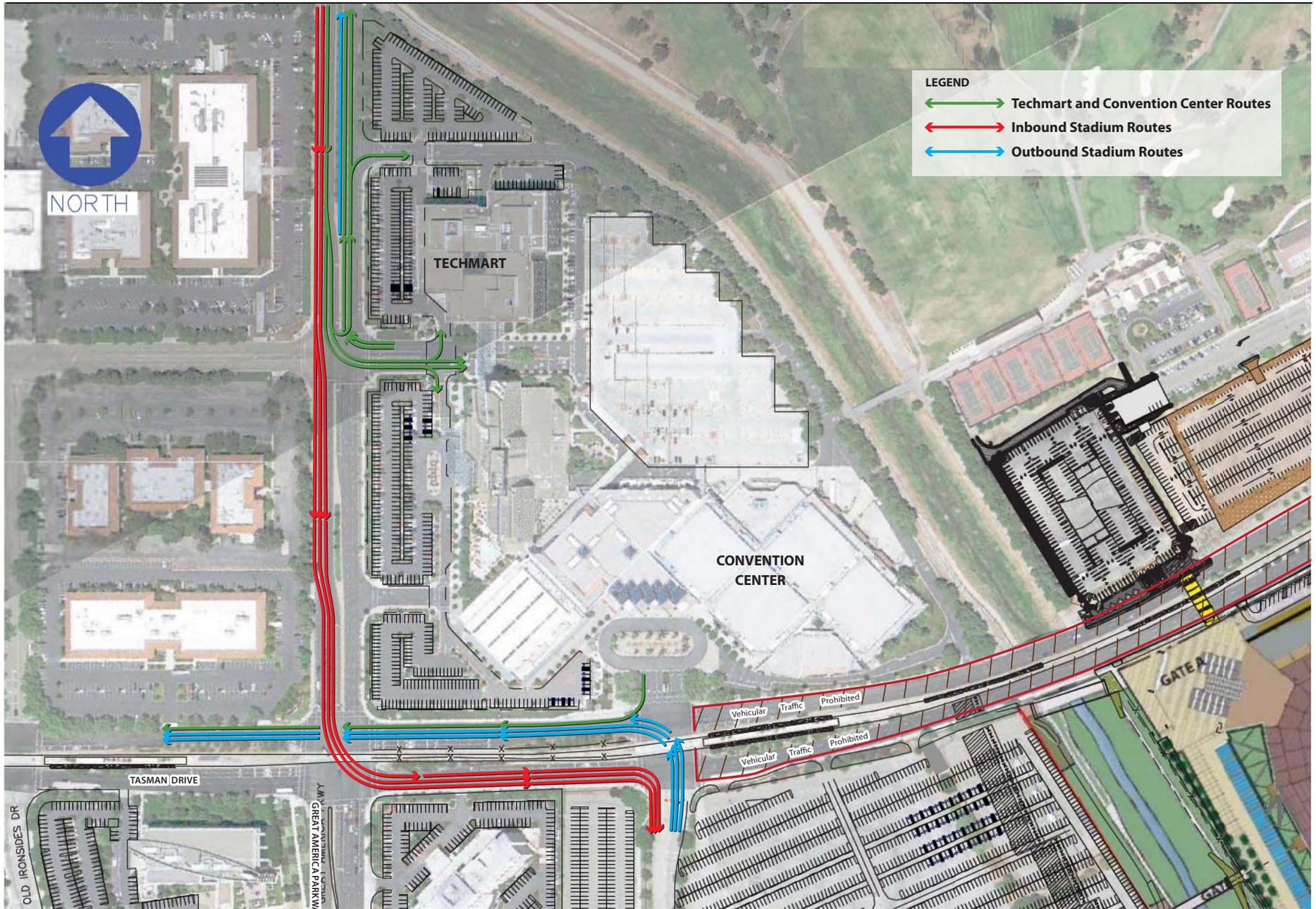
In order to notify traffic approaching the impacted area of event day roadway changes, changeable message signs and directional signage are to be used. The changeable message signs shall be posted at each of the major access roadways. Each sign will indicate that a Stadium event will be occurring, and will recommend an alternate route. The locations of the changeable message signs, including the message to be displayed at each location, is shown in **Figure 7-3**.

Directional signage will be placed throughout the Stadium area to clearly identify alternate routes for Techmart and Convention Center related traffic. The locations of all advance signage are illustrated in **Figure 7-3**.

Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and Techmart and the Convention Center will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. The Stadium Manager shall communicate the Stadium's anticipated Annual Events Calendar to all neighboring property owners so that they may plan accordingly, and collect annual event scheduling information from Techmart and the Convention Center. Public awareness strategies and communications strategies for implementation include:

- Brochures and mailers
- Press releases and media alerts
- Telephone hotline
- Web-based dissemination
- Smartphone application
- Public meetings



[7-4] Access to Techmart & Convention Center

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-4

Access to Techmart and Convention Center on Event Day



7.3 Santa Clara Youth Soccer Park Vehicle Access during Events

Stadium activity may coincide with Santa Clara Youth Soccer Park activities. In the event that this occurs, safe and efficient access, and parking, for Youth Soccer Park users must be maintained. To accommodate event day levels of traffic, reconfiguration of the surrounding roadway network for some periods of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to this facility can be achieved most efficiently by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on Stadium event days and how access to the Santa Clara Youth Soccer Park will be provided.

Access Plan

The Stadium is located west of the Youth Soccer Park. On event days, police officers will regulate traffic flow and prohibit vehicles from traveling along Tasman Drive between Convention Center Circle and Centennial Boulevard. Vehicular access to the area west of the Centennial Boulevard / Tasman Drive intersection will be strictly prohibited on event days, as the area along Tasman Drive between Convention Center Circle and Centennial Boulevard will be designated for pedestrian and transit use only. Traffic officers will control the pedestrian crossings at the intersection of Centennial Boulevard and Stars & Stripes Drive.

Entering the Santa Clara Youth Soccer Park

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Santa Clara Youth Soccer Park can only be accessed by patrons from the east access point at the cul-de-sac on Stars & Stripes Drive. Youth Soccer Park related traffic will make a right turn onto northbound Centennial Boulevard from westbound Tasman Drive, turn right onto Stars & Stripes Drive, and continue to the parking lot access point at the end of the cul-de-sac.

Exiting the Santa Clara Youth Soccer Park

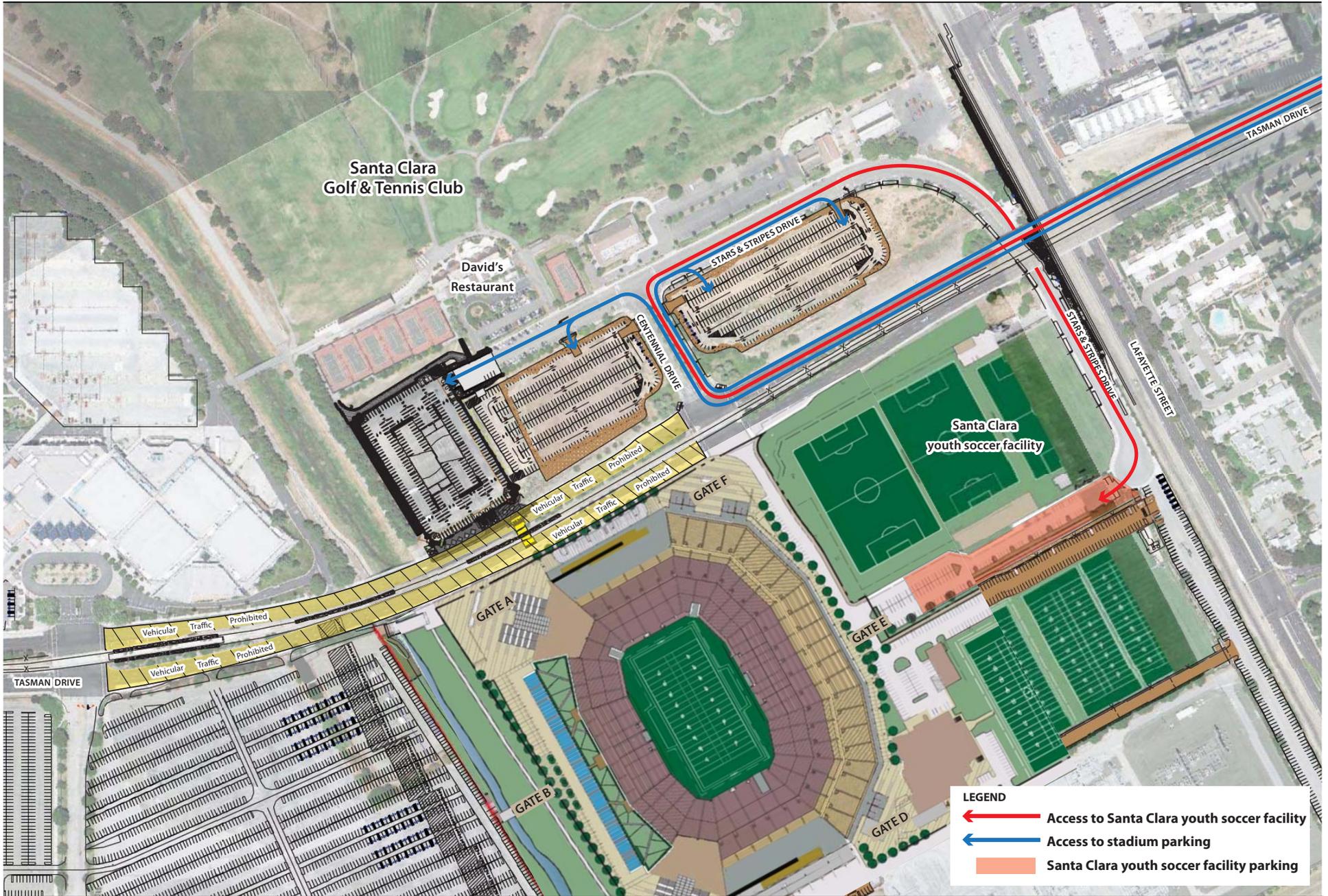
Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Santa Clara Youth Soccer Park patrons will be required to exit the facility via the access point at the cul-de-sac on Stars & Stripes Drive. Youth Soccer Park related traffic will make a left turn onto southbound Centennial Boulevard from westbound Stars & Stripes Drive, and will then be required to turn left onto eastbound Tasman Drive towards North 1st Street. An illustration of traffic flow in the vicinity of the Santa Clara Youth Soccer Park on event days is provided as **Figure 7-5**.

Advanced Notice

Advance notice for scheduled users of the soccer facilities will be sent via the City Scheduler directly to each user.

Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and the Santa Clara Youth Soccer Park will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. The Stadium Manager will communicate the Stadium's anticipated Annual Events Calendar to all neighboring property owners so that they may plan accordingly, and collect annual event scheduling information from the Santa Clara Youth Soccer Park. Public awareness strategies and communications strategies for implementation are described in Section 7.1.2.



[7-5] Access to youth soccer facility.ai

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara

Figure 7-5

Access to Santa Clara youth soccer facility on Event Day



7.4 Santa Clara Golf & Tennis Club Vehicle Access during Events

For large events, it is expected that the Stadium will utilize the Santa Clara Golf Course for parking. When the Santa Clara Golf Course for parking is being used for Stadium event parking, the Santa Clara Tennis Club will be closed. However, for smaller events that do not utilize the Santa Clara Golf Course for parking, safe and efficient access, and parking, for Golf and Tennis Club users must be maintained. To accommodate event day levels of traffic, reconfiguration of the surrounding roadway network for some periods of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to this facility can be achieved most efficiently by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on event days and how access to the Santa Clara Golf & Tennis Club will be provided.

Access Plan

The Stadium is located south of the golf and tennis club. On event days, police officers will regulate traffic flow and prohibit vehicles from traveling along Tasman Drive between Convention Circle and Centennial Boulevard. Vehicular access to the area west of the Centennial Boulevard / Tasman Drive intersection will be strictly prohibited on event days, as the area along Tasman Drive between Convention Circle and Centennial Boulevard will be designated for pedestrian and transit use only. Traffic officers will control the pedestrian crossings at the intersection of Centennial Boulevard and Stars & Stripes Drive.

Entering the Santa Clara Golf & Tennis Club

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Santa Clara Golf & Tennis Club can be only accessed by patrons from westbound Tasman Drive by making a right turn onto northbound Centennial Boulevard from westbound Tasman Drive and continuing onto Stars & Stripes Drive to the parking lot entrance(s). Users of these facilities will park on-street adjacent to the Santa Clara Golf & Tennis Club.

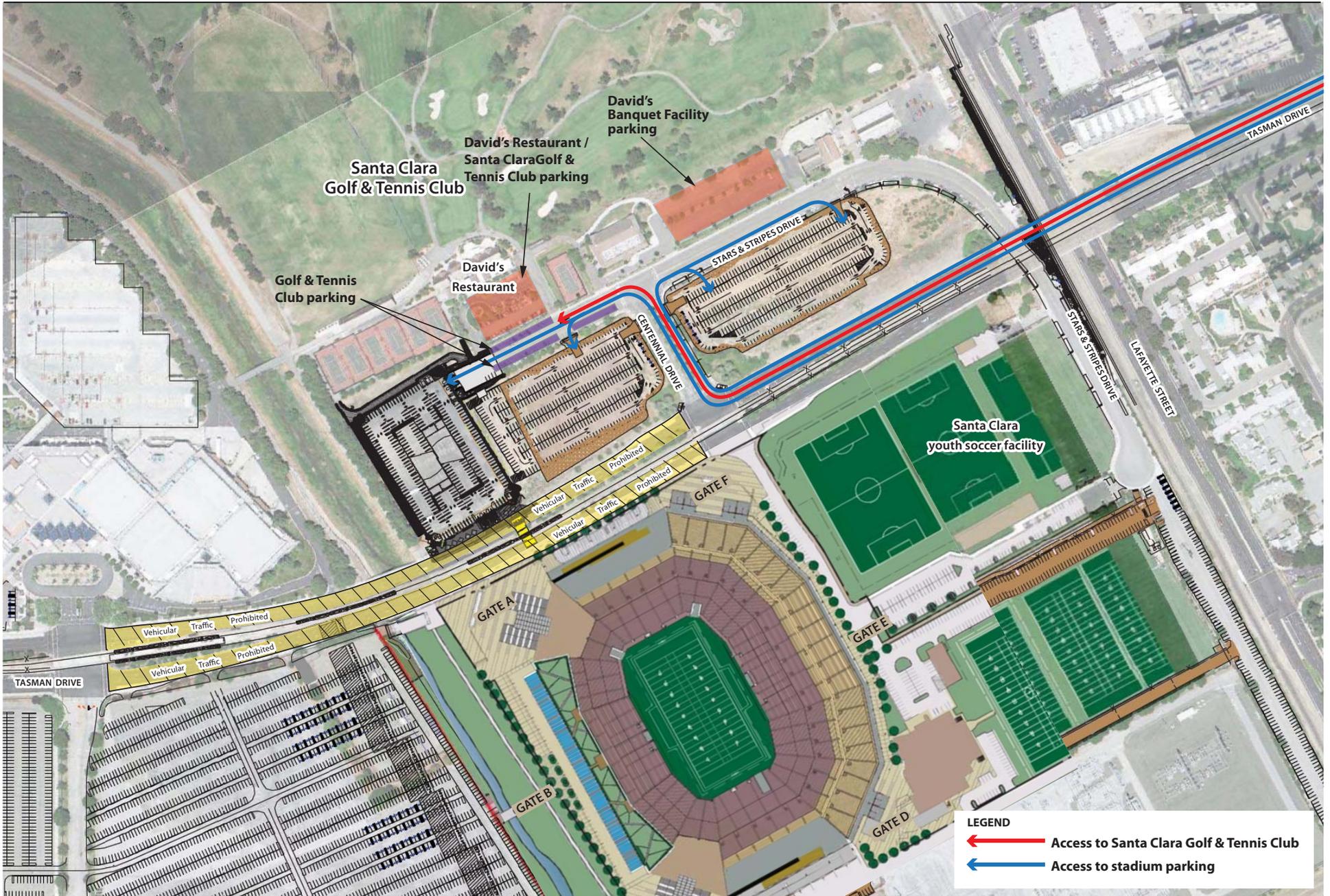
Exiting the Santa Clara Golf & Tennis Club

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Santa Clara Golf & Tennis Club patrons will be required to exit the club by making a right turn from Stars & Stripes Drive onto southbound Centennial Boulevard, followed by a left turn onto eastbound Tasman Drive towards North 1st Street. An illustration of traffic flow near the Santa Clara Golf & Tennis Club on event days is provided as **Figure 7-6**.

Advance Signage

In order to notify traffic approaching the impacted area of event day roadway changes, changeable message signs and directional signage are to be used. The changeable message signs shall be posted at each of the major access roadways. Each sign will indicate that there is a Stadium event will be occurring, and will recommend an alternate route. The locations of the changeable message signs, including the message to be displayed at each location, is shown in **Figure 7-3**.

Directional signage will be placed throughout the Stadium area to clearly identify alternate routes for Santa Clara Golf & Tennis Club related traffic.



17-6) Access to Golf & Tennis Club.a1

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 7-6

Access to Santa Clara Golf & Tennis Club on Event Day



Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and the Santa Clara Golf & Tennis Club will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. The Stadium Manager shall communicate the Stadium's anticipated Annual Events Calendar to all neighboring property owners so that they may plan accordingly, and collect annual event scheduling information from the Santa Clara Golf & Tennis Club. Public awareness strategies and communications strategies for implementation are described in Section 7.1.2.

7.5 David's Restaurant and Banquet Facility Vehicle Access during Events

Stadium activity may coincide with activity at David's Restaurant and Banquet Facility. In the event that this occurs, safe and efficient access for facility users must be maintained. To accommodate event day levels of traffic, reconfiguration of the surrounding roadway network for some periods of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to this facility can be made most efficiently by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on Stadium event days and how access to David's Restaurant and Banquet Facility will be provided.

Access Plan

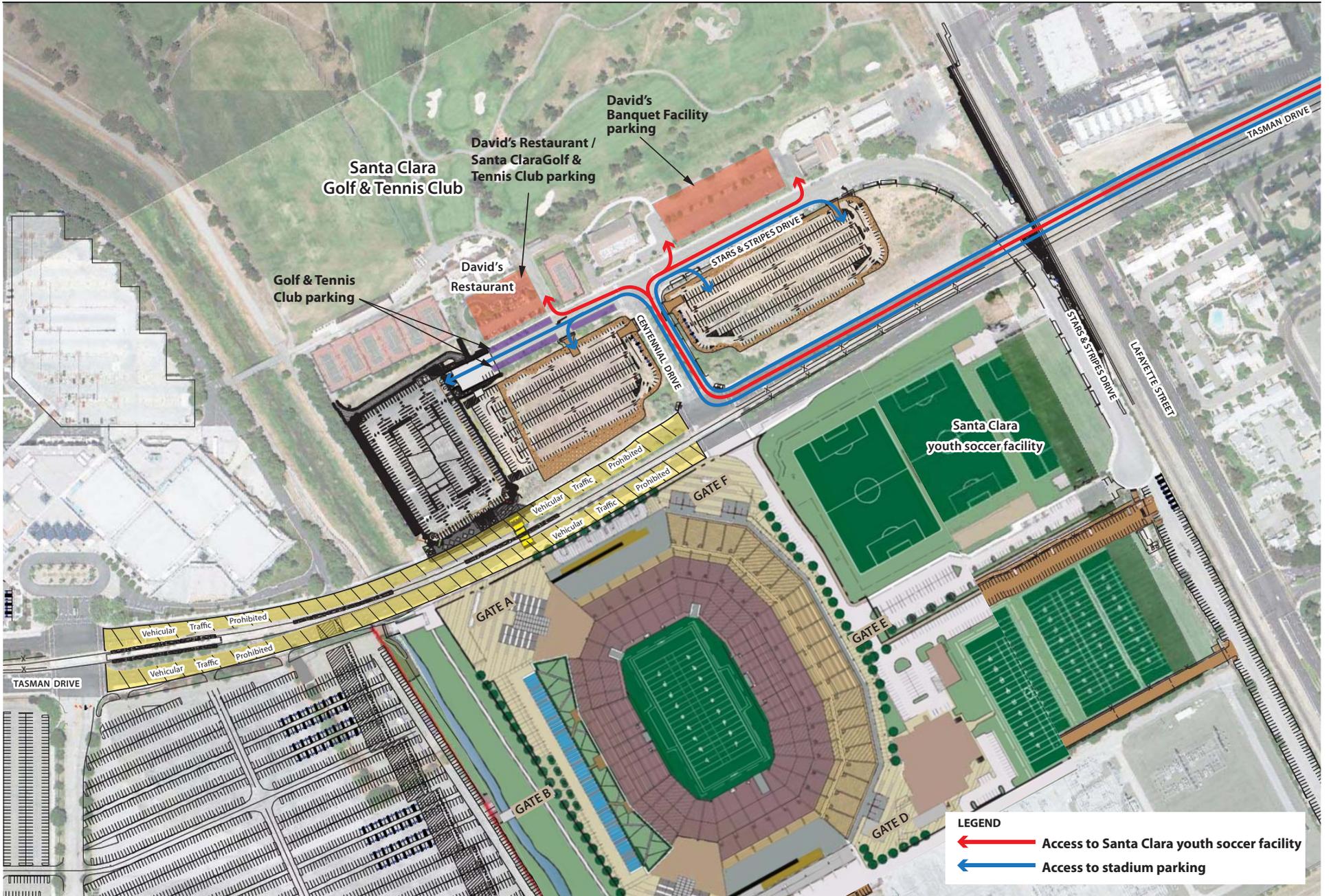
The Stadium is located south of the restaurant facility. On event days, police officers will regulate traffic flow and prohibit vehicles from traveling along Tasman Drive between Convention Circle and Centennial Boulevard. Vehicular access to the area west of the Centennial Boulevard / Tasman Drive intersection will be strictly prohibited on event days, as the area along Tasman Drive between Convention Circle and Centennial Boulevard will be designated for pedestrian and transit use only. Traffic officers will control the pedestrian crossings at the intersection of Centennial Boulevard and Stars & Stripes Drive.

Entering David's Restaurant and Banquet Facility

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, David's Restaurant and Banquet Facility can only be accessed by patrons from westbound Tasman Drive, by making a right turn onto northbound Centennial Boulevard from westbound Tasman Drive, and a turn onto westbound or eastbound Stars & Stripes Drive to access the facility's parking lot. During Stadium events, David's Restaurant and Banquet Facility's parking supply will be monitored by facility personnel to ensure efficient flow of vehicles in or out of the area.

Exiting David's Restaurant and Banquet Facility

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, David's Restaurant and Banquet Facility patrons will be required to exit the facility by accessing southbound Centennial Boulevard followed by a left turn onto eastbound Tasman Drive towards North 1st Street. An illustration of traffic flow in the vicinity of David's Restaurant and Banquet Facility on event days is provided as **Figure 7-7**.



(7-7) Access to David's Restaurant.L

San Francisco 49ers Transportation Management and Operations Plan for the New Stadium in Santa Clara
Figure 7-7
Access to David's Restaurant on Event Day



Advance Signage

In order to notify traffic approaching the impacted area of event day roadway changes, changeable message signs and directional signage are to be used. The changeable message signs shall be posted at each of the major access roadways. Each sign will indicate that there is a Stadium event will be occurring, and will recommend an alternate route. The locations of the changeable message signs are shown in **Figure 7-3**.

Directional signage shall be placed throughout the Stadium area to clearly identify alternate routes for David's Restaurant and Banquet Facility related traffic.

Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and David's Restaurant and Banquet Facility will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. The Stadium Manager shall communicate the Stadium's anticipated Annual Events Calendar to all neighboring property owners so that they may plan accordingly, and collect annual event scheduling information from David's Restaurant and Banquet Facility. Public awareness strategies and communications strategies for implementation are described in Section 7.1.2.

7.6 Our Lady of Peace Church and Shrine

Stadium activity may coincide with Our Lady of Peace Church and Shrine activity. In the event that this occurs, safe and efficient access, and parking, for Church and Shrine users must be maintained. To accommodate event day levels of traffic, reconfiguration of the surrounding roadway network for some periods of time before and after events will ensure safe and efficient travel to and from the Stadium. As a result, access to this facility can be made most efficient by entering and exiting via designated roadways. This section of the TMOP describes what changes may occur on Stadium event days and how access to the Our Lady of Peace Church and Shrine will be provided.

Access Plan

The Stadium is located northeast of the Our Lady of Peace Church and Shrine. Vehicular access to the Church and Shrine area will be provided via Great America Parkway, Mission College Boulevard, and Our Lady's Way.

Entering Our Lady of Peace Church and Shrine

With the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Our Lady of Peace Church and Shrine will be accessible by making a left turn onto Mission College Boulevard from northbound Great America Parkway, and entering the parking lot directly from Mission College Boulevard. The Church and Shrine will also be accessible by making a u-turn at the Great America Parkway / Mission College Boulevard intersection (i.e., from northbound Great America Parkway onto southbound Great America Parkway), turning right onto Our Lady's Way, and entering the parking lot directly from Our Lady's Way.

Exiting Our Lady of Peace Church and Shrine

Due to the reconfiguration of the roadway network to accommodate Stadium traffic on event days, Church and Shrine patrons will be required to exit the facility via Our Lady's Way. Church and Shrine related traffic will either travel eastbound along Our Lady's Way, and make a right turn onto southbound Great America Parkway; or travel westbound along Our Lady's Way, and make a left turn onto southbound Mission College Boulevard.

An illustration of traffic flow in the vicinity of the Our Lady of Peace Church and Shrine on event days is provided as **Figure 7-8**.

Advance Notice

In order to notify traffic approaching the impacted area of event day roadway changes, changeable message signs and directional signage are to be used. The changeable message signs shall be posted at each of the major access roadways. Each sign will indicate that there is a Stadium event will be occurring, and will recommend an alternate route. The locations of the changeable message signs are shown in **Figure 7-3**.

Communication

Concurrent events have the potential to create increased traffic congestion and conflicts. Collaboration and coordination between the Stadium Manager and Our Lady of Peace Church and Shrine will be required to ensure implementation of an integrated set of event management strategies and to ensure the dissemination of credible traveler information. The Stadium Manager shall communicate the Stadium's anticipated Annual Events Calendar to all neighboring property owners so that they may plan accordingly, and collect annual event scheduling information from Our Lady of Peace Church and Shrine. Public awareness strategies and communications strategies for implementation are described in Section 7.1.2.

7.7 Great America Commuter Rail Station

Stadium activity may coincide with general use of the Great America Commuter Rail Station by ACE and Capitol Corridor. Both ACE and Capitol Corridor will provide services during weeknight events that will require passengers to access the station via personal auto, ACE provided shuttles, and by private employer shuttles. Currently, ACE provides eight shuttle routes that carry passengers between the Great America Commuter Rail Station, and the Cities of Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose, and Milpitas. Each shuttle is timed with ACE train weekday peak hour arrivals and departures. Capitol Corridor provides two shuttle routes carrying passengers between nearby businesses and the Great America Commuter Rail Station. Both ACE and Capitol Corridor shuttles currently stage along Stars and Stripes Drive, adjacent to the Station. Capitol Corridor shuttle routes currently approach the Station from the west via Tasman Drive, and exit to the east via Tasman Drive. ACE shuttle routes currently approach the Station from both the east and west via Tasman Drive. For weekday events that will necessitate a closure of Tasman Drive, shuttle routes will need to be augmented, and shuttle schedules will need to be adjusted accordingly. The shuttles reroutes will include a detour to Great America Way (north of the Stadium area), to Mission College Boulevard and Agnew Road (south of the Stadium area), and to Lafayette Street (east of the Stadium area).



San Francisco 49ers Transportation Management and Operations Plan for a New Stadium in Santa Clara

Figure 7-8

Access to Our Lady of Peace Church and Shrine

This page intentionally left blank.



8.0 Development of Operating Budget

The operating budget for all elements of the TMOP shall be maintained by the Stadium Manager, and revised annually based on input received from all working groups. Detailed tasks and associated costs will be organized within a separate operating budget document, rather than within the TMOP itself. However, the cost estimations are expected to include (but are not limited to) the following items:

- Development and circulation of Annual Events Calendar;
- Implementation of traffic signal improvements;
- Establishment of Stadium security perimeter on event days;
- Implementation of parking and traffic control plans on event days, including:
 - Event day signal modifications;
 - Arrangement of parking facilities and stationing of ticket takers;
 - Placement of signage and coning to control the direction of traffic flow;
 - Placement of changeable message signs;
 - Stationing of officers at select intersections; and
 - Circulation of event day information to ticket holders, as well as to local businesses and area residents.
- Implementation of transit adjustments on event days, including:
 - Tasman Drive at-grade crossing; and
 - Transit queuing areas.
- Data collection efforts, including:
 - Event day observations;
 - Aerial photography;
 - Transit ridership on event days, and non-event days; and
 - Analysis of collected data.
- Preparation of reports and data for working group review; and
- Continued coordination with nearby facilities.

Each year, the operating budget is to be reviewed and approved by the Stadium Authority.