

# Final Transportation Management Plan for the Warriors San Francisco Event Center



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Prepared for:



Golden State Warriors Arena LLC

FINAL

Transportation Management Plan (TMP) for the  
Golden State Warriors Event Center and Mixed-Use Development

Prepared for:  
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## EXECUTIVE SUMMARY

The Transportation Management Plan (TMP) is a management and operating plan designed to provide multi-modal access to a range of events at the new Golden State Warriors (GSW, or Warriors) Event Center in San Francisco's Mission Bay neighborhood, and to the retail and office uses on the same development site. The purpose of the plan is to ensure safe and efficient access by promoting and facilitating the use of nearby public transit services and pedestrian and bicycle infrastructure for travel to and from the Event Center and the adjacent mixed use development, thereby reducing vehicular impacts to the Mission Bay/Dogpatch area and the adjacent neighborhoods. The plan's primary goals include a reduction in single occupancy vehicle trips and facilitation of multi-modal access to/from the site for all employees and visitors. Where applicable, auto mode share standards are based on site-specific travel demand estimates prepared as part of the project's subsequent environmental impact report (SEIR) analysis.<sup>1</sup>

The TMP is a working document that will be expanded and refined over time by the Warriors, the City of San Francisco, and other agencies responsible for carrying out the plan. An active field monitoring process will occur during the four years after the project's completion, with annual surveying and reporting conducted thereafter, to make any necessary adjustments. It is also anticipated that subsequent refinements will be made to respond to changing circumstances, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the project vicinity over time.<sup>2</sup>

The TMP provides a summary of the Event Center and mixed-use development project description; event and no-event scenarios that are addressed in this document; existing transportation facilities and planned major transportation projects; travel characteristics of Event Center attendees, office workers, and retail patrons; transportation control recommendations; travel demand and communication strategies; and performance standards.

The scenarios addressed in this plan are as follows.

- Typical Day (No-Event Day)
- Convention – weekday event with approximately 9,000 attendees
- Arena Concert – evening event with approximately 12,500 attendees
- NBA Game – an evening Warriors game with 18,064 attendees
- Dual Event – A weekday non-GSW event of 12,500 or more attendees starting within an hour of a SF Giants home game at AT&T Park.<sup>3</sup>

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<sup>1</sup> Travel, Parking, and Loading Demand Estimates for the Proposed Event Center & Mixed Use Development at Mission Bay Blocks 29-32 Final Memorandum, Advant Consulting and LCW Consulting, November 19, 2014 .

<sup>2</sup> Changes to the project TMP do not override the project Mitigation Monitoring & Reporting Program (MMRP) (2015). Where conflicts may exist over time between this TMP and the MMRP, the MMRP shall be the governing document.

<sup>3</sup> Concurrent events at the Event Center and AT&T Park could also include a GSW basketball home game coinciding with a San Francisco Giants home game. This scenario is analyzed in the project's SEIR. However, because each team has little



The travel characteristic assumptions for varying scenarios at the proposed development are based on the analysis prepared concurrently for the project's SEIR.

Transportation control strategies that are identified in the Plan include provision of an on-site, site-specific Transportation Management Center (TMC) located in the security center in the Event Center; designation of a Parking Control Officer (PCO) director who will staff the Event Center TMC and manage game-day controls; designation of up to three in-field PCO supervisors who will roam and oversee PCO operations; the potential locations of PCOs who will direct vehicular and pedestrian traffic under various event scenarios; provision of GSW or Event Center staff to assist with wayfinding and crowd management; a coordinated partial street closure of the northbound lanes on 3<sup>rd</sup> Street (between 16<sup>th</sup> Street and Mission Bay Boulevard South) and partial closure of westbound lanes on South Street for a short period after the conclusion of peak NBA and arena concert events; and designation of curbside locations for Muni buses, Mission Bay Transportation Management Association (TMA) shuttles, other shuttle buses, charter buses, taxis, Transportation Network Companies (TNCs) (e.g., Uber, Lyft), limousines, private vehicle loading and unloading, and media trucks. The transportation control strategies also address transit boarding at the nearby Muni stations, pedestrian control at the Event Center main garage driveway access point on 16<sup>th</sup> Street, and emergency vehicle access to and around the Event Center Development.

Communication strategies that are identified in the Plan include promotion, outreach and wayfinding strategies designed to inform event attendees of the various transportation options that are available and provide directions on how to access them. This includes a description of transportation information that will be provided by the Warriors and event promoters with event ticket purchases. The wayfinding strategies include a series of signs and maps that will be placed to facilitate circulation and access in and around the buildings on-site, and multi-modal travel to and from the site.

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control over the scheduling of home games by the league, and because such instances are presumed to happen rarely, this TMP defines "dual events" for planning purposes according to the text above.

## CHAPTER 1. INTRODUCTION

This introduction describes the purpose, goals, and objectives of the Transportation Management Plan (TMP) for the Golden States Warriors Event Center and Mixed-use Development Project (“Event Center Development”). It gives a project overview within the San Francisco context, including ongoing and upcoming projects that will change the transportation system in the area and may prompt adjustments to the TMP in the coming years. It then lists organizations and agencies with a stake in the project with their respective roles and responsibilities, and discusses the overall TMP implementation strategy, including coordination between stakeholders. Finally, it outlines the information contained in the remainder of the TMP.

### 1.1 TMP PURPOSE, GOAL, AND OBJECTIVES

The purpose of the TMP is to outline strategies to optimize access to and from the Event Center Development within the constraints inherent to a large public event. The TMP considers the travel characteristics of Event Center attendees, office workers, retail patrons, and all other visitors to the site. Its main goal is to ensure safe and efficient access for all modes with a particular focus on promoting pedestrian, bicycle, and transit access to the Event Center and adjacent mix of uses, thereby reducing vehicular impacts to the Mission Bay/Dogpatch area and nearby neighborhoods.

The objectives of the TMP are:

- To facilitate and promote safe use of non-automobile transportation by people attending and supporting Event Center events or office and retail uses on-site;
- To highlight and optimize the use of transit by both event attendees and event or daily employees;
- To facilitate and maximize bicycle use by Event Center Development event attendees and event or daily employees;
- To facilitate a high-quality walking experience to the Event Center Development from adjacent residences, employment locations, transit stations, and parking garages by identifying key walking routes and major street crossing locations, so that wayfinding can be provided and PCOs can be located at critical points to manage the interaction of pedestrians and vehicles during major events;
- To publicize the non-traditional transportation resources existing in the site vicinity, including the Mission Bay Transportation Management Association (TMA) shuttle service and pedicab ride providers;
- To maximize safety for all transportation users at key locations around the Event Center Development site and broader neighborhood during event ingress and egress;
- To ensure the safe interaction of pedestrians and cyclists traveling along South and 16th Street and vehicles accessing the Event Center Development garage entries located on South Street at Bridgeview Way and on 16th Street at Illinois Street;
- To facilitate the safe and efficient flow of vehicle traffic into and out of the site and throughout the Mission Bay neighborhood during event and no event conditions; and
- Under a scenario without implementation of the Muni Transit Service Plan, to maintain a stated maximum auto mode share standard of 53 percent under peak weekday event conditions (6:00 PM – 8:00 PM) and 59 percent under peak weekend event conditions (6:00 PM – 8:00 PM).

The TMP is a living document and will be amended from time to time by the Golden State Warriors, in coordination with SFMTA and with input from the nearby community, as travel patterns change as a result of development and changes to the roadway infrastructure and operations. The Golden State Warriors are committed to implementation of flexible strategies to advance the goals and objectives outlined here.

### **1.1.1 Design Objectives**

The key transportation-oriented objectives of the Event Center Development design are:

#### Guest Safety

- Design clear and distinct pick-up and drop-off locations for each travel mode such that zones are primarily single-purpose and potential conflict areas are minimized (i.e., transit zones to the west, bikes and cyclists to the southeast, private vehicles to the east).
- Discourage mid-block pedestrian crossings at 3<sup>rd</sup> Street, 16<sup>th</sup> Street, or Terry François Boulevard
- Create crossings that work for an all-day, all-year development; avoid creating crosswalks that only operate under PCO supervision
- Reduce conflicts between pedestrians and autos at driveways and garage entrances

#### Guest Convenience

- Locate guest arrival areas near building entrances and other conveniences to create visual connections to the travel mode and to augment wayfinding, including:
  - The southeast Event Center entrance (along Terry François Boulevard and 16<sup>th</sup> Street)
  - Office entrances on 16<sup>th</sup> Street and South Street, especially for regular TMA shuttles
  - Northwest and southwest site corners, staging areas, and pathways, especially for arrivals via bike and Muni bus or light rail
- Prioritize open pathways designed for optimal pedestrian circulation and public access
  - Maintain open access to the southern passageway to preserve the 16<sup>th</sup> Street/Main plaza connection
  - Highlight, through both static and dynamic wayfinding, the northwest corner and southwest corner, and the gracious and pleasant paths to and from the Main Plaza to these corners
  - Leverage the position of the Gatehouse and the decorative fencing proposed on Third Street a means to direct patrons to the northwest and southwest corners of the project and to discourage mid-block crossings of 3<sup>rd</sup> Street
- Locate drop-off and pick-up locations for a given mode in close proximity to each other for pre- and post-event scenarios to create consistency, enhance intuitiveness, and create efficient paths of travel for patrons

### Synergy & Resource Intelligence

- Build a network of dynamic, up-to-the-minute transit information signage and wayfinding, both inside and outside of project buildings, to aid in the efficiency of patron arrivals and departures
- Locate the bike valet close to the Terry François Boulevard cycle track and nearby Bay Area Bike Share station(s)
- Position the bike valet in sight of the Event Center’s southeast Lobby building entrance
- Locate the daily TMA shuttle stop close to office lobbies

### Good Neighbor Policies

- Create generous pedestrian queuing areas on-site to minimize neighborhood spillover
- Maintain local access to 4<sup>th</sup> Street and Bridgeview Way by promoting alternate pre- and post-game routes that emphasize use of 3<sup>rd</sup> Street, 7<sup>th</sup> Street, and Terry Francois Boulevard
- Access to building entries, garage entries, and sidewalk areas for daily users of the 409 and 499 Illinois buildings, the 450 South Street garage, and of the future buildings on Blocks 33-34 will not be unreasonably impeded
- Maintain access to the UCSF Mission Bay Campus and UCSF Hospitals for patients, employees, and the university community
- Maintain the site’s identity as a porous, accessible, and welcoming neighborhood center

### Media Requirements

- Locate media to provide for reliable satellite connections as per NBA League guidelines while providing under-ground cabling below sidewalks for the safety of pedestrians

## **1.2 KEY STAKEHOLDERS**

Key stakeholders in the TMP and their respective roles and responsibilities are listed in **Table 1-1**.

**TABLE 1-1: KEY STAKEHOLDERS, ROLES, AND RESPONSIBILITIES**

Key Stakeholders	Roles and Responsibilities
Golden State Warriors (GSW)	The GSW is the project sponsor and is responsible for implementation of the TMP.
San Francisco Municipal Transportation Agency (SFMTA)	The SFMTA oversees the City's public right-of-way (ROW) and manages all surface transportation infrastructure and systems in the City, including roads, curb space, sidewalks, bicycle lanes, parking, transit, and traffic control measures <sup>1</sup> . The SFMTA also regulates taxis and enforces parking regulations. SFMTA operates San Francisco's bus and light rail service under the Muni brand, which will provide access to the Event Center and mixed-use development. Recommendations related to physical changes to the ROW must be supported by the SFMTA and approved by OCII. The SFMTA also coordinates closely with the SFCTA on the ongoing Waterfront Transportation Assessment, which includes the Mission Bay neighborhood in its study area.
Office of Community Investment and Infrastructure (OCII)	OCII has jurisdiction over implementing any major redevelopment projects in the Mission Bay North and South Redevelopment Project Areas. OCII acts as the land use regulatory authority and the lead agency on the EIR. OCII will ensure that the project follows the Mission Bay Infrastructure Plan, which is the guiding document for remaining infrastructure improvements in the Mission Bay Area.
Caltrans	Caltrans is California's Department of Transportation and has jurisdiction over the freeways that provide regional vehicle access to the proposed Event Center Development site.
Port of San Francisco (Port)	The Port of San Francisco (Port) has jurisdiction over San Francisco's waterfront, including Terry François Boulevard and small portions of 16 <sup>th</sup> and South Streets at their eastern edges. <sup>1</sup> This includes the provision of any new ferry terminal facilities and a cycle track facility, and jurisdiction over street parking operations in the areas noted above.
San Francisco County Transportation Authority (SFCTA)	The SFCTA serves as the Congestion Management Agency (CMA) for San Francisco County and is responsible for the ongoing Waterfront Transportation Analysis, which includes the Mission Bay neighborhood in its study area.
San Francisco Planning Department	The Planning Department is responsible for reviewing and commenting on project design, and assessing environmental impacts on the City and its residents in collaboration with the overall assessment being led by OCII.
San Francisco Department of Public Works (DPW)	DPW is responsible for street maintenance and implementation of streetscape projects as part of the Mission Bay Plan, including curb ramp installations and upgrades.
San Francisco Police Department (SFPD)	SFPD is responsible for emergency response, oversight/override of traffic control plans, incident management, and coordination with SFFD and the California Highway Patrol as needed.
San Francisco Fire Department (SFFD)	SFFD provides fire suppression and emergency medical services to the residents, visitors, and workers within San Francisco.
Caltrain	Caltrain is a California commuter rail line connecting San Francisco to the Peninsula and Santa Clara Valley to the south. Its San Francisco terminal station is at 4 <sup>th</sup> and King Streets, approximately 2/3 mile north of the project site. The 22 <sup>nd</sup> Street Caltrain station is also located within walking distance of the Event Center Development.

**TABLE 1-1: KEY STAKEHOLDERS, ROLES, AND RESPONSIBILITIES**

Bay Area Rapid Transit (BART)	<p>BART is a rapid transit system that serves the San Francisco Bay Area. It operates five routes with 44 stations in four counties. Downtown San Francisco is roughly the geographic center of the BART system, and its Embarcadero, Montgomery Street, Powell Street, and 16<sup>th</sup> Street Mission stations are within approximately 1.7 to 2.1 miles of the Event Center Development. Powell Street station will be connected to the site vicinity by the Central Subway upon that project's completion in 2019.</p>
Water Emergency Transportation Authority (WETA) <sup>2</sup>	<p>WETA was established by Senate Bill (SB) 976 to improve the ability of ferries to respond in an emergency and to consolidate several regional ferry services. WETA operates service to Alameda/Oakland, Harbor Bay, San Francisco, South San Francisco, and Vallejo as San Francisco Bay Ferry. WETA is exploring the potential for a ferry terminal at the foot of 16<sup>th</sup> Street near the Event Center Development.</p>
Golden Gate Ferry (GGF) <sup>3</sup>	<p>GGF operates frequent ferry service between San Francisco and Larkspur in central Marin County, and between San Francisco and Sausalito in southern Marin County. Extra service is also offered from Larkspur to AT&amp;T Park for Giants home games and other sporting and music events.</p>
Mission Bay Transportation Management Association (TMA)	<p>The TMA is a non-profit organization established to maximize access and mobility to, from, and within Mission Bay by means of free shuttle operations servicing residents and employees in the area. Shuttles transport patrons primarily to key transit locations, including the Caltrain station at 4<sup>th</sup> St. and King St. and the Powell St. BART station. The Warriors will become members of the association and provide annual contributions for the expansion of this service (including service to Blocks 29-32 and potential additional evening and weekend routes throughout the neighborhood).</p>
University of California, San Francisco (UCSF)	<p>The UCSF Mission Bay campus is located in close proximity to the Warriors' project. Campus operations include regular shuttle service between UCSF campuses across San Francisco; these shuttles are intended to serve only university personnel (faculty, staff, students, etc.). They are, however, a regular presence within the Mission Bay street network.</p>
Community Groups	<p>Several community groups offer consultation and feedback on the project design and operational planning to help ensure a smooth integration into the Mission Bay neighborhood. Some community groups include the Mission Bay Community Advisory Committee (CAC), San Francisco Bicycle Coalition, Dogpatch Neighborhood Association, and others.</p>

Notes:

1. Although the Port has jurisdiction over certain street segments in San Francisco, SFMTA still manages all aspects of surface transportation on those streets under agreement with the Port.
2. Source: <http://www.watertransit.org>
3. Source: <http://www.goldengateferry.org>

Source: Fehr & Peers, 2014.

### 1.3 PROJECT CONTEXT

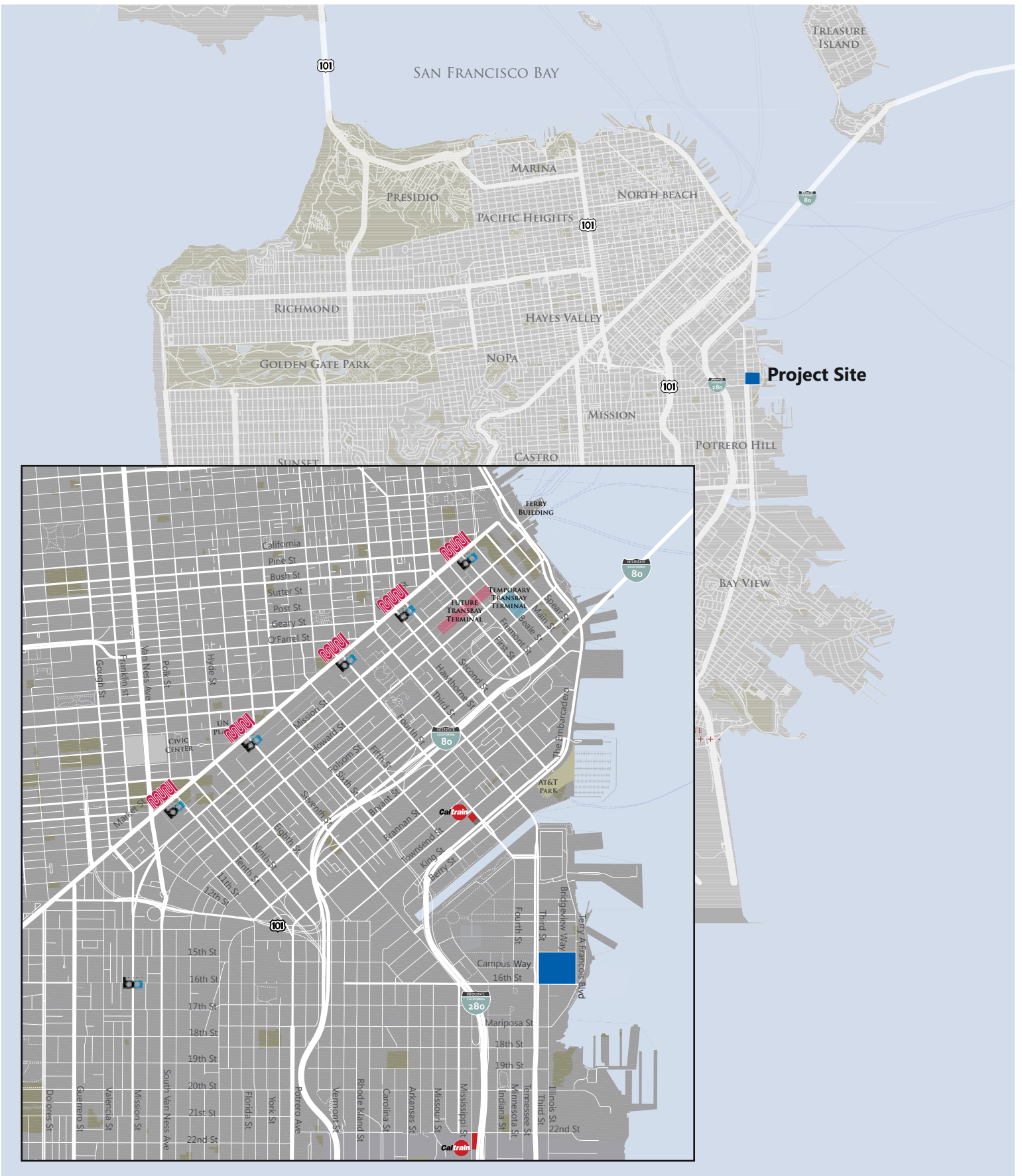
The proposed Event Center Development site consists of Blocks 29, 30, 31 and 32 in the Mission Bay neighborhood of San Francisco and is served by local and regional transit (Muni, ferries, regional buses and Caltrain); a developing roadway, bike route, sidewalk network; and freeway access. Bicyclists will be encouraged to arrive at the site via 16th Street and the planned Blue Greenway along Terry François Boulevard. The project location is illustrated on **Figure 1-1**. The project site plan is illustrated on **Figure 1-2**.

The project site is located approximately 2/3 mile from AT&T Park, a 42,000 seat Major League Baseball Stadium and home to the San Francisco Giants. Although the Warriors regular season does not largely overlap with the Giants regular season, overlap of other event types may occasionally occur, and the venues they some transportation facilities and management strategies. Although rare, a dual event scenario is considered as part of this document.

Over the past several years, many projects in the area have affected the transportation system in the vicinity of the Event Center Development, including the opening of the T 3rd light rail line connecting San Francisco's Financial District to Sunnydale, which started operation in 2007. The projects listed in the following sections, which are either recently completed, under construction, pending, or under consideration, will continue to enhance the transportation system in the area and may warrant changes to the TMP as they are implemented. Several significant transportation investments at or near the site are projected to begin operation within the next 5-10 years. These near-term transportation projects are illustrated on **Figure 1-3** and include SFMTA's Central Subway, the electrification of Caltrain, the Blue Greenway, enhanced transit service along 16th Street, and the 2nd Street Project, among others. These types of capacity and service enhancements provide essential context for planning safe, efficient transportation access to the Event Center and adjacent office and retail uses.

Several large-scale development projects are also proposed for the Mission Bay neighborhood that may affect travel patterns in the area. The project's SEIR (currently being prepared) will analyze traffic patterns and intersection performances under cumulative conditions that contain several prominent developments in the project vicinity. The TMP may likewise need to be revised, after development projects are realized and operational, to more effectively manage transportation systems under all event and no-event conditions. Some reasonably foreseeable development projects include the following:

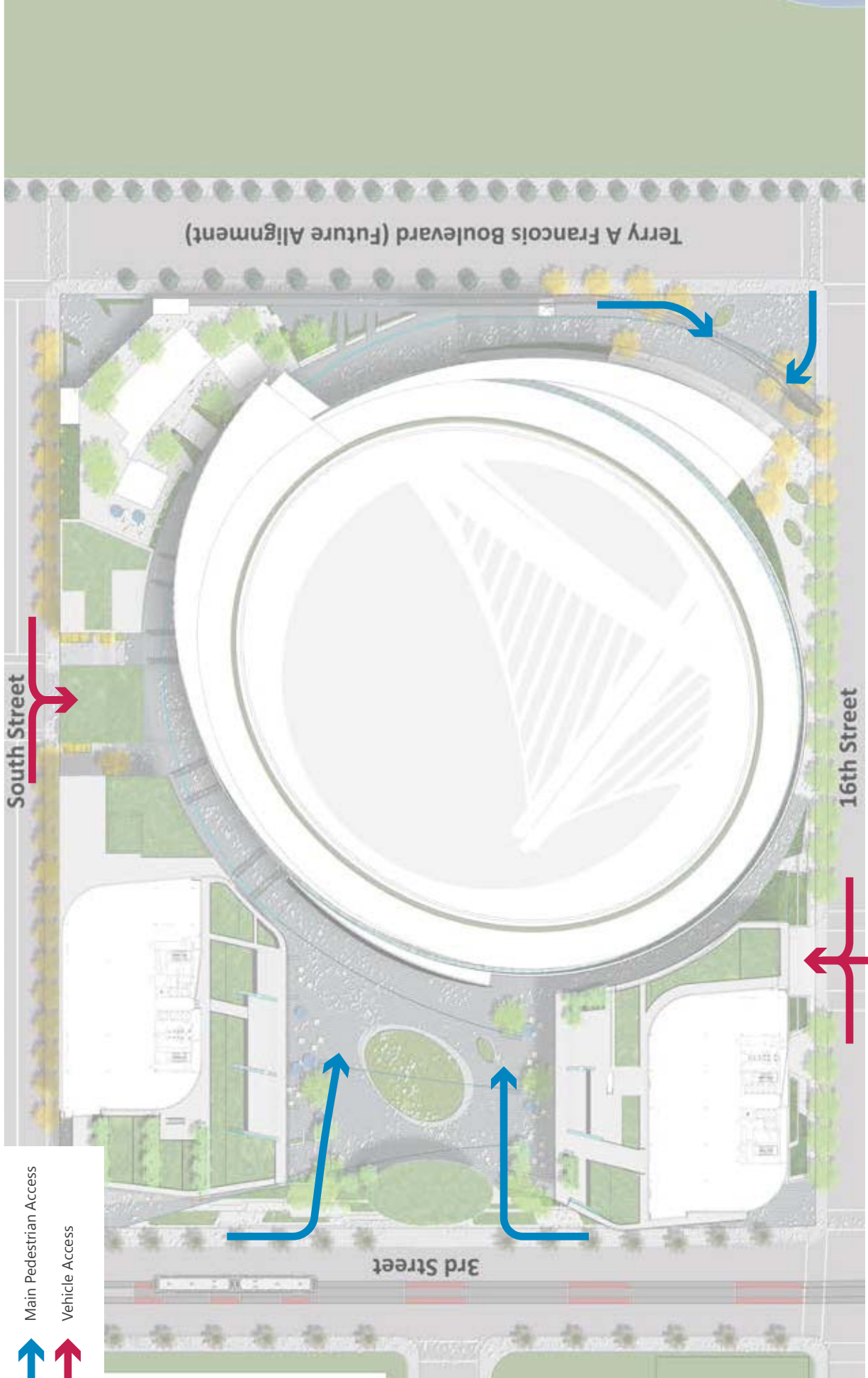
- Pier 70 Mixed-Use Project
- Seawall Lot 337 and Pier 48 Mixed-Use Project
- Kaiser Medical Office Building at 1600 Owens Street
- Central SoMa Plan
- UCSF Long Range Development Plan



Not to Scale



**South Street Driveway:**  
three vehicle lanes



**16th Street Driveway:**  
two vehicle lanes, two truck access lanes



# SITE PLAN

FIGURE 1-2

- MUNI Platform
- Caltrain Station
- BART Station
- MUNI Station
- Project Site

- F Market & Wharves
- KT Ingleside-Third Street
- N Judah
- J Church
- L Taraval
- M Ocean View
- BART Line
- Caltrain Line

**Near-Term Transportation Projects**

- Central Subway
- Blue Greenway
- New Bus Route (22 Fillmore/Route 55)
- Caltrain Electrification
- Owens Extension
- Ferry Building Expansion



Not to Scale

### 1.3.1 Transit Projects

Through consultation with SFMTA a list of projects were selected based on their proximity to the project site, ability to affect the transportation network, and likelihood of being completed. Several major near-term and long-term SFMTA Muni projects are proposed that, once implemented, will directly improve service frequency, capacity, travel time, cost-effectiveness and reliability in the vicinity of the project site.

**SFMTA Muni Forward** – This is the implementation phase of the SFMTA Transit Effectiveness Project (TEP). The project includes both general improvements throughout the system and measures for specific transit lines. Implementation is ongoing. The following changes are planned to take place in the project area:

- **10 Townsend** – The Muni Forward proposes to rename the 10 Townsend the 10 Sansome. Service would be rerouted off of Townsend down 4<sup>th</sup> Street. From 4<sup>th</sup> Street the route would extend through Mission Bay to new proposed street segments on 7<sup>th</sup> Street between Mission Bay Boulevard and Irwin Street, on Irwin Street between 7<sup>th</sup> and 16<sup>th</sup> streets, on 16<sup>th</sup> Street between Irwin and Connecticut streets, and on Connecticut Street between 16<sup>th</sup> and 7<sup>th</sup> streets. Peak period headways would be reduced from 20 to 6 minutes. Midday headways would be reduced from 20 to 12 minutes.
- **22 Fillmore** – The Muni Forward proposes rerouting the 22 Fillmore to continue along 16<sup>th</sup> Street, creating new connections to Mission Bay from the Mission neighborhood. The proposed route change would add transit to 16<sup>th</sup> Street between Kansas Street and 3<sup>rd</sup> Street and 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mission Bay Boulevard North. Muni Forward also proposes to change the AM peak period headway, reducing from 9 minute to 6 minute headways.

Additionally, the SFMTA has proposed two transit enhancement treatment visions for 16<sup>th</sup> Street (“Muni Forward”), of which one or a combination of the two will be selected by the SFMTA Board prior to implementation. The treatments are referred to as the Moderate and Expanded Alternatives in the TEP EIR. The Moderate Alternative proposes a number of physical changes to the portion of the rerouted 22 Fillmore in the vicinity of the Mission Bay campus site including, but not limited to, new transit stops, relocated transit stops, and transit bulbs (approximately 45 feet in length), as well as new traffic signals at Connecticut and Missouri streets. The Expanded Alternative includes the features listed for the Moderate Alternative as well as the conversion of a lane of mixed-flow lane of traffic to a transit-only lane (side running or center running to be determined) along 16<sup>th</sup> Street in both directions in the vicinity of the campus site as well as the prohibition of left turns at Bryant, Potrero (westbound only), Utah, San Bruno, Kansas, Rhode Island, De Haro, Carolina, Wisconsin, Arkansas, Connecticut, and Missouri streets. Both alternatives would reduce peak period headways; AM would be reduced from 9 to 6 minutes, PM peak headways would be reduced from 8 to 5.5 minutes, and midday headways would be reduced from 10 to 7.5 minutes. The stated purpose of both alternatives is to make the 22 Fillmore more frequent, reliable, and effective along 16<sup>th</sup> Street.

Prior to the extension of the 22 Fillmore into Mission Bay via either the Moderate or Expanded Alternative, which both require the addition of poles and extension of the Overhead Contact System (OCS), the SFMTA plans to implement a temporary motor coach service – the 55 Mission Bay - to coincide with the opening of the Phase One Medical Center at UCSF Mission Bay between Mission Bay and the 16<sup>th</sup> Street BART Station. The route would follow 16<sup>th</sup> Street from Mission Street to 3<sup>rd</sup> Street and 3<sup>rd</sup> Street from 16<sup>th</sup> Street to Mission Bay Boulevard North. The preliminarily proposed locations for new bus stops for this service in the vicinity of the Event Center site are on 16<sup>th</sup> Street at 4<sup>th</sup> Street (both directions) and on 3<sup>rd</sup> Street just south of Mission Bay Boulevard South (southbound direction). The

operating hours and service frequencies of the proposal have not yet been made public at the time of publication of this document.

**SFMTA Central Subway** – SFMTA Muni will operate a light rail subway at high frequency between Chinatown, Union Square, Yerba Buena Gardens and the Caltrain depot at 4<sup>th</sup> and King Streets (about 2/3 mile from the project site) beginning in 2019. The T 3<sup>rd</sup> line will extend north from its current terminus at 4<sup>th</sup> and King Streets to serve this subway, and no longer operate along the Embarcadero. Construction of this project is well underway. This project would improve transit service between the project site and Downtown and create new connections between the project site and regional transit via connections to BART at Powell St. station.

**SFMTA Bus Rapid Transit** – SFMTA plans to build and operate a Muni “rapid bus” corridor with a terminal within 2/3 mile from the project site: the Van Ness corridor, with one of two lines terminating at 4<sup>th</sup> & King Streets. These service and infrastructure enhancements are expected to be in operation by 2020.

**Caltrain Modernization Program** – Caltrain plans to electrify the railway for increased efficiency and capacity. The Modernization Program will increase the frequency of service, including expanding the number of peak hour trains by one/hour. The project is scheduled for completion in 2021.

**Transbay Transit Center** – The new Transbay Transit Center, currently under construction and scheduled for completion in 2017, will be a major hub serving 11 transit providers. It will be located between Beale, 1<sup>st</sup>, Mission and Howard Streets, approximately 1.75 miles from the project site.

**Ferry Building Landings and Terminals** – the Port of San Francisco operates the ferry terminals at the Ferry Building two miles from the project site, in cooperation with the Water Emergency Transportation Authority (WETA) and Golden Gate Transit. Frequent, daily ferry service is provided between the Ferry Building and seven cities in Alameda, Solano, San Mateo and Marin Counties. The Ferry Building is also a major Muni bus and streetcar terminal hub, serving numerous cross-town and downtown lines. The Downtown San Francisco Ferry Terminal Expansion Project includes construction of up to three new ferry gates and implementation of several pedestrian amenities which would increase ferry capacity and improve the passenger experience, as well as provide additional emergency facilities in the event of a major catastrophe. The project is under environmental review and is expected to begin construction in early 2015. WETA is also currently exploring the possibility of constructing a terminal at the foot of 16<sup>th</sup> Street adjacent to the Event Center Development site, however, due to the preliminary nature of their study, ferry access to the site is not assumed for the sake of this TMP.

### **1.3.2 Pedestrian and Bicycle Projects**

**2<sup>nd</sup> Street Project** – Multiple improvements are proposed for 2<sup>nd</sup> Street and could start construction as early as 2016. The goal of this project is to improve pedestrian safety along the corridor, create a more attractive public realm, provide a separated bicycle lane, minimize Muni delays, and increase foot traffic. These improvements would provide an enhanced pedestrian corridor for those walking from Downtown to and from the Event Center, offices, or retail proposed within the Event Center Development in Mission Bay.

**Blue Greenway** – This Port of San Francisco led project will create a network that connects public open space and water access in south-east San Francisco, from China Basin Channel to the San Francisco County Line, which will include a combination of bicycle and pedestrian trails and parks. Through Mission Bay along the Event Center Development frontage, the Blue Greenway will include a north-south bikeway on Terry François Boulevard that will connect to the Embarcadero bikeway to the north.

The 2009 Bike Plan and 2013 Bicycle Strategy includes several improvements to the bicycle network throughout the City. Of the improvements approved for implementation in the near-term and long-term, the following projects will affect bicycle circulation in the vicinity of the site:

- The transition of the Class III facilities on 16<sup>th</sup> Street to a Class II facility from 3<sup>rd</sup> Street to Terry François Boulevard (as an element of the Blue Greenway).
- The addition of bicycle lanes on Illinois Street from Cargo Way to 16<sup>th</sup> Street.
- The addition of bicycle lanes on Mississippi Street from 16<sup>th</sup> Street to Mariposa Street.
- The addition of a physically separated bikeway along The Embarcadero from 3<sup>rd</sup> Street to Fisherman's Wharf

### **1.3.3 Regional Traffic Projects**

**Proposal to remove the northern section of Interstate 280** – This proposal is currently being explored by the City and would remove the I-280 terminus on- and off-ramps from their current location adjacent to the Caltrain Station at 4<sup>th</sup> and King Streets. This removal may have various benefits, including uniting the neighborhoods currently split by the freeway, opening up land along I-280 and at the 4<sup>th</sup> and King Street rail yards for development, reducing the complexity of the downtown rail extension, and reducing vehicle-pedestrian conflicts at the crossing outside the Caltrain Station. If this project moves forward, it will likely affect access to the Event Center Development site by rerouting vehicle traffic to/from I-280, creating additional roadway connections between Mission Bay and areas west, and potentially altering pedestrian routes. However, this proposal is in preliminary stages and has not been approved or environmentally cleared, and as such the effects of such a change are highly speculative.

### **1.3.4 Near-Term Infrastructure Projects**

**New roadway** projects are underway with an anticipated completion date of Spring 2015 at the following locations:

- Extension of Owens St from 16<sup>th</sup> Street to Mariposa Street / I-280
- Extension of 16<sup>th</sup> Street to Terry François Boulevard

**New signals** have recently been completed or are currently being constructed within 1 mile of the project site at the following intersections.

- 3<sup>rd</sup> Street / Channel Street
- 3<sup>rd</sup> Street / Mission Bay Boulevards
- 4<sup>th</sup> Street / Channel Street
- 4<sup>th</sup> Street / Gene Friend Way
- 16<sup>th</sup> Street / 4<sup>th</sup> Street
- 16<sup>th</sup> Street / Vermont Street
- 16<sup>th</sup> Street / 7<sup>th</sup> Street, and

- 7<sup>th</sup> Street / Mission Bay Drive / Berry Street

**New signals** are being constructed with an anticipated completion date in Spring 2015 at:

- Mariposa Street / 4<sup>th</sup> Street and
- Mariposa Street / I-280 SB On-ramp

**Signal Modification** projects are also underway within 1/3 mile of the project site. Signal reconfigurations are being constructed with an anticipated completion date in Spring 2015 at the following intersections:

- 3<sup>rd</sup> Street / 16<sup>th</sup> Street
- 3<sup>rd</sup> Street / Mariposa Street
- 16<sup>th</sup> Street / Owens Street
- Owens Street / Mariposa Street / I-280 NB Off-ramp
- Mariposa Street / I-280 SB On-ramp

**Street restriping** projects have been completed or are pending at the following intersections.

- 7<sup>th</sup> Street / 16<sup>th</sup> Street
- 7<sup>th</sup> Street / Mission Bay Drive / Berry Street
- Mariposa Street Bridge (over Caltrain tracks)
- Mariposa Street / 3<sup>rd</sup> Street
- Mariposa / 4<sup>th</sup> Street
- Mariposa Street from I-280 SB on-ramp to Pennsylvania Avenue

**Street restriping** projects are in the planning stages, and pending approval, at the following intersections.

- 16<sup>th</sup> Street / Potrero Avenue
- 7<sup>th</sup> Street / Brannan Street

**Street widening or improvement** projects are underway within ¼ mile of the site and have an anticipated completion date in Spring 2015 at the following locations.

- 3<sup>rd</sup> Street / 16<sup>th</sup> Street
- Mariposa Street from Owens Street to Illinois Street
- Connections to UCSF Mission Bay Campus (at 16<sup>th</sup> Street and Mariposa Street)
- NB I-280 off-ramp

**Studies** are planned in connection with the Mission Bay Infrastructure Plan improvements to the I-280 on- and off-ramps at Mariposa Street and the Owens Street extension, during which the SFMTA will be reevaluating the travel lane striping plan for Mariposa Street between Pennsylvania Avenue and Fourth Street.

- As part of this evaluation, the SFMTA will assess the feasibility of lengthening the dedicated left turn lane from eastbound Mariposa Street onto northbound Fourth Street. The evaluation is anticipated to take place in 2016, two years prior to the opening of the proposed Event Center.
- A re-evaluation may be needed following the opening of the Event Center. Therefore, in order to enhance access to the UCSF Medical Center Children’s Hospital, subsequent to the opening of the Event Center and prior to the second year of the Event Center’s operation, the Warriors shall retain a qualified transportation professional approved by SFMTA to conduct a traffic engineering study. The study, to be conducted in consultation with UCSF and SFMTA, will evaluate potential changes to the travel lane configuration and related signage on Mariposa Street between the I-280 ramps and Fourth Street. The study would be used to determine if the dedicated eastbound left turn lane onto Fourth Street/UCSF passenger loading/unloading and emergency vehicle entrance to the UCSF Children’s Hospital should be extended west from its existing length of about 150 feet to provide for a longer queuing area separated from event-related traffic flow. If the study recommends restriping, the Warriors shall fund SFMTA’s cost of the design and implementation of the restriping.<sup>4</sup>

## **1.4 IMPLEMENTATION STRATEGY**

### **1.4.1 Coordination with Agencies and Transit Providers**

Traffic controls proposed in the TMP will require coordination with several of the agencies described in section 1.2. **Table 1-2** summarizes the necessary coordination between the Warriors and public agencies and transit providers during Event Center events and throughout the year.

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<sup>4</sup> See MMRP, I-TR-10b.

**TABLE 1-2: PROPOSED CONTROL AND SERVICE COORDINATION SUMMARY**

Control or Service	Entity	Coordination
		The Warriors shall work with the MBBTCC to consult with Caltrain to provide additional Caltrain service to and from San Francisco on weekdays and weekends. The need for additional service shall be based on surveys of event center attendees conducted as part of the TMP. <sup>5</sup>
Additional Caltrain service	Caltrain	Communication about event schedules and surveys of Event Center attendees will help design additional service.
		Real-time communication between Transportation Management Control (TMC) and Caltrain during games so any planned post-event train can be put into service at 4 <sup>th</sup> /King station at the appropriate time.
Additional BART service	BART	Communication about event schedules so that BART can augment post-event service by providing additional train cars post-event.
		The Warriors shall work with the MBBTCC to consult with Golden Gate Transit and WETA to provide additional ferry and/or bus service from San Francisco following weekday and weekend evening events. The need for additional service shall be based on surveys of event center attendees conducted as part of the TMP. <sup>6</sup>
Additional North Bay Ferry and/or Bus Service		Communication about event schedules and surveys of Event Center attendees will help design additional service.
Additional northbound Muni light rail service	SFMTA (Muni)	Real-time communication between TMC and SFMTA (Muni) during events so that additional light rail trains can be put into service at appropriate times.
		Location, installation, and operation of variable message signs (VMS) alerting drivers of traffic conditions and temporary post-event lane closures on 3 <sup>rd</sup> Street.
Variable Message Signs (VMS)	Caltrans, SFMTA	The City to request the Caltrans install changeable message signs on I-280 upstream of key entry points onto the local street network. <sup>7</sup>

<sup>5</sup> See MMRP, M-TR-5a.

<sup>6</sup> See MMRP, M-TR-5b.

<sup>7</sup> See MMRP, M-TR-2b.



**TABLE 1-2: PROPOSED CONTROL AND SERVICE COORDINATION SUMMARY**

Use of existing SFgo intersection surveillance cameras, as well as four new proposed surveillance cameras along the Event Center's perimeter streets, for observation of traffic conditions on streets pre-, during, and post-event	SFMTA	Permission from SFMTA to see live streams from video cameras from the TMC room at the Event Center.
Traffic management by Parking Control Officers (PCOs) on the streets pre-, during, and post-event	SFMTA	Real-time communication between TMC, Field Supervisor, variable message sign operators, emergency services personnel, and PCOs on the street.
Pre- and Post-event Shuttles	Mission Bay TMA, Private Shuttle Providers, SFMTA	Real-time communication between TMC and Shuttle Operators during events so shuttle buses can be put into service at appropriate time.
Valet bicycle parking during events	GSW	The provision of valet bicycle parking and additional temporary secure corral parking during events at the Event Center will be coordinated with SFMTA and the San Francisco Bicycle Coalition (SFBC), or other vendor.
Pre- and Post-event Pedicab service along Terry Francois Boulevard	Private Pedicab Providers	Pre-event planning and clearly marked staging areas for private pedicab drivers.
On-street special event pricing	SFMTA , Port	Provide event schedule to SFMTA Parking group and the Port for implementation of special event pricing at on-street parking meters during events, pending Port approval.
Emergency response and emergency vehicle routing	SFPD, SFFD, SDMTA	Real-time emergency response and PCO support as needed to ensure emergency vehicle access to and around the Event Center Development.

Source: Fehr & Peers 2014.

## 1.5 DOCUMENT ORGANIZATION

Chapter 2 summarizes the Event Center Development project and outlines the event scenarios. Chapter 3 describes the existing transportation system in the project vicinity, including the street network, transit, bicycle and pedestrian infrastructure, and regional traffic access. Chapter 4 describes the travel demand management program that will be implemented to increase the level of access to the project by transit, bicycling and walking. Chapter 5 describes the anticipated characteristics of Event Center attendees and visitors to the mixed-use development, including the key assumptions on which the TMP recommendations are based. Chapter 6 describes the proposed controls and is organized by event scenario, ranging from a no-event day to smaller convention events to the most complex event (Event Center event concurrent with event in AT&T Park). Chapter 6 also includes a discussion of the project's Transit Service Plan. Chapter 7 describes freight loading for the Event Center Development. Emergency vehicle access for the site is described in Chapter 8. Finally, Chapter 9 discusses communication strategies designed to complement the controls listed in Chapter 6, and includes wayfinding and outreach. Chapter 10 describes how the TMP will be monitored and refined over time, while outlining performance standards for evaluating the plan's effectiveness.

## CHAPTER 2. PROJECT DESCRIPTION AND EVENT SCENARIOS

### 2.1 PROJECT DESCRIPTION

#### 2.1.1 General

The proposed site is comprised of land referred to as Blocks 29, 30, 31 and 32, located in the Mission Bay South area of San Francisco. The 11-acre project consists of a new approximately 18,000-seat multi-purpose Event Center and mixed-use development including multiple office buildings, retail, restaurants, structured parking, plaza areas, and other amenities. The Event Center would host the Golden State Warriors basketball team during the National Basketball Association (NBA) season, as well as provide a year-round venue for a variety of other uses, including concerts, family shows, other sporting events, cultural events, conferences and conventions.

The proposed program for the Mission Bay South project site at Blocks 29-32 includes the following:

- Event Center Basketball seating capacity: 18,064
- Event Center supporting uses include a practice facility and Bayfront Terrace
- 750,000 gross square foot Event Center
- 25,000 gross square feet of GSW office space
- 580,000 gross square feet of office buildings
- 125,000 gross square feet of visitor-serving retail and restaurant uses
- 950 parking stalls in on-site parking structure
- 13 underground truck docks
- 132 stalls in existing structured garage at 450 South Street
- Access points for trucks and automobiles on 16<sup>th</sup> Street at Illinois Street
- Access points for small delivery vehicles and automobiles on South Street at Bridgeview Way

The public realm zones and uses for the Event Center Development are shown on the site plan in Figure 1-2. There will be five pedestrian entries to the site, one midblock on South Street, one on the 3<sup>rd</sup> Street frontage, one midblock on 16<sup>th</sup> Street, one at the corner of 16<sup>th</sup> Street and Terry François Boulevard via the southeast Plaza, and one midblock on Terry François Boulevard. Large open plaza areas will be located on the west side of the multi-purpose Event Center and in the southeastern portion of the site. The plazas will provide access to the retail and office uses on site and would be connected by a ramp wrapping around the exterior along the north and eastern-sides of the multi-purpose Event Center. A passageway connecting 16<sup>th</sup> Street and the western plaza area serves as a secondary connection between open spaces on-site.

### **2.1.2 Proposed Street Cross-Sections**

As part of the Event Center Development, the existing or planned cross-sections for several adjacent streets are proposed to be modified to better meet the needs of the Event Center and surrounding mix of uses. The conceptual striping plan for the project site is shown on Figure 2-1.

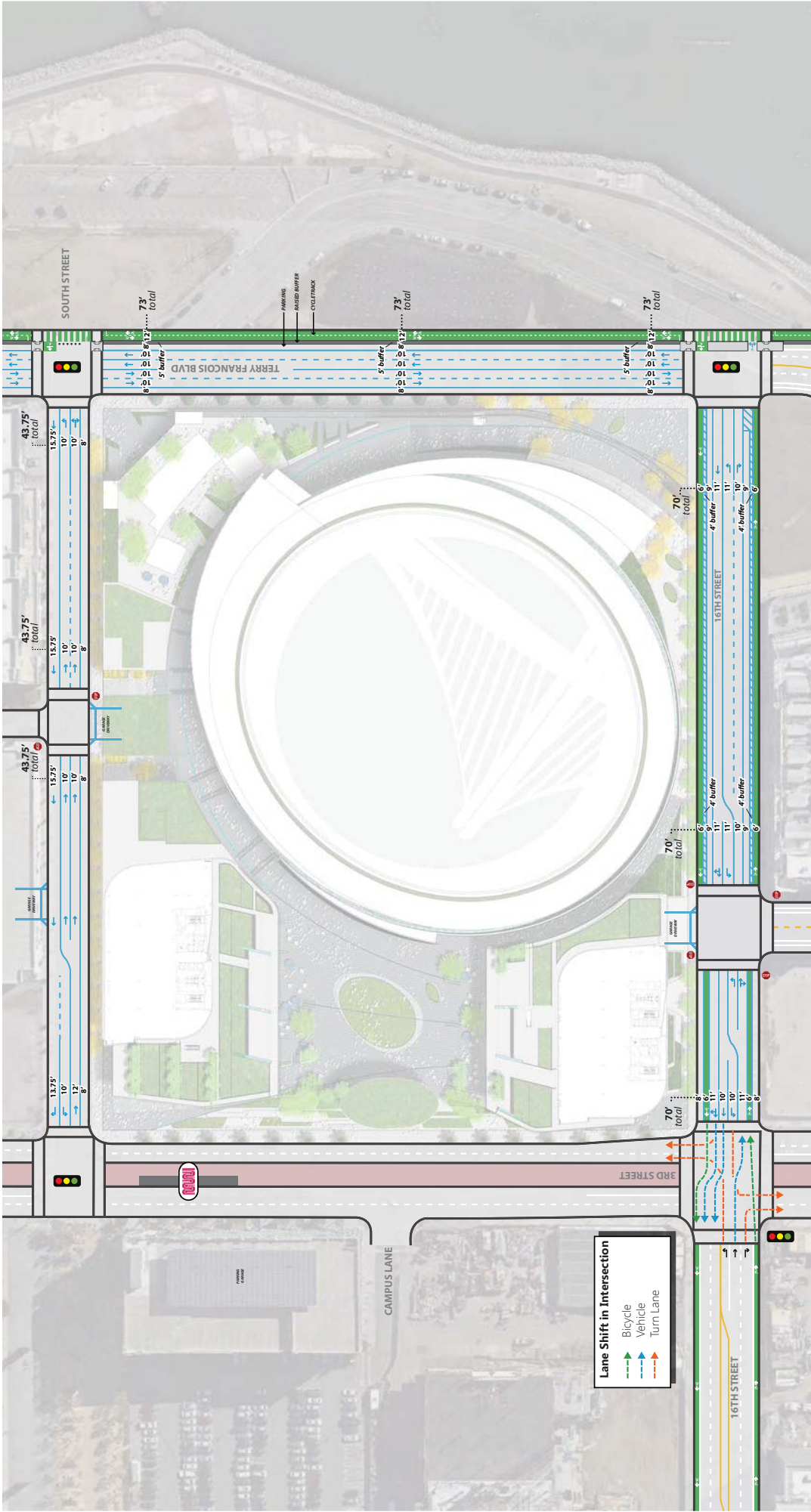
The project proposes to revise the planned cross-section for 16<sup>th</sup> Street from 3<sup>rd</sup> Street to Terry François Boulevard. The revised street cross-section would include 6 foot bike lanes with a 4 foot buffer on both sides, -9 foot parking lanes on both sides (for the segment from Illinois Street to Terry François Boulevard), one 11 foot through lane in each direction, and an 11 foot center lane that would serve as left turn pockets at 3<sup>rd</sup> Street, Illinois Street, and Terry François Boulevard. The on-street parking provided along 16<sup>th</sup> Street will be metered for general daytime use on non-event days, but restricted during limited hours for a variety of event-related needs including shuttle bus loading, media trucks, and charter bus loading when events are scheduled. One on-street space on the north side of 16<sup>th</sup> Street, between 3<sup>rd</sup> Street and Illinois Street, will be designated for on-street metered commercial loading for all hours until event-related curb regulations go into effect.

The project also proposes to restripe South Street within the boundaries of the project. The proposed cross-section would include an 8-foot parking and loading lane on the south side of the street, and a 12- to 10-foot lane for eastbound through-traffic. Between the 450 South Street parking garage entrance and Terry François Boulevard, South Street would also include an additional 10-foot wide lane for eastbound through-traffic, and a lane for westbound through-traffic at just less than 16 feet wide. Between the 450 South Street parking garage entrance and 3<sup>rd</sup> Street, the street would feature an exclusive westbound right turn lane (just less than 14 feet wide) and an exclusive westbound left turn lane (10 feet wide) at the 3<sup>rd</sup> Street intersection. No parking or loading would be available on the north side of the street. A bus stop for the Mission Bay TMA shuttle will be provided on the south side of South Street, from the 3<sup>rd</sup> Street intersection east a distance of 60 feet. A taxi loading area will be provided on the south side of South Street, from the Event Center garage access (opposite Bridgeview Way) east a distance of 100 feet. The remainder of the curbside frontage along South Street will be metered for general daytime use on non-event days. Eight on-street spaces on the south side of South Street will be designated for on-street metered commercial loading for all hours until event-related curb regulations go into effect. During events as needed, all on-street parking on the south side of South Street between 3<sup>rd</sup> Street and Terry François Boulevard will be prohibited so this space may be used for bus and taxi loading areas.

The planned Blue Greenway project will add a two-way bikeway along the east side of Terry François Boulevard with a 4-foot buffer. The reconstructed portion of Terry François Boulevard along the project frontage will also provide four travel lanes and on-street parking lanes on both sides. A Paratransit stop, 75 feet in length, which will accommodate up to three vans, will be provided on the west side of Terry François Boulevard near the southeast entrance to the Event Center and elevators to the Pedestrian Path. The remainder of the curbside frontage along Terry François Boulevard will be metered for general daytime use on non-event days. Eight on-street spaces on the west side of Terry François Boulevard will be designated for on-street metered commercial loading for all hours until event-related curb regulations go into effect. During events as needed, all on-street parking on the west side of Terry François Boulevard will be prohibited. During these conditions, the frontage will be designated for taxi use, Paratransit vehicle use, and TNC or private vehicle passenger drop-off/pick-up. At the intersection of Terry François Boulevard and 16<sup>th</sup> Street, two-stage bike boxes or equivalent measures will be provided to facilitate safe turns for cyclists traveling between 16<sup>th</sup> Street and the Blue Greenway bikeway on the east side of Terry François Boulevard.

In addition to the changes in cross sections, the following intersection controls would be implemented as part of the proposed project:

- The intersection of Terry Francois Boulevard/South Street is currently stop-controlled at the eastbound approach to the intersection, and would be signalized.
- The intersection of Bridgeview Way/South Street is currently uncontrolled, and would be made a side-street stop-controlled intersection with southbound vehicles on Bridgeview Way required to stop.
- The new intersection of Terry Francois Boulevard/16th Street would be signalized.
- The intersection of Illinois Street/16th Street is currently uncontrolled, and would be made an all-way stop-controlled intersection. Conditions at this intersection would be monitored, and if determined by the SFMTA that a traffic signal is warranted, the intersection would be signalized.
- The intersection of Terry Francois Boulevard/Illinois Street/Mariposa Street is currently stop-controlled, and would be signalized.



CONCEPTUAL STRIPING - PROJECT SITE

FIGURE 2-1

### **2.1.3 Mission Bay TMA Shuttle Program Expansion**

The Mission Bay Transportation Management Association (TMA) strives to reduce single-occupant vehicle trips by encouraging alternative modes of transportation for residents, employees and visitors to the Mission Bay development area. The Mission Bay TMA currently provides two free shuttle bus route services (east and west) between Mission Bay and the Powell Street BART Station and the 4<sup>th</sup>/King Caltrain Station.

The Warriors will join the Mission Bay TMA and the organization's required contributions to the association will enable expanded service, which may include additional evening or midday shuttles and/or weekend service. Additional routes to locations including the 16<sup>th</sup> Street BART Station and/or Transbay Terminal may also be feasible. This service will enable office employees and retail visitors to access the site from key transit locations. All standard shuttle service funded in part by the Warriors development will be an integrated part of the TMA network and will continue to be free of charge for all residents and employees in Mission Bay, regardless of origin or destination. If the Warriors choose to fund incremental event-only shuttle service in partnership with the TMA, such service would be supported exclusively by the Warriors and limited to event attendees.

The site's design includes an additional TMA shuttle stop, located on the south side of South Street just east of 3<sup>rd</sup> Street, located by the lobby of one of the project's office/lab buildings. This stop may also serve developments on the UCSF campus to the west, the Gap (existing) and Uber (planned) office buildings on the north side of South Street, and the Bayfront Park nearby.

### **2.1.4 Bicycle Parking**

Bicycle parking will be provided in an enclosed 300+ bicycle valet facility located on the 16<sup>th</sup> Street frontage just west of the southeast Event Center entrance. Valet doors will face east to direct departing cyclists towards the signalized intersection at Terry Francois Boulevard and 16<sup>th</sup> Street, where they can safely mount their vehicles. The bike valet facility will be available for self-park to Event Center and GSW employees for all-day use but will not be staffed during non-peak event times; it is assumed that the valet partner and the SFMTA will provide guidance on the most efficient secure storage system under these conditions. The bike valet is proposed to be staffed by a partner such as the San Francisco Bicycle Coalition (SFBC) for evening use by ticketholders during peak events such as NBA games and concerts. The valet parking facility will be attended from two hours before the start of peak events to approximately one hour after the event ends. Additional valet service will be provided by partners at temporary, staffed bike corrals of 50-100 bikes on plaza level in the southeast and west portions of the site for events where bike use is projected to exceed the supply provided by the permanent 300+ space bike valet facility. This additional bike corral will be positioned to be accessible to bicyclists, but not to interfere with pedestrian pathways or ADA access points. Additional bicycle parking will be located throughout the development for daily users, including a secure bike parking room for each office building for office and retail employees and bike racks at ground level on South Street, Terry François Boulevard, and 16<sup>th</sup> Street for all users. Bike rack design will be determined in consultation with SFMTA staff. Total proposed bike parking is in excess of 500 spaces (including temporary corrals).

In addition to the bicycle parking program, the Event Center Development program will include sponsorship for a Bay Area Bike Share station on or near the site, likely along Terry Francois Boulevard or South Street, and support in principle for additional stations in the project vicinity. Precise location of the Bay Area Bike Share station(s) will be determined through coordination between the Port of SF, the SFMTA, and the bike share operator.

### **2.1.5 Vehicle Parking**

The current Event Center Development program includes an approximately 950-space parking structure with below-grade parking and an at-grade level located under the plaza podium, all concealed from the public's view. Access to the garage will be provided via two controlled driveway entrances, one on South Street at Bridgeview Way and the other on 16<sup>th</sup> Street across from Illinois Street.

The 16<sup>th</sup> Street driveway will serve as the primary access point for Event Center patrons, who will be required to show pre-purchased parking passes to Event Center staff located on the street prior to entering the driveway. Any parking passes can be scanned at the interior end of the driveway to allow more cars to queue upon arrival. Office workers will also use the 16<sup>th</sup> Street Driveway, where, Automatic Vehicle Identification System (AVI) or fob controls will enable access at an entry point at the interior end of the driveway. AVIs may also be used for select season ticket holders for Event Center uses. The South Street driveway will provide access to retail patrons on-site and will include a valet drop-off area within the garage able to serve up to 280 vehicles. Self-parking visitors to office or retail during daytime hours will utilize a more traditional system using ticket-issuing machines and pay-on-foot ticket kiosks located throughout the garage. Each driveway will feature one in-bound lane during event hours and two egress lanes during the post-event period.

There will also be 13 truck docks located below grade, with access via distinct driveway lanes at the 16<sup>th</sup> street entry. The truck dock is physically separated from the primary vehicle parking areas.

In addition, the Golden State Warriors organization has purchased the right to use 132 additional stalls located in the structured parking garage at 450 South Street, directly across the street from the site's northern boundary. These spaces will be used by daily office employees and/or Golden State Warrior employees, not by event attendees. The Warriors are open to working with additional third parties to accommodate excess parking demand if the need arises.

In accordance with project mitigation measure M-TR-2b, the Warriors will offer for pre-purchase substantially all available on-site parking spaces not otherwise committed to office tenants, retail customers or season ticket holders, and will cooperate with neighborhood private garage operators to pre-sell parking spaces. Event attendees who do purchase reserved parking on-site will receive instructions for entering and exiting the Event Center garage with their ticket confirmation. They will also receive a dated parking pass to hang on their rear view mirror (or similar access mechanism, such as an AVI chip). Signage will be provided at both Event Center garage access points indicating Event Center parking is available for those attendees with pre-purchased tickets only. The parking operation on event days will consist of attendants checking entering vehicles for valid parking access to a space in the garage. The parking pass checks will be done by attendants stationed curbside at garage driveways along 16<sup>th</sup> Street and South Street so that vehicles without proper credentials will not be able to enter the parking garage driveway. If queues extend from the 16<sup>th</sup> Street garage driveway back onto 16<sup>th</sup> Street, this access will be temporarily closed and inbound event attendees will be directed to the South Street garage access. Vehicles without reserved parking passes will be directed to the north or to the west of the site to other nearby parking facilities off-site.

Parking for retail and restaurant customers will be available at the 950-space garage on no-event days, during daytime events, and on non-peak event evenings. Garage operation for these customers will consist of attended valet parking. The valet parking drop-off and pick-up area will be located within the garage via the South Street driveway where the majority of the retail uses are located. When parking in the garage is not available, and during peak events, valet attendants will park retail customers' vehicles at off-site locations, including public lots in the vicinity.

Retail and office employees with reserved parking will use the 16<sup>th</sup> Street entry to the parking garage across from Illinois Street. The garage operation at this location will be an automated electronic system (no attendants) to facilitate efficient entry/exit for these daily users.

As part of the proposed street restriping, on-street metered parking is planned to surround the site on three sides – South Street, Terry François Boulevard, and 16<sup>th</sup> Street. This on-street parking will be used for various parking and loading designations on event days. During no-event times, the on-street space may be used for general parking, as summarized in Table 2-1 and Figure 2-2. Pending Port approval, on-street spaces on blocks adjacent to the Event Center Development are likely to be marked with Special Event parking signs, similar to those found in the vicinity of AT&T Park, and carefully monitored for compliance.

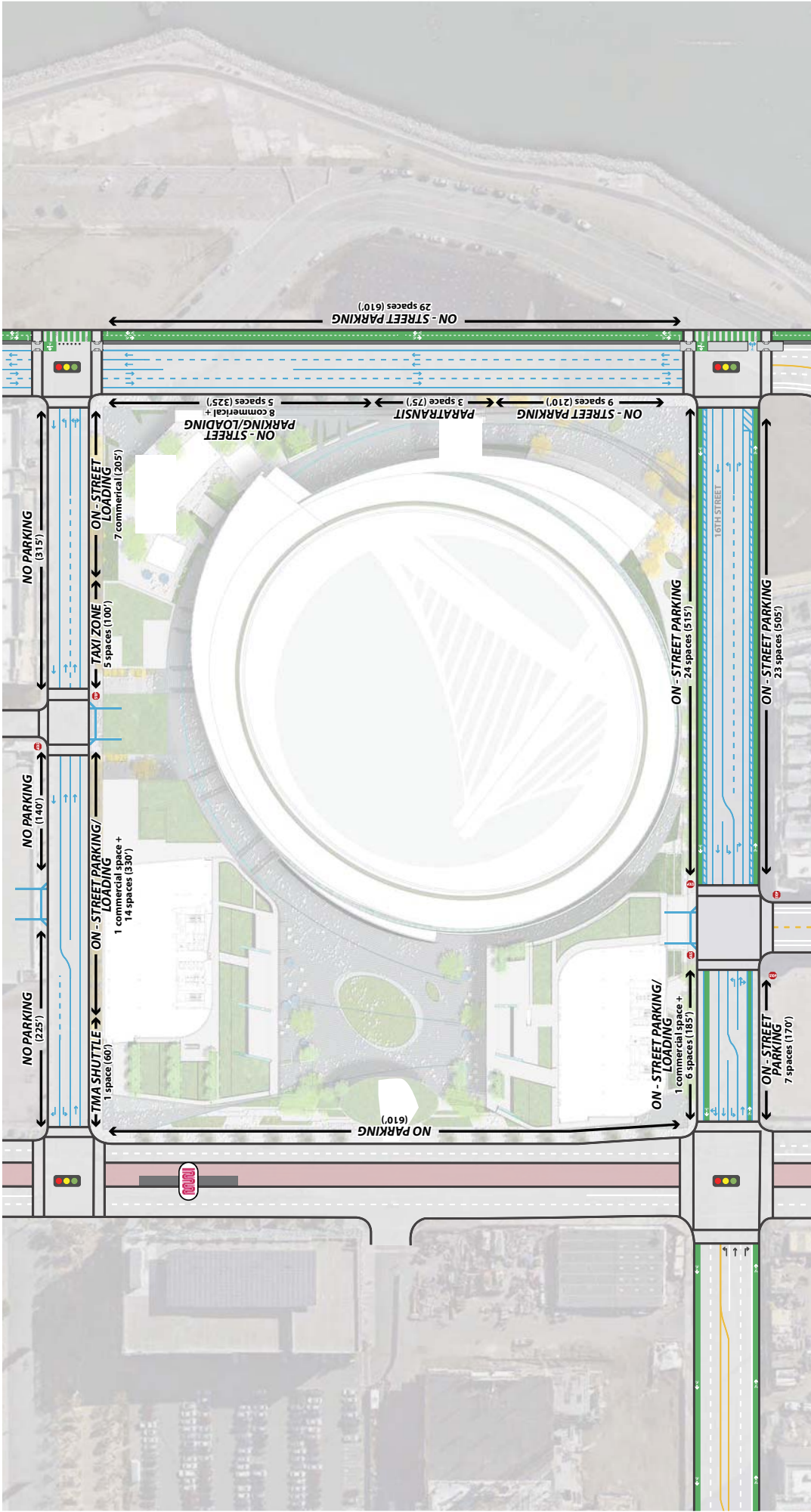
TABLE 2-1: NO-EVENT ON-STREET PARKING <sup>3</sup>					
Street Segment		From	To	Length (ft.)	On-Street Parking Available <sup>1,2</sup>
South Street	North Side	3rd Street	450 South Street Garage Driveway	225	--
		450 South Street Garage Driveway	Bridgeview Way	140	--
	South Side	Bridgeview Way	Terry François Boulevard	315	--
Terry François Boulevard	East Side	3rd Street	Bridgeview Way	410	15
	West Side	Bridgeview Way	Terry François Boulevard	305	--
16 <sup>th</sup> Street	North Side	South Street	16th Street	610	29
	South Side	South Street	16th Street	610	15
16 <sup>th</sup> Street	North Side	3rd Street	Parking Garage Driveway	185	7
		Parking Garage Driveway	Terry François Boulevard	515	24
	South Side	3rd Street	Illinois Street	170	7
		Illinois Street	Terry François Boulevard	505	23

Notes:

1. On-street parking space = 15' for end stall; 20' for regular stall; 25' for loading stall
2. Red zone at each corner = 20'
3. Excludes TMA shuttle stop and no-event taxi zone, both also located on the south side of South Street, and select metered commercial loading zones on South Street and Terry François Boulevard. .

Source: Fehr & Peers, Golden State Warriors, SFMTA Parking Stall Standards.





ON-STREET PARKING - NO EVENT

FIGURE 2-2



North Arrow

The City has identified two off-site parking lots on Port of San Francisco lands to the south of the Event Center (19th Street and Western Pacific sites, as shown in **Figure 2-3**) that can accommodate approximately 250 additional parking spaces for all events and up to approximately 800 additional parking spaces for use during dual events of 12,500 or more Event Center attendees (for a total of approximately 1,050 additional off-site parking spaces). As long as the Port of San Francisco takes all necessary actions to make the land available for public parking, GSW shall: (1) make commercially reasonable efforts to negotiate with the Port of San Francisco or its designee to acquire sufficient rights for the use of such parking lot(s) through lease, purchase, or other means as necessary; and (2) (if such negotiations are successful) provide free shuttles to the Event Center from such off-site parking lot(s) that are more than ½-mile from the Event Center on a maximum 10-minute headway before and after events.<sup>8</sup>

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<sup>8</sup> See MMRP, M-TR-11c.

- MUNI Platform
- Caltrain Line
- Project Site
- PCO Station
- Existing VMS
- Proposed New VMS
- Post-Event Lane Closure



Not to Scale

### **2.1.6 Pedestrian Facilities**

As described above, the project has been designed to accommodate high volumes of pedestrians under pre- and post-event conditions, incorporating several large corner plazas, a pedestrian path that enables circulation around the enter Event Center without street crossings, and a wider sidewalk than is required by the Mission Bay Infrastructure Plan along the Terry Francois Boulevard project frontage.

All sidewalks on the Event Center Development perimeter shall be lit with streetlamps in accordance with the Mission Bay South Streetscape Plan. Plazas, stairwells, and walkways within the site will also include sufficient lighting to provide pedestrians, bicyclists, and others with a sense of safety.<sup>9</sup>

### **2.1.7 Muni UCSF Mission Bay Station**

The project SEIR's "Muni UCSF Mission Bay Station Variant" has been selected by the Warriors for inclusion in the Event Center Development.<sup>10</sup> Under this plan, the existing high-level northbound and southbound passenger platforms at the UCSF Mission Bay light rail stop would be removed, and replaced with a single high-level center platform to accommodate both northbound and southbound light rail service passengers, and the extension of the northbound platform at the UCSF Mission Bay stop that was previously described in prior iterations of this TMP document would not be required.

The new center platform would be located between the northbound and southbound light rail tracks in the general location of the existing UCSF Mission Bay Station southbound platform, and would be approximately 320 feet long by 17 feet wide, allowing for two, two-car light rail trains to simultaneously board or alight passengers along the platform. Access ramps between 40 and 50 feet in length and about 13 feet wide would be constructed at both ends of the platform. Passenger amenities on the platform would include covered shelter with seating, CCTV, 311 telephone, NextBus display, and trash receptacles. Passenger access to the center platform would generally be provided from a single point at the north end of the platform closest to South Street, although the second egress ramp at the south end would allow for passenger flexibility during events (e.g., post-peak event when the northbound lanes of Third Street adjacent to the Event Center Development are closed to vehicular traffic).

The existing power equipment for light rail service would be expanded to provide additional traction power for the Central Subway/T Third service. The new center platform would not require any changes to the number of northbound and southbound travel lanes on Third Street, and the existing southbound left turn lane at the Third Street approach to 16<sup>th</sup> Street would be maintained.

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<sup>9</sup> See MMRP, FSEIR Mitigation Measure E.47.f.

<sup>10</sup> If the Muni UCSF Mission Bay Station Variant is not implemented, the Warriors shall fund a study of the effects of pedestrian flows on Muni's safety and operations prior to an event as well as the feasibility and efficacy of enlarging the southbound platform by extending it south towards 16<sup>th</sup> Street. The study shall include an assessment of exiting pedestrian flows from a fully occupied two-car light rail train on the platform and ramp to the crosswalk at South Street across Third Street, also taking into consideration the presence of non-event transit riders waiting to board the train, service frequency, and current traffic signal operations. The study shall be performed by a qualified transportation professional approved by SFMTA and the study shall commence within one year of project approval. See MMRP, I-TR-4.

## **2.2 EVENT SCENARIOS**

The event scenarios and time periods analyzed in the TMP are designed to provide a range of typical scenarios, including several of those being studied for transportation impacts in the project SEIR. In full, this range of scenarios will offer a menu of options to event operators and City personnel to fit most event conditions. Transportation control measures for events not specifically described will be derived based on reviewing the plans for events with comparable attendance levels and time periods included in the TMP and making adjustments as needed.

The primary event scenarios that are addressed in this TMP are as follows:

- Typical No-Event Day
- Convention – weekday event with approximately 9,000 attendees
- Arena Concert – an evening event with approximately 12,500 attendees
- NBA Game – an evening Warriors game with 18,064 attendees
- Dual Event – A weekday non-GSW event of 12,500 or more attendees starting within an hour of a SF Giants home game at AT&T Park Typical No-Event Day

The retail, restaurant, and office uses located adjacent to the Event Center will be open 365 days a year. Project sponsors anticipate daily activity from these users in addition to passive recreation or seasonal festivals in the open plaza areas and in Bayfront Park located across the street.

### **2.2.1 Small Event**

Small events (3,000 to 9,000 attendees) may consist of conventions, small “arena theater” concerts, family shows, non-NBA sporting events, and other types of events to be decided. For the purpose of the TMP, a small event is defined as a daytime convention with an attendance of 9,000 people.

### **2.2.2 Arena Concert Event**

Arena concert events are defined in this TMP as events with approximately 12,500 attendees. The estimated 30 annual arena concerts (typically occurring on Friday and Saturday evenings within a 7:30 PM to 10:30 PM window) at the Event Center would vary in attendance levels, depending on the artist and stage configuration. While the estimated average attendance level would be approximately 12,500 patrons, the Event Center design would allow for an end-stage concert configuration to accommodate a maximum of approximately 14,000 patrons.

Occasionally, arena concerts would occur in a full 360-degree center-stage configuration which would allow for a maximum attendance above the seated capacity of 18,064 – up to 18,500 patrons. This would account for less than 10 percent of the total annual arena concerts (no more than four per year). Logistics for these larger arena concerts are considered as part of the peak event scenario.

### **2.2.3 Peak Event**

Peak events are defined in this TMP as events where more than 90 percent of the seating capacity of the Event Center will be occupied (i.e. more than 16,200 attendees). These include all GSW pre-season, regular season,

and post-season games as well as sold-out center stage concerts. The peak event analyzed in detail in the TMP is a sold out basketball game that fills the Event Center to capacity (18,064 attendees).

The NBA regular season consists of 41 home games.

The majority of games take place in the evening (7:30 PM tipoff). In the 2012-2013 season, there was one daytime game (1:00 PM tipoff) during the regular season and it took place on a holiday (Martin Luther King Day, 01/21/13). Since most concerts typically take place in the evening, most of the egress from the Event Center will occur at night, during off-peak traffic conditions. Some games and concerts, though, will have ingress activity during the weekday evening commute period.

#### **2.2.4 Dual Events**

Since the 2004 seasons, there have been 19 days in which both the San Francisco Giants and the Golden State Warriors have had overlapping regular season home games, for an average of approximately 2 such days per year. Because the teams have little control over the home game schedules set by their respective leagues, a small number of such overlaps are anticipated to continue to occur and were analyzed in the project SEIR, but are not considered “dual events” for planning purposes.

On October 7, 2015, the Golden State Warriors and the University of California San Francisco (UCSF) signed a Memorandum of Understanding (MOU) agreeing to restrictions on the scheduling of certain large weekday non-Golden State Warriors events that start within an hour of a SF Giants home game (or “dual events”). Specifically, if the City and the Golden State Warriors make the transportation improvements and transportation demand management strategies detailed in the aforementioned MOU, in Board of Supervisors File 150995 establishing a Mission Bay Transportation Improvement Fund, and the SFMTA Board Resolution 15-154, and these do not reduce traffic delays to below unacceptable levels as defined in the MOU, the Golden State Warriors agree to hold no more than 12 large weekday non-Golden State Warriors evening events that start before 8:00 p.m. on a night with a SF Giants home game in the subsequent calendar year. No other venue in the NBA has a similar restriction on the ability to schedule events.

### **2.3 EVENT CENTER**

#### **2.3.1 Typical Annual Event Distribution**

It is anticipated that the Event Center will have a total of approximately 200-220 events each year, distributed as follows:

- **43-60 GSW home games** (2-3 pre-season + 41 regular season + a maximum possible of 16 home playoff games), most often taking place from 7:30 PM to around 9:40 PM.
- **45 Concerts**, consisting of approximately 30 large arena concerts and 15 small “arena theater” concerts. These events will occur mostly on Friday and Saturday nights from 7:30 PM to 10:30 PM, concentrated during late fall, winter, and early spring.
- **55 Family Shows**. Tours typically perform 10 shows in the building over 5 days (Wed-Sun) as described in Table 2-2.
- **31 Conventions/Corporate Events**, distributed throughout the year as the building schedule permits.
- Approximately **30 other sporting events** distributed throughout the year as the building schedule permits.

Table 2-2 summarizes the annual event distribution.

TABLE 2-2: TYPICAL ANNUAL EVENT CENTER EVENT DISTRIBUTION			
Event Description	Quantity	Typical (Approximate) Event Times	Daytime or Evening
Warriors Events	43-60		
Pre-season	2-3	7:30 PM – 9:40 PM	Evening
Season	41	7:30 PM – 9:40 PM	Evening
Post-season	0-16	7:30 PM – 9:40 PM	Evening
Non-Warriors Events	161		
Concerts	45		
“Arena Theater” Concerts (average 3,000 attendees)	15	Fri-Sat 7:30 PM – 10:30 PM	Evening
Arena Concerts (average 12,500 attendees)	30	Fri-Sat 7:30 PM – 10:30 PM	Evening
Family Shows	55	Typically 10 shows over 5 days (Wed. to Sun.): Wed. (1): 7:30 - 9:00 PM Thur. (1): 7:30 - 9:00 PM Fri. (2): 10:30 AM - Noon; 7:30 - 9:00 PM Sat. (3): 11 AM-12:30 PM, 3:00 PM - 4:30 PM; 7:00 PM -8:30 PM Sun. (3): 11 AM - 12:30 PM, 3:00 PM - 4:30 PM; 7:00 PM-8:30 PM	Both
Conventions/ Corporate Events	31	Variable	Both
Other Sporting Events	30	Variable	Both

Notes:

1. Of the peak events, it is anticipated that fewer than 10 will overlap with events at AT&T Park.

Source: Golden State Warriors.

## CHAPTER 3. EXISTING CONDITIONS

Chapter 3 describes existing transportation systems serving the Event Center Development site, including the street network, freeways, transit hubs, bicycle facilities, and truck routes. Select commitments to make near-term significant changes in conditions that are certain and fully-funded are noted as many of these investments and changes in capacity and service will be completed by 2020 and will be key to assumptions about the operation and functionality of the transportation networks serving the Event Center Development. This Chapter is included in the TMP for contextual and informational purposes only. A full environment document will be prepared that includes a more complete and quantitative analysis of the existing conditions as they pertain to transportation.

### 3.1 PEDESTRIAN FACILITIES



Major pedestrian routes to the Event Center Development include 16<sup>th</sup> Street for east-west travel as well as 3<sup>rd</sup> Street and Terry François Boulevard/Bay Trail for north-south travel.

Within the project site area, sidewalks generally exist on both sides of the street, and are generally 12 to 15 feet wide. There is currently no sidewalk along the frontage of the project site except on 3<sup>rd</sup> Street; however sidewalks will be completed along 16<sup>th</sup> Street, South Street, and Terry François Boulevard adjacent to the site as part of the project. There are gaps in the sidewalk along nearby roadways that are currently under construction, including the south side of 16<sup>th</sup> Street between 7<sup>th</sup> and 3<sup>rd</sup> streets and the west side of 3<sup>rd</sup> Street between 16<sup>th</sup> and Mariposa streets. These sidewalk gaps will be closed upon completion of the adjacent buildings. All intersections surrounding the site have standard painted crosswalks and directional curb ramps. All signalized intersections include pedestrian signals with count down timers.

The **Bay Trail** is a planned 500-mile recreational shoreline corridor that, when complete, will encircle San Francisco and San Pablo Bays with a continuous network of bicycling and hiking trails. In the project vicinity, the Bay Trail will run along the east side of Terry François Boulevard, and is designated as a multi-use trail shared by pedestrians and bicycles. As a major mostly uninterrupted pedestrian facility, this path will carry a significant proportion of pedestrian flow to and from the Event Center and between the Event Center and major regional transit hubs and bike share stations, and certain segments along congested areas, such as the Embarcadero, are being designed to provide separate paths for bicyclists and pedestrians to improve safety.

### 3.2 TRANSIT NETWORK



This section discusses both regional and local transit provision to the proposed Event Center Development site. The site is well-served by both local and regional public transit. Local service is provided by Muni Bus, light rail lines, and the Mission Bay TMA shuttles. Regional service is provided by BART, Caltrain, AC Transit, Golden Gate Transit, SamTrans, and various ferry providers. Riders from these regional transit services would either walk or transfer to Muni or privately operated shuttles to access the Event Center Development. This section is organized in order of proximity to the site, starting with the transit hub that is furthest away (BART Stations) and ending with the one that is closest (Muni light rail platform). Existing rail transit is shown in Figure 3-1 and existing bus transit is shown in Figure 3-2.

#### 3.2.1 Bay Area Rapid Transit (BART, Regional)

BART provides regional commuter rail service in the Bay Area. San Francisco's Financial District is centrally located within the system, which provides service to the East Bay (Pittsburg/Bay Point, Richmond,



Dublin/Pleasanton and Fremont) and to San Mateo County (San Francisco International Airport and Millbrae) with operating hours between 4:00 AM and midnight daily. In the Financial District, BART operates underground below Market Street. The Event Center Development can be most directly accessed from four BART stations including the Embarcadero (2.1 miles), Montgomery Street (1.8 miles), Powell Street (1.7 miles), and 16<sup>th</sup> Street Mission (1.7 miles) stations. When the Muni Central Subway opens in 2019, its connection to the BART Powell Street Station will likely make this a primary transfer station to the Event Center. During the weekday PM peak period, when many event-goers are expected to arrive, headways are generally 5 to 15 minutes for each line. Off-peak headways are generally 20 minutes for each line. BART trains range from 3 to 10 cars depending on time of day and demand. BART will extend its service to Warm Springs in 2015 and to San Jose in 2018 and to east Contra Costa County via eBART in 2016. BART is also proposing early phases of its “BART Metro” project (that increases Transbay Tube/SF frequency) and to introduce higher-capacity train cars within the next 5-10 years. BART is also performing a study to recommend measures to increase platform and station circulation capacity, particularly at Embarcadero and Montgomery Stations. The BART system map is illustrated below.



### 3.2.2 Ferry Building

WETA, Blue & Gold, and Golden Gate operate regular ferry service between the San Francisco Ferry Building (2 miles from the project site) and Vallejo, Larkspur, Sausalito, Tiburon, Oakland, Alameda and South San Francisco. Golden Gate and WETA also provide event-level service to AT&T Park, 2/3 mile from the project site. The Ferry Building is also a terminal / hub for Muni and Amtrak/Amtrak Capital Corridor service.

A Mission Bay ferry terminal near 16<sup>th</sup> Street has been identified in Water Emergency Transportation Authority (WETA) and MTC’s 2040 Regional Transportation Plan “One Bay Area” planning documents as a potential future

infrastructure investment, but there has not yet been an environmental assessment or full-funding strategy identified for the project. WETA plans to continue developing this concept.

### **3.2.3 Caltrain (Regional)**

Caltrain provides passenger rail service on the Peninsula between San Francisco and Downtown San Jose with several stops in San Mateo and Santa Clara Counties. Limited service is available south of San Jose. Within San Francisco, Caltrain terminates at a station located on 4<sup>th</sup> Street between King and Townsend Streets, approximately 2/3 mile from the proposed Event Center Development site. The 4<sup>th</sup>/King station is served by local, limited, and “Baby Bullet” trains. The 22<sup>nd</sup> Street Station is also nearby, located directly underneath I-280, approximately one mile from the Event Center Development site, and is served by local, limited, and a few of the currently scheduled “Baby Bullet” trains.

Caltrain service headways in the northbound direction during the PM peak, which will serve Event Center weekday events, are variable depending on the specific service provided by the train (bullet or limited); however, there are typically 5 arrivals in one hour. Southbound headways after the PM peak are once per hour. Electrification of Caltrain by 2021 will allow implementation of increased train frequencies. On weekends, headways are once per hour, so most Event Center attendees will likely arrive in a single train. However some guests may come on an earlier train for weekend events to visit the city or the retail and restaurant uses on site. Finally, Caltrain currently provides special post-game train service following Giants games.

### **3.2.4 San Francisco Muni (Local)**

Muni operates bus, cable cars, streetcars, and light rail lines within San Francisco. The line that most directly serves the proposed Event Center Development site is the T 3<sup>rd</sup> Street light rail line, which operates in a dedicated right-of-way in the center of 3<sup>rd</sup> Street. A couple of Muni bus lines, the 22 Fillmore and 10 Townsend, as well as the N Judah light rail line stop within 1 mile of the project site. Figure 3-1 shows rail lines and Figure 3-2 shows bus lines that provide service in the immediate project vicinity.

**T 3<sup>rd</sup> Street** – The T 3<sup>rd</sup> Street light rail route connects Visitacion Valley to Mission Bay via Bayview and Dogpatch. It also connects Balboa Park BART Station to Mission Bay through Downtown San Francisco as the K Ingleside route via St Francis Wood, West Portal, and the Castro. It operates weekdays and weekends from approximately 4:00 AM to 1:00 AM, mostly with one-car trains using platforms that are typically long enough for two car-trains in the vicinity of the Event Center. This line will be diverted to the Central Subway in 2019, will regularly be served by 2-car trains at a higher frequency than current scheduling north of Mariposa Street, and its UCSF Mission Bay station is located at the northwest corner of the project site.

The T 3<sup>rd</sup> Street line currently stops at side-running raised platforms located along 3<sup>rd</sup> Street at the following locations:

- Inbound/Outbound far-side curbside stops at South Street (at the northwest corner of the site)
- Inbound/Outbound far-side curbside stops at Mariposa Street (1/4-mile south of the site)
- Inbound/Outbound far-side curbside stops at 20<sup>th</sup> Street (1/2 mile south of the site)
- Inbound/Outbound far-side curbside stops at Mission Rock Street (1/3-mile north of the site)

In addition, all other Muni light rail lines and several east-west Muni bus lines overlap the T 3<sup>rd</sup> line at the Downtown stations, including the Embarcadero BART/Muni Station and other Market Street Muni bus/rail hubs that are within 2 miles away. Event-goers coming from other parts of San Francisco can transfer to the T 3<sup>rd</sup> line.

Within five years, Muni expects to operate enhanced transit service described in the TEP, which could include the T 3<sup>rd</sup> and the 22 Fillmore trolley bus rerouted to run along 16<sup>th</sup> Street east of I-280 to Terry François Boulevard, with a more near-term plan to operate a Muni 55 motor coach line between the 16<sup>th</sup> Street BART and the Event Center until the trolley bus extension can be completed. The Muni 33 line may be extended to serve the segment in Potrero Hill currently served by the 22. Two new Muni Bus Rapid Transit corridors (Van Ness and Geary) will have at least one of the programmed lines terminate within 2/3 mile of the project site within the next 5-8 years. Lastly, many major Muni bus lines have current terminus stations at the Temporary Transbay Terminal, Caltrain Terminal and Ferry Building (see below).

### **3.2.5 Mission Bay TMA Shuttles**

The Mission Bay Transportation Management Association (TMA) strives to reduce single-occupant vehicle trips by encouraging alternative modes of transportation for residents, employees and visitors to the Mission Bay development area. Mission Bay TMA currently provides two shuttle bus route services (east and west) between Mission Bay and the Powell Street BART Station and the 4th/King Caltrain Station. They are free of charge and open to all employees, residents, and visitors to the Mission Bay Area and the China Basin building at 185 Berry Street. The west route serves 16<sup>th</sup> and Illinois streets, while the east route serves 4<sup>th</sup> Street and Mission Bay Boulevard; both operate at 15-minute intervals from 7:00 to 10:00 AM and 3:45 to 8:15 PM. Figure 3-2 shows TMA Shuttle routes and existing stops.

The Golden State Warriors will join the Mission Bay TMA and the shuttles will be made available for employees and visitors. According to the Mission Bay TMA, the evening service is currently at or near capacity. After joining the TMA, shuttle routes, stops, and schedules may be reconfigured to better serve the site and Mission Bay. A new stop to serve the site is suggested on the south side of South Street near the intersection with 3<sup>rd</sup> Street.

If the Warriors choose to fund incremental event-only shuttle service in partnership with the TMA, such service would be supported exclusively by the Warriors and limited to event attendees.






### **3.2.6 UCSF Campus-to-Campus Shuttles**

UCSF provides shuttles for university personnel, including faculty, staff, technicians, and students, to travel between the university's campuses in San Francisco. These shuttles relieve capacity constraints for both the Mission Bay TMA shuttles and the road network via a reduction in single-occupant vehicle trips. Non-university affiliated personnel in the neighborhood are not permitted to ride UCSF shuttles.

### **3.2.7 Temporary Transbay Terminal**

The Temporary Transbay Terminal provides temporary bus terminal facilities during construction of the new multi-modal Transbay Transit Center, which is scheduled for completion in 2017. The Temporary Terminal is located in the area bounded by Main, Folsom, Beale and Howard Streets, approximately 1.75 miles north of the project site. It currently serves AC Transit, WestCAT Lynx, Muni, Golden Gate Transit, and SamTrans passengers.

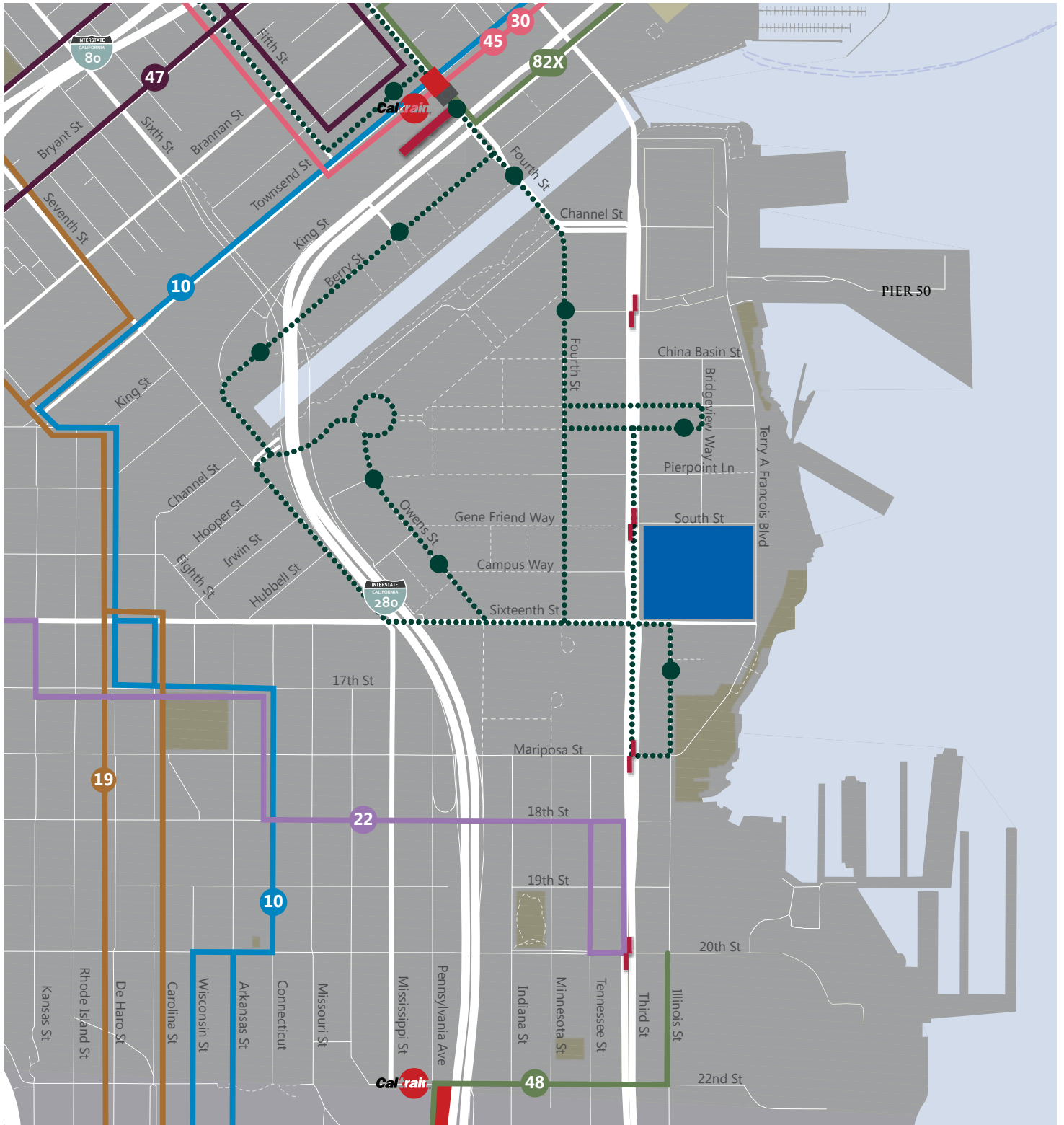
The new Transbay Transit Center will be located in an area bounded by Beale Street, 2<sup>nd</sup> Street, Minna Street, and Natoma Street and will serve the same transit providers as the Temporary Terminal plus capacity to accommodate Caltrain expansion and California High Speed Rail. Phase I of the project is expected to be completed by 2017.

-  MUNI Platform
-  Caltrain Station
-  BART Station
-  MUNI Station
-  Project Site
-  F Market & Wharves
-  KT Ingleside-Third Street
-  N Judah
-  J Church
-  L Taraval
-  M Ocean View
-  BART Line
-  Caltrain Line



Not to Scale

-  BART Station
-  Caltrain Station
-  MUNI Platform
-  Project Site
-  Mission Bay TMA Shuttles (● TMA Shuttle Stops)
-  10 Townsend
-  82X Levi Plaza Express
-  19 Polk
-  22 Fillmore
-  47 Van Ness
-  30 Stockton/45 Union-Stockton
-  48 Quintara/24th Street



Not to Scale

### 3.3 BICYCLE FACILITIES



Bicyclists may use all roadways in the city, not just designated bicycle routes; however, the City of San Francisco has an extensive bicycle network. The three classes of bicycle facilities are described below.



**Class I (Multi-use paths)** are paved multi-use facilities separated from roadways. The City of San Francisco has Class I facilities in large parks (e.g., Golden Gate Park or the Panhandle) and in areas where bicycling on the street would be challenging (e.g., US 101/Cesar Chavez Interchange).

Class I facilities are generally shared with pedestrians and may be adjacent to an existing roadway, or may be entirely independent of existing vehicular facilities.



**Class II (Bicycle Lanes)** are striped lanes on roadways designated for use by bicycles through striping, pavement legends, and signs.



**Class III (Bicycle Routes)** are designated roadways for shared bicycle/vehicle use indicated by signs only; may or may not include additional pavement width for cyclists. The majority of San Francisco's bicycle facilities are Class III facilities. In San Francisco, Class III Bicycle Routes are routinely striped with the shared-lane arrow, or "sharrow," reminding drivers and cyclists to share the roadway.

Current on-street bicycle facilities in the vicinity of the project are shown in Figure 3-3 and described below. The majority of the study area is flat, with limited changes in grade, facilitating bicycling within and through the area. However, dedicated bicycle lanes are not provided on all routes. For a description of planned bicycle projects which will add key links to the existing network including the Blue Greenway on Terry François Boulevard, refer to section 1.3.2.

The Bay Trail, described above, connects China Basin to Mission Bay across the Channel and runs along bicycle route #5. Additionally, the Embarcadero Enhancement project, now underway proposes to develop a conceptual design and cost estimate for a bikeway - a bicycle facility that is physically separated from moving or parked vehicles and pedestrians - along The Embarcadero from 3<sup>rd</sup> Street in South Beach to Powell and Jefferson Streets in the Fisherman's Wharf area. A bikeway is a bicycle facility that is physically separated from moving or parked vehicles and pedestrians. The SFMTA proposes to study a bicycle connection across the Lefty O'Doul Bridge that would connect the two waterfront bicycle facilities.

**Route #5** runs north to south along Terry François Boulevard and Illinois Street as a Class II bike lane. This route connects China Basin to the north with the project site and Route #7 to the south.

**Route #536** is a two-block section of northbound sharrow on 3<sup>rd</sup> Street between Terry François Boulevard and Townsend Street.

**4<sup>th</sup> Street** is a north-south bike route that extends from Berry Street to the north to 16<sup>th</sup> Street. 4<sup>th</sup> Street is designated as a Class III bicycle facility as it crosses Mission Creek until Channel Street, south of which it has Class II bike lanes.

**Route #7** is primarily a north-south bike route that runs along Indiana Street as a Class III facility. At Mariposa St to the north, it merges with Route #23 and runs to the east to Illinois Street, where it continues north to the Event Center site. This route connects to Route #23 to the west as well as Route #5 and the Bay Trail to the east.










**Route #23** is primarily a north-south bike route that extends along 7<sup>th</sup> Street from Brannan Street to 16<sup>th</sup> Street and down Mississippi Street to Mariposa Street with Class II bike lanes. At Mississippi Street and Mariposa, it runs east along Mariposa Street as a Class III facility and merges with Route #7.

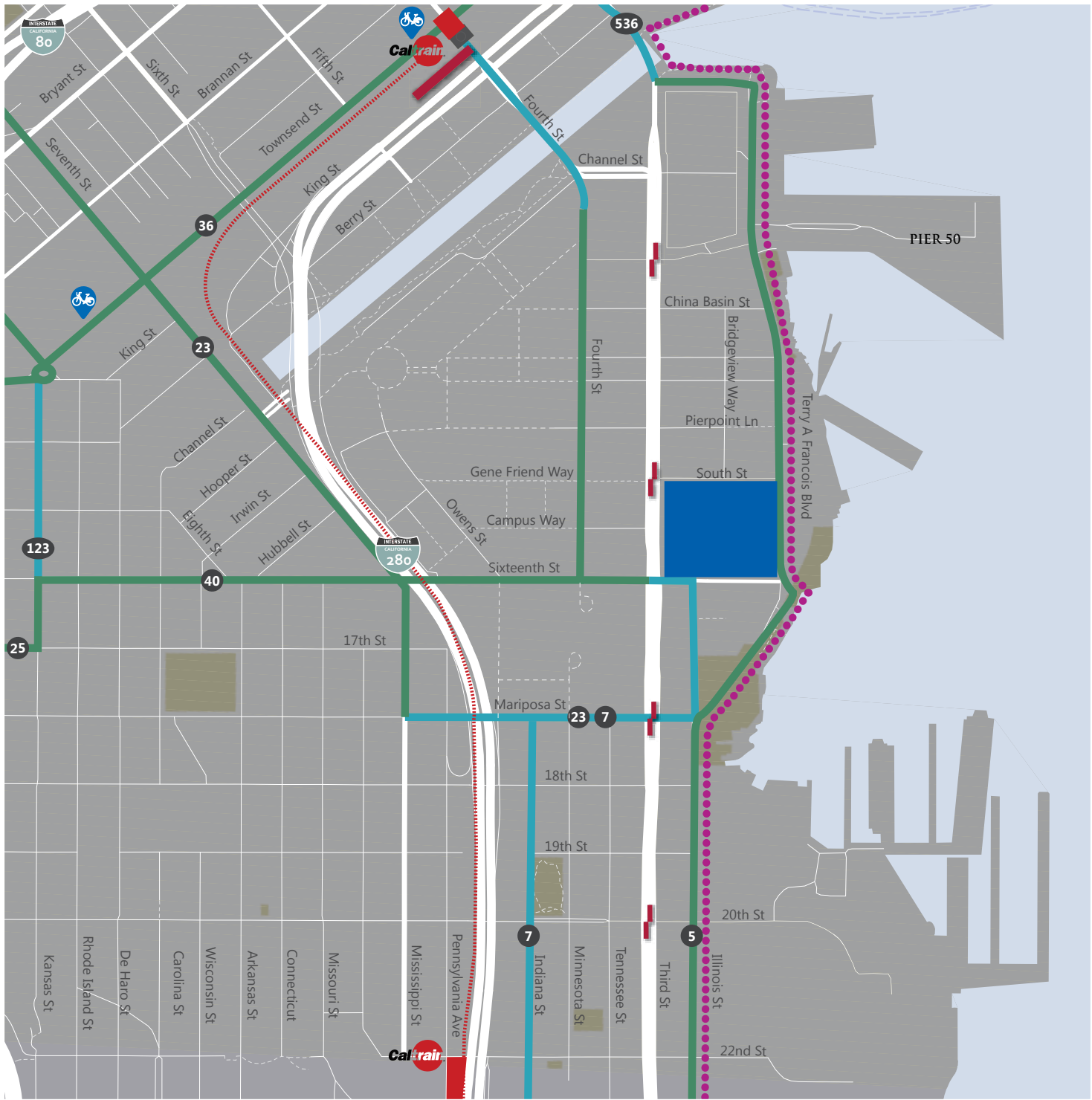
**Route #123** is a short north-south bike route that runs along Henry Adams/Kansas Street between Division Street and 16<sup>th</sup> Street as a Class III bicycle facility. It connects Routes #36 and #40.

**Route #36** is an east-west bike route that runs along Townsend Street between The Embarcadero and 8<sup>th</sup> Street as a Class II bike lane. It connects the Caltrain Station at 4<sup>th</sup> and King Streets with Routes #23 and #123 to the west.

**Route #40** is an east-west bike route that runs along 16<sup>th</sup> Street from Kansas Street to 3<sup>rd</sup> Street as a Class II bike lane. It continues for less than a block as a Class III bike facility from 3<sup>rd</sup> Street to the project site at Illinois Street. This route connects Route #25 and #123 to the west with Routes #23, 4<sup>th</sup> Street, and the project site to the east. Route #40 is planned to be moved to 17<sup>th</sup> Street between Kansas and Mississippi Streets before returning to 16<sup>th</sup> Street, where it will continue to Terry François Boulevard.

There is currently a **Bay Area Bike Share** (BABS) pod at the Caltrain Station and on Townsend Street between 7<sup>th</sup> and 8<sup>th</sup> streets, and at least one planned in the Mission Bay neighborhood near the UCSF residences. The Warriors are exploring locations for a new bike share station at or immediately adjacent to the Event Center or Bayfront Park.

-  Bikeshare Station
-  Bicycle Route Number
-  BART Station
-  Caltrain Station
-  MUNI Platform
-  Project Site
-  Bicycle Lane - striped, marked, and signed lanes for bicycle travel (Class II)
-  Bicycle Route - shared travel lane marked and signed for shared use (Class III)
-  Bay Trail



  
Not to Scale



### 3.4 STREET NETWORK



Since the Event Center Development site is located at the eastern edge of the Mission Bay neighborhood, the street network serving it extends to the north, west, and south only. The project proposes to restripe the roads adjacent to the Event Center Development frontage, as discussed in more detail previously in Chapter 2.

#### 3.4.1 Local Access

This section describes the existing streets that are most relevant for access to the immediate vicinity of the site and discusses their relevance for particular modes as appropriate.

**16<sup>th</sup> Street** is a four-lane east-west Secondary Arterial roadway with left turn pockets that extends to Castro Street to the west and currently terminates at Illinois Street in the east. Upon build out, 16<sup>th</sup> Street will continue along the south border of the project site to Terry François Boulevard. East of Illinois Street and along the majority of the corridor within the study area, on-street parking is prohibited on both sides of the street. On-street parking is currently allowed on both sides of the street between 3<sup>rd</sup> Street and Illinois Street. Muni line 22 currently runs along the length of 16<sup>th</sup> Street west of Kansas Street. Interim Muni line 55 is proposed to run along 16<sup>th</sup> Street to 3<sup>rd</sup> Street. Bicycle Route 40 is a Class II route that runs along 16<sup>th</sup> Street between 3<sup>rd</sup> and Kansas streets. Future plans will extend the route east along 17<sup>th</sup> to Mississippi where it will return to 16<sup>th</sup> Street. Sidewalks are generally provided on at least one side of the road within the study area (on the south side of the road to the east of 3<sup>rd</sup> Street and on the north side of the road west of 3<sup>rd</sup> Street). On-street bike lanes are planned along 16<sup>th</sup> Street between 3<sup>rd</sup> Street and Terry François Boulevard.

**South Street** borders the project to the north and runs for one block from Terry François Boulevard to 3<sup>rd</sup> Street. It is a four-lane road that transitions to a pedestrian plaza, Gene Friend Way, to the west of 3<sup>rd</sup> Street. Parking is prohibited on both sides of the street and wide sidewalks are provided on the north side. No bicycle facilities are provided on South Street.

**3<sup>rd</sup> Street** is a four-lane north-south roadway that extends from Market Street to Bayshore Boulevard. It is designated as a Primary Transit Important roadway in San Francisco's General Plan. Near the Event Center site, on-street parking is prohibited on both sides of the street. 3<sup>rd</sup> Street is designated as a Class III bike route with sharrows between King Street and Terry François Boulevard in the northbound direction only. The T 3<sup>rd</sup> Street light rail line operates along 3<sup>rd</sup> Street between Channel Street and Bayshore Boulevard along a physically separated median in the roadway. During peak events at AT&T Park, vehicle capacity across the 3<sup>rd</sup> Street Bridge is reduced to one lane in each direction to accommodate surges in pedestrian activity around the park.

**Terry François Boulevard** is primarily a four-lane road that runs north-south from Mission Rock Street to 3<sup>rd</sup> Street and borders the project site to the east. The road transitions to a two-lane road north of Mission Rock Street, where it curves to the west to its terminus at 3<sup>rd</sup> Street. Terry François Boulevard is part of the Bay Trail and Bicycle Route 5 (Class II in both directions). On-street parking is generally permitted on both sides of the street, except along the frontage of Pier 48 and Pier 50. During events at AT&T Park, Terry François Boulevard is closed to vehicle traffic from 3<sup>rd</sup> Street to Pier 48. The proposed Blue Greenway project will add a two-way bikeway along the east side of the street with a 4-foot buffer. As part of the Blue Greenway project, Terry François Boulevard will be realigned to create a regular block shape for Blocks 30 and 32 and to maximize the size of the Bayfront Park. The four travel lanes and on-street parking lanes on both sides will be maintained.

**Bridgeview Way** is a privately managed, narrow two-lane road that runs from South Street directly across from the north parking entrance for the Event Center Development, to China Basin Street. Parking is prohibited on

both sides of the street and sidewalks are provided on both sides along the entire stretch. This road provides internal access and circulation for the residential and office uses along the corridor.

**Illinois Street** is a two-lane road that runs north-south from Cargo Way to 16<sup>th</sup> Street at the south parking entrance to the Event Center Development. Through the project area, parking is permitted on both sides of the street and the majority of the road. Parking is prohibited on the west side of Illinois between Mariposa and 18<sup>th</sup> streets during the post-event period when there are events at AT&T Park. Illinois Street also serves as Bicycle Route 5, with Class II facilities in both directions. Parking is prohibited on the west side of Illinois between Mariposa and 18<sup>th</sup> streets during the post-event period when there are events at AT&T Park.

**4<sup>th</sup> Street** is a two-lane north-south Primary Transit Important roadway that extends from Market Street to 16<sup>th</sup> Street. On-street parking is provided on both sides of the street. 4<sup>th</sup> Street is designated as a Class III bike route as it crosses Mission Creek, after which it transitions into Class II bike facilities (bike lanes) between Channel Street and 16<sup>th</sup> Street. The T 3<sup>rd</sup> Street light rail line operates on 4<sup>th</sup> Street between King Street and Channel Street. The 4<sup>th</sup> Street Bridge is closed to northbound traffic except transit, taxis and bikes during the post-event period for AT&T Park events. As part of the Mission Bay Redevelopment Plan, 4<sup>th</sup> Street will extend south of 16<sup>th</sup> Street to access a new UCSF hospital facility, but will not connect through to Mariposa Street.

**7<sup>th</sup> Street** is a two-lane north-south Secondary Arterial roadway that extends from Market Street to 16<sup>th</sup> Street. On-street parking is provided on both sides of the street between Irwin Street and 16<sup>th</sup> Street. 7<sup>th</sup> Street has Class II bike facilities between Brannan and 16<sup>th</sup> streets.

**Mission Bay Boulevard North and South** are a one-lane one-way east-west couplet Local Street that extends from Terry François Boulevard to 4<sup>th</sup> Street; right-turn only lanes are provided at intersections. It is located at the northern edge of the Mission Bay campus site and will be eventually extended to connect to the Mission Bay Circle in the future, located approximately 1,300 feet to the west, as part of the Mission Bay Redevelopment Plan. On-street parking is provided on the north side of the Mission Bay Boulevard North.

**King Street** is a five to six-lane Primary Transit Important east-west roadway that connects to the terminus of I-280 approximately 2/3 mile north of the project. The Muni line T 3<sup>rd</sup> Street operates in the median along King Street between The Embarcadero and 4<sup>th</sup> Street, where it continues down 4<sup>th</sup> Street to the Event Center site. AT&T Park, home of the San Francisco Giants, is located on King Street between 2<sup>nd</sup> and 3<sup>rd</sup> Streets. Caltrain has its terminus station on 4<sup>th</sup> Street between King and Townsend Streets. Although King Street is not directly adjacent to the Event Center Development project site, it plays a major role in providing access to and from the site. King Street is closed in eastbound direction between 3<sup>rd</sup> and 2<sup>nd</sup> streets during post-event period for AT&T Park events.

**Berry Street** is a two-lane east-west Local Street that extends from 3<sup>rd</sup> Street to Owens Street. Berry Street operates as an eastbound one-way street between 3<sup>rd</sup> and 4<sup>th</sup> Streets. On-street parking is provided primarily on the south side, though there are some areas that have on-street parking on both sides of the street.

**Channel Street** is a four-lane east-west Local Street that currently extends from west of 4<sup>th</sup> Street to 3<sup>rd</sup> Street. On-street parking is prohibited on both sides of the street between 3<sup>rd</sup> and 4<sup>th</sup> Streets, and permitted west of 4<sup>th</sup> Street. The T 3<sup>rd</sup> Street rail line operates on Channel Street between 3<sup>rd</sup> and 4<sup>th</sup> streets within a physically separated median in the roadway. Channel Street will be extended to the Mission Bay Circle in the future, as part of the Mission Bay Redevelopment Plan.





**Mission Rock Street** is a two-lane east-west Local Street that extends from Terry François Boulevard to 4<sup>th</sup> Street. On-street parking is provided on both sides of the street for most of the length, but is not available east of 3<sup>rd</sup> Street.

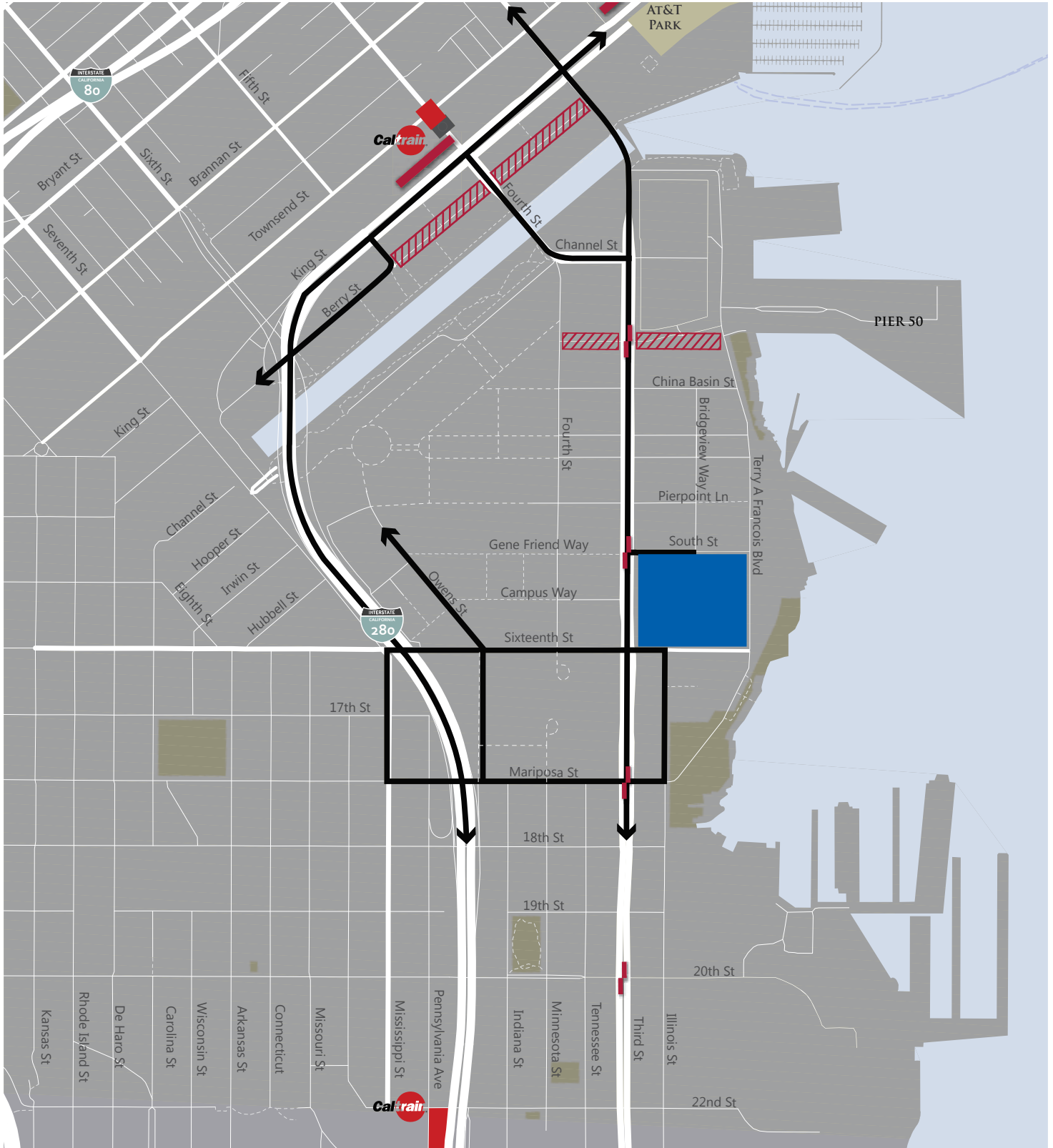
**Mariposa Street** is a two-lane east-west Local Street that extends from Illinois Street to Harrison Street. During special events, parking is prohibited to provide four travel lanes. The I-280 on- and off-ramps (southbound and northbound, respectively) are located immediately east of the intersection of Pennsylvania and Mariposa streets. The intersection of Mariposa Street and Fourth Street serves as a major access point to the UCSF hospital facilities currently under construction. Both sides of the street provide on-street parking. In addition, Mariposa Street is a designated Class III bike route with sharrows between Illinois Street and Mississippi Street. Mariposa Street will be widened to five lanes between 3<sup>rd</sup> Street and I-280 prior to opening of the Event Center.

**Owens Street** is a north-south roadway that runs from 16<sup>th</sup> Street north to a future roundabout, where it continues to the west until it runs into Mission Bay Drive. It operates as a two-way street with one travel lane in each direction. There are no Muni routes or bicycle designations on Owens Street. Owens Street sidewalk widths within the study area are generally adequate. Owens Street will be extended south to Mariposa Street and will connect with the I-280 off-ramp at Mariposa.

### **3.4.2 Truck Access**

Major truck routes in Mission Bay are along I-280, King Street, Mariposa Street, 16<sup>th</sup> Street, and 3<sup>rd</sup> Street. These routes are illustrated in Figure 3-4. Primary truck access to the project site will be along Mariposa Street to Illinois Street, where direct access to the parking garage will be provided at the Illinois Street / 16<sup>th</sup> Street intersection. Secondary truck access to the site will be along Cesar Chavez Street to Illinois Street. Truck access to and circulation throughout the Event Center Development site is explained in further detail in Chapter 7.

-  BART Station
-  Caltrain Station
-  MUNI Platform
-  Project Site
-  Truck Route
-  No Thru Truck Traffic



Not to Scale

### 3.5 REGIONAL TRAFFIC

**Interstate 80 (I-80):** I-80 provides the primary regional access by car from the East Bay to the project area. It connects to the East Bay and other major freeways (I-580 and I-880) via the San Francisco-Oakland Bay Bridge. Within San Francisco, I-80 generally has eight lanes (four lanes in each direction). On- and off-ramps serving the site are located as follows:

- Off-ramps:
  - Westbound: Harrison Street at 5<sup>th</sup> Street; 8<sup>th</sup> Street at Harrison Street
  - Eastbound: 4<sup>th</sup> and Bryant, 7<sup>th</sup> and Bryant
- On-ramps:
  - Eastbound: Bryant Street between 1<sup>st</sup> and 2<sup>nd</sup> Streets; Essex Street at Harrison Street; , 1<sup>st</sup> Street at Harrison Street, 8<sup>th</sup> Street
  - Westbound: 7<sup>th</sup> Street and Harrison, 4<sup>th</sup> and Harrison

**Interstate 280 (I-280):** I-280 provides the primary regional access by car from the South Bay and the Peninsula to the project site and is generally a six-lane freeway. There is a freeway interchange between I-280 and **Highway 101** (US 101) approximately 2.5 miles south of the site. US 101 also provides access to Cesar Chavez Street south of the site and Vermont Street west of the site. I-280 has a terminus (both on- and off-ramps) at 4<sup>th</sup> and King Streets, adjacent to the Caltrain Station, which results in the need to ensure safe pedestrian circulation at that intersection. The closest on- and off-ramp serving the site for southbound and northbound I-280 traffic is at Mariposa Street. Drivers will be encouraged to also use the ramp at Cesar Chavez St/Pennsylvania Avenue to reduce the impacts on the ramps before and after a peak event and distribute traffic more efficiently. On- and off-ramps serving the site are located as follows:

- Off-ramps:
  - Northbound: Cesar Chavez Street; Mariposa Street; 5<sup>th</sup> Street / King Street (terminus)
  - Southbound: 18<sup>th</sup> Street / Pennsylvania Avenue; Cesar Chavez Street / 25<sup>th</sup> Street
- On-ramps:
  - Northbound: 25<sup>th</sup> Street; 18<sup>th</sup> Street;
  - Southbound: 5<sup>th</sup> Street / King Street (terminus); Mariposa Street; Cesar Chavez Street

Regional auto traffic will seek parking in locations close to the Event Center. A total of 8,290 parking spaces exist in the area between the Event Center and I-280/King Street to the west and north. This includes 4,690 spaces in parking structures and 3,590 spaces in surface lots. Major parking facilities in the area include Lot A (2,300 space surface lot), the 1,400 space structure at 450 South Street, the 730 space UCSF garage at 3<sup>rd</sup> Street and Campus Lane, a 500 space structure at 499 Illinois Street, and an 800 space structure located behind 1650 Owens Street.

## CHAPTER 4. TRAVEL DEMAND MANAGEMENT

The Warriors shall work with the City to pursue and implement commercially reasonable strategies to reduce transportation impacts related to project implementation. In addition, the City shall pursue additional strategies to be implemented by the City or other public agency (e.g., Caltrans).

The Warriors' and City's approach shall include one or more of the strategies identified in this chapter, which incorporates both those TDM measures included in previous versions of the TMP and the "additional strategies" listed in project mitigation measure M-TR-2b (marked with an asterisk). The purpose of these strategies is to increase the level of access to the project by transit, bicycling and walking while discouraging the use of private automobiles, particularly by solo drivers.

### 4.1 GENERAL TRANSPORTATION MANAGEMENT STRATEGIES

1. Designate a TMP coordinator to: develop and implement marketing/communications/incentives programs, and coordinate with facility and tenants on policies and capital needs to support sustainable trip making by employees and Event Center visitors.
2. Develop means of in-building, on-site, and/or neighborhood communication (radio, TV, smart phone app, etc.) that gives Event Center, office, or retail users multiple, real-time advisories about the status of the transportation system and event schedule to facilitate convenient transportation choices. Information provided may include availability of public transit and shuttle bus service, location and capacity of bike parking facilities, best walking paths, location of taxi stops, and limited extent of – or high price for – available parking.
3. \*Create a smart phone application, or integrate into an existing smart phone application, transportation information that promotes transit first, allows for pre-purchase of parking and designates suggested paths of travel that best avoid congested areas or residential streets such as Bridgeview Way north of Mission Bay Boulevard and Fourth Street. The app may also be equipped to send notifications about event times and traffic conditions. The app will be free and available to anyone who wishes to download it, and will be useful for anyone working, living, or visiting the Mission Bay Area.
4. Provide extensive use of real-time transit info in public assembly areas that reflect the range of transit services in the area.
5. Install a machine to add value to Clipper Cards on-site.
6. Establish an annual TDM budget for all components of the TDM program applying to GSW employees and Event Center visitors.
7. \*Participate as a member of the Mission Bay/Ballpark Transportation Coordination Committee (MBBTCC) and notify the MBBTCC at least one month prior to the start of any non-GSW event with at least 12,500 expected attendees. If commercially reasonable circumstances prevent such advance notification, the GSW shall notify the MBBTCC within 72 hours of booking.
8. \*Meet with the City to discuss transportation and scheduling logistics following signing any marquee events (national tournaments or championships, political conventions, or tenants interested in additional season runs: NCAA, etc.).

## **4.2 EMPLOYEE TDM**

### **4.2.1 Employee Public Transit Strategies**

1. Participate in and promote pre-tax commuter benefits, a federal program that allows employees to reduce their commuting costs by up to 40 percent using tax-free dollars to pay for their commuting expenses.
2. Contribute to the Mission Bay TMA shuttle program; designate priority curb areas on-site for TMA shuttles.
3. Promote use of Mission Bay TMA shuttles to employees; notify them that they are eligible to ride the Mission Bay TMA shuttles, and provide information about routes, stop locations, and schedule.

### **4.2.2 Employee Bicycle Strategies**

1. Provide indoor secure bicycle parking facilities for employees.
2. Provide shower and locker facilities for employee use.
3. Promote use of the indoor bicycle valet facility (approximately 300 bike spaces) (available to Event Center and GSW employees only during non-event hours and days).
4. Sponsor a Bay Area Bike Share station in the project vicinity.
5. Encourage all employees and visitors to participate in public events that promote bicycling such as the annual "Bike to Work" day.

### **4.2.3 Employee Automobile Reduction Strategies**

1. Enroll in free-to-employees ride-matching program through [www.511.org](http://www.511.org).
2. Enroll in free-to-employers Emergency Ride Home program through the City of San Francisco ([www.sferh.org](http://www.sferh.org)).
3. Designate parking spaces for carpool/vanpool participants.
4. \*Seek partnerships with car-sharing services.
5. If applicable, comply with California's parking cash-out program.
6. Organize and publicize community efforts, such as Spare the Air days (as declared for the Bay Area region) or a Rideshare Week.
7. Encourage tenants to allow certain employees to work flexible schedules and telecommute, to the extent reasonable.

### **4.2.4 Additional Strategies**

1. Identify potential tenants who may provide on-site amenities (such as fitness and exercise centers, food and beverage options, and/or automated banking resources) to encourage employees to stay on-site during the work day.

## **4.3 EVENT CENTER PATRON TDM**

### **4.3.1 Patron Public Transit Strategies**

1. \*Work with the City to identify Event Center patrons arriving via transit and reward those patrons with promotional incentives that may include discounted food or beverage, team or venue merchandise, raffle entry, access to a “fast-track” security line or one or more other options. Market these incentives with a robust communications strategy prior to an event day so that guests can make choices accordingly.
2. Distribute GSW-branded Clipper Cards to encourage patrons to associate event attendance with transit usage during attendee’s trip planning process.
3. Work with the SFMTA to determine the market feasibility and benefits of bundling the cost of a round-trip Muni fare into the cost of all ticketed events.
4. Encourage customers at point of ticket purchase to use sustainable modes via communications on the internet and through the ticket vendor.
5. Work with the SFMTA to brand transit stops/stations near the project site, covering any costs associated with re-branding. Utilize TVs and other screens inside the Event Center building to display real time transit information and prominent comparisons between transportation choices available to fans, employees, and visitors to the Event Center Development. Emphasize transit’s lower-cost, higher sustainability, and other beneficial factors as compared with private autos.
6. Play recorded announcements during halftime (for games) or between opening and main acts (for concerts), and as Event Center attendees exit the building, to notify guests of non-auto travel options home, including real time transit and shuttle departure times.
7. Provide additional communication of transit options and wayfinding during playoff games for non-season pass holders who may be coming from out of town by providing information to, and coordinating displays within, hotels and local businesses in the Event Center vicinity.

### **4.3.2 Patron Bicycle Strategies**

1. \*Promote use of the indoor bicycle valet facility (approximately 300 bike spaces) on 16<sup>th</sup> Street. Identify and reward patrons of the bike valet with promotional incentives that may include discounted food or beverage, team or venue merchandise, raffle entry, access to a “fast-track” security line or one or more other options. Market these incentives with a robust communications strategy prior to an event day so that guests can make choices accordingly.
2. If and when peak event bicycle storage demand exceeds the 300-space enclosed valet facility and on-site bike rack capacity, provide additional temporary outdoor bike valet parking areas.
3. Provide outdoor bicycle storage/racks for Event Center and office, retail, or restaurant visitors.
4. Sponsor a Bay Area Bike Share station in the project vicinity.
5. Encourage all guests to participate in public events that promote bicycling such as the annual “Bike to Work” day



6. Provide a bicycle map, showing routes to the Event Center development site, on the Event Center web site, mobile applications, and in event literature and advertisements, when appropriate.

#### **4.3.3 Patron Automobile Reduction Strategies**

1. \*If parking is not bundled with ticket purchases for arena events (i.e., select event days and types), charge market-rate fees for on-site parking in connection with such arena events. Encourage off-site parking partners to charge market-rate parking fees for all arena events. Notify patrons in advance that nearby parking resources are limited and travel by non-auto modes is encouraged.
2. Designate priority curbside areas on-site for taxis, charter buses, and rideshare vehicles. Explore partnership options with rideshare/carpool/TNC companies to offer discounts to event attendees and other visitors and/or employees.
3. \*Work to identify off-site parking lot(s) in the vicinity of the Event Center, if available, where livery and TNC vehicles could stage prior to the end of an event.

#### **4.3.4 Patron Communication Strategies**

1. Design a "Getting There" page for the venue website that lists multi-modal options and comparisons before showing preferred driving routes or available parking.
2. Promote transit access to project by providing: interactive trip-planning tools, transit maps, with recommended stops/stations for accessing site and best routes to the Event Center; and walking directions from transit stations/stops. Promote transit information on Event Center web site, mobile apps, on websites of events taking place at the site (to be required as a standard part of event contract), and in event literature and advertisements, when appropriate.
3. Provide real-time transit information, including train or bus arrivals and departures, in key Event Center locations (exit areas, gathering areas, etc.), inside the building (on TVs and other screens), and/or via mobile applications.
4. Make available additional communication of transit options and wayfinding during playoff games for non-season pass holders who may be coming from out of town by providing information to, and encouraging displays within, hotels and local businesses in the Event Center vicinity.
5. Create schedules of upcoming events for display on electronic message boards, to discourage auto use and parking in the Event Center vicinity.

#### **4.3.5 Additional Strategies**

1. Identify potential tenants who may provide on-site amenities (such as food and beverage options, and/or automated banking resources) to encourage Event Center patrons to stay on-site for longer post-event periods.

### **4.4 CITY TDM EFFORTS**

The strategies described below are designed to further limit transportation impacts in the project vicinity. While it is the responsibility of the City, not the Warriors, to implement one or more of the following options, they are relevant to the Warriors' planning and ongoing coordination with public agencies and neighbors and are included here for reference.

1. \*The City to provide coordinated outreach efforts to surrounding neighborhoods to explore the need/desire for new on-street parking management strategies, which could include implementation of time limits and Residential Parking Permit program areas.
2. \*The City to include on-street parking spaces within Mission Bay in the expansion and permanent implementation of SFpark, including dynamic pricing, and smart phone application providing real-time parking availability and cost.
3. \*The City shall work to include the publicly accessible off-street facilities into the permanent implementation of SFpark, and incorporate data into a smart phone application and permanent dynamic message signs.
4. \*The City to consult with regional providers to encourage increased special event service, particularly longer BART and Caltrain trains, and increased ferry and bus service.
5. \*The City to work in good faith with WETA, the Warriors, UCSF, and other interested parties to explore the possibility of construction of a ferry landing at the terminus of 16<sup>th</sup> Street, and provision of ferry service during events.
6. \*If necessary to support achievement of certain non-auto mode shares for the project (i.e., in a scenario without implementation of the Muni Special Event Transit Service Plan), the Warriors shall cooperate with future City efforts to manage and price the off-site parking supply in the project vicinity to reduce travel by automobile, thus improving traffic conditions.

The TDM strategies listed above will be reviewed and refined during the Event Center's first year of operation and may be reviewed and revised annually thereafter, or as new transportation facilities are developed in the project vicinity.

## **4.5 SPECIAL EVENT TRANSIT SERVICE PLAN**

This section summarizes a preliminary Transit Service Plan (TSP) for the Warriors Event Center and Mixed Use Development as outlined by the SFMTA in a presentation on October 1, 2014.

### **4.5.1 Service Plan Objectives**

The key objective for the TSP is as follows:

- Provide high quality service to event goers, without affecting service reliability for other Muni customers
- Accommodate a 35 percent transit mode share for peak event trips
- Develop a service plan that maximizes existing infrastructure and prioritizes operations efficiencies
- Develop a service plan adequate for peak event ridership volumes that is also scalable for small and medium events

### **4.5.2 Service Plan for Peak Event**

The majority of regional transit riders will use Muni as a last-mile connection to the Event Center Development. Most Muni passengers will travel on the T 3<sup>rd</sup> southbound pre-event, and northbound post-event. The T 3<sup>rd</sup> service pre-event is expected to have excess capacity, while post-event excessive capacity will not be allocated

from regular service, but rather will be served from additional trains and supplemental routes. The T 3<sup>rd</sup> service will be supplemented with bus service to respond to distributed customer demand, to minimize transfers made, and to minimize rail car demand. **Inset 4-1** shows proposed routes for each of the supplemental shuttles. Supplemental bus routes include:

- T 3<sup>rd</sup> Supplemental Service
- Metro Shuttle via The Embarcadero
- 16<sup>th</sup> Street BART Station Shuttle
- Van Ness Avenue Shuttle
- Ferry Building / Transbay Terminal Shuttle

### Inset 4-1: Supplemental Shuttle Routes



Table 4-1 summarizes the fleet of shuttle buses and light rail vehicles necessary for pre- and post-event scenarios.

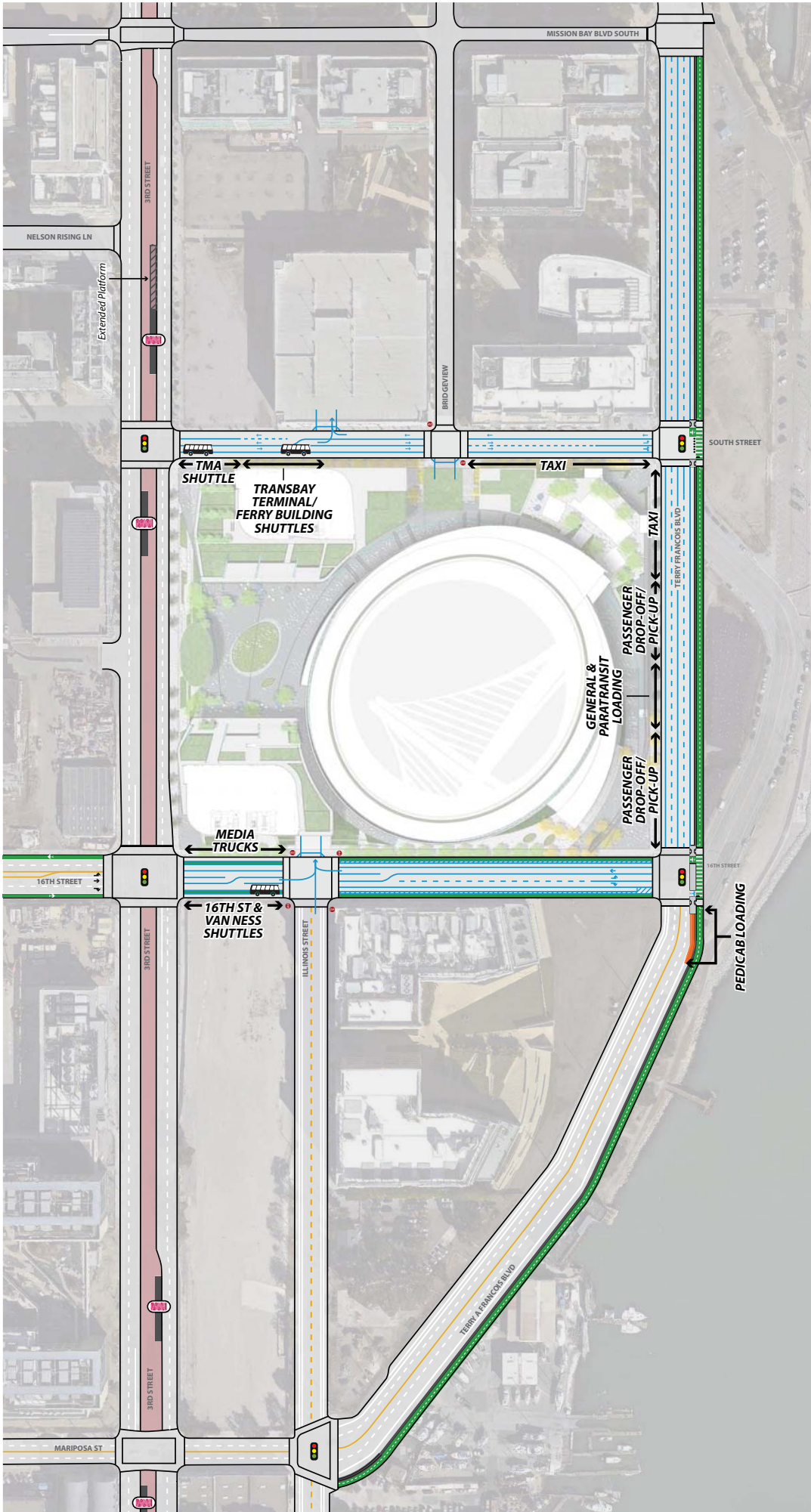
Figure 4-1 shows the pre-event shuttle plan, including stop locations at the site. Figure 4-2 shows the post-event shuttle plan; including shuttle stop locations, staging areas, and temporary lane closers, which are discussed in more detail in Chapter 6.

**TABLE 4-1: PRELIMINARY TRANSIT SERVICE PLAN FOR PEAK EVENT <sup>11</sup>**

SERVICE	FLEET NECESSARY	
	Pre-Event	Post-Event
T 3 <sup>rd</sup> Supplemental Service	4 two car trains between Chinatown and Mission Bay Loop combined with 4 minute scheduled subway service	10 two car trains staged to clear event
Metro Shuttle via The Embarcadero	None – limited car availability	2 three car trains staged to clear event
16 <sup>th</sup> Street BART Station Shuttle	4 articulated motor coaches operating between 16 <sup>th</sup> Street BART and the arena every 7-8 minutes	4 articulated motor coaches + 1 standard motor coaches operating between 16 <sup>th</sup> Street BART and the arena staged to clear event with half of vehicles returning for a second trip
Van Ness Avenue Shuttle	5 standard motor coaches operating every 12 minutes along the Van Ness corridor to arena via 16 <sup>th</sup> Street	4 standard motor coaches operating to the Van Ness corridor via 16 <sup>th</sup> Street staged to clear event
Ferry Building / Transbay Terminal Shuttle	6 standard motor coaches operating every 10 minutes via Ferry Plaza and the Transbay Terminal to the arena	6 standard motor coaches operating to Transbay Terminal and Ferry Building Plaza staged to clear event

Source: SFMTA (Oct. 1, 2014).

<sup>11</sup> The Transit Service Plan can also be modified and implemented to serve varying attendance size for small and medium events, based on review of conditions during events by the Muni Service Planning Supervisor.

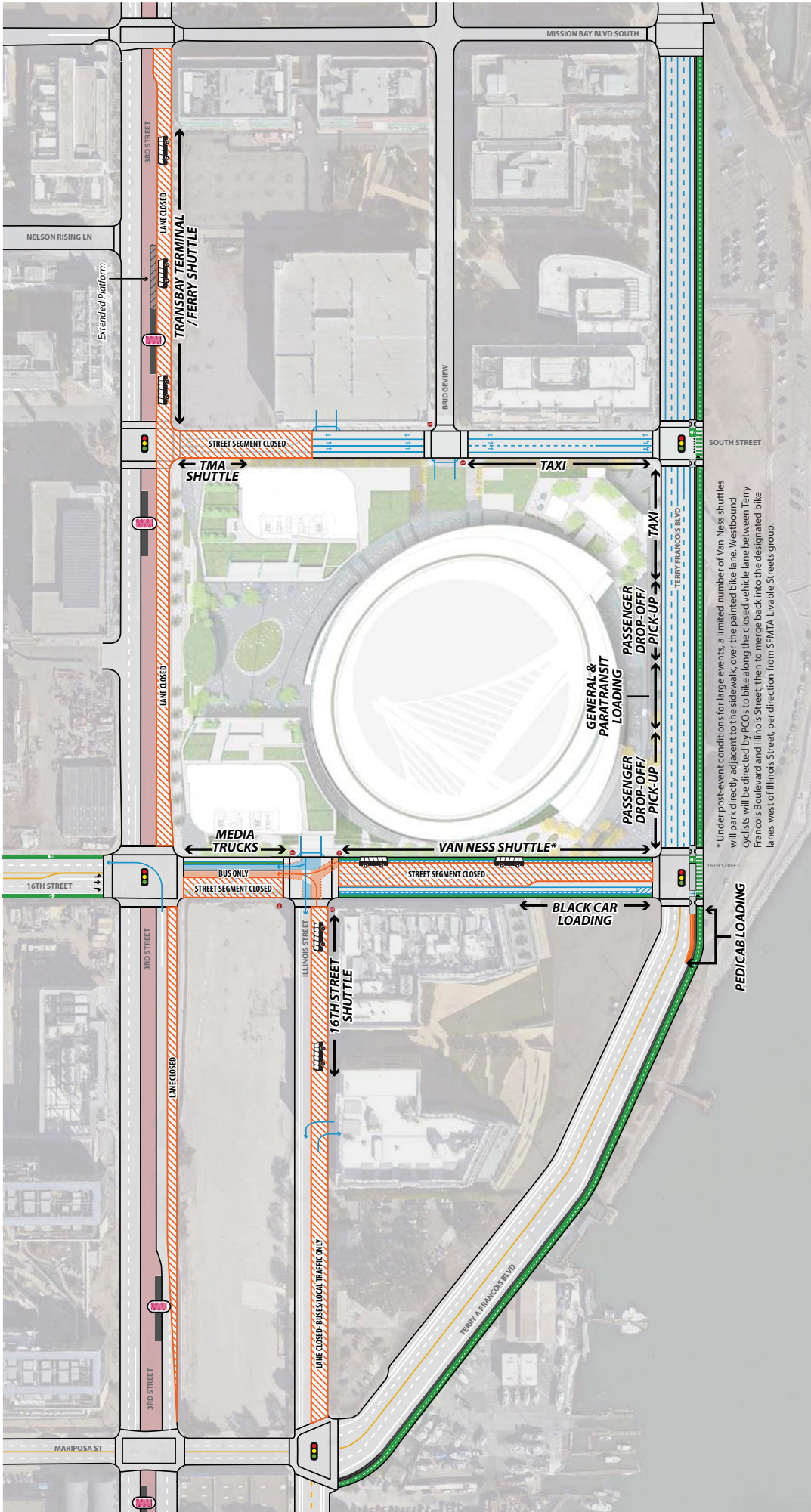


PRE-EVENT SHUTTLE PLAN (PEAK, CONCERT, AND DUAL EVENTS)

FIGURE 4-1



Not to Scale



\* Under post-event conditions for large events, a limited number of Van Ness shuttles will park directly adjacent to the sidewalk, over the painted bike lane. Westbound cyclists will be directed by PCOs to bike along the closed vehicle lane between Terry Francisco Boulevard and Illinois Street, then to merge back into the designated bike lanes west of Illinois Street, per direction from SFMTA Livable Streets group.

POST-EVENT SHUTTLE PLAN (PEAK, CONCERT, AND DUAL EVENTS)

FIGURE 4-2



## CHAPTER 5. TRAVEL CHARACTERISTICS OF EVENT CENTER ATTENDEES AND SITE USERS

This chapter describes the travel characteristics of current Oracle Arena attendees and the assumptions for the new Event Center based on the analysis prepared by the SEIR Team (as of December 2014), focusing on travel patterns typical of game days. For typical sequences of events on game and concert days, please see **Appendix A**. This Chapter is included in the TMP for contextual and informational purposes only. A full environment document will be prepared that includes a more complete and quantitative analysis of travel characteristics (i.e., projected mode split, intersection performance, parking demand, and traffic routing) as they pertain to transportation.

### 5.1 NBA EVENT ATTENDANCE LEVELS

The NBA regular Season consists of 82 games total with half of them played at the home Arena. Home games over the year would typically consist of the following:

- 2-3 pre-season home games;
- 41 regular season home games;
- 0-16 post-season home games (should the Warriors reach the playoffs, the minimum number of home games is 2 and the maximum is 16)

The monthly distribution of home games tends to be evenly spread at about 7 games/month over 6 months (November-April), with a typical month having 1-3 games on Fridays, 1-3 games on Saturdays, 0-1 game on Sundays, and 2-6 games on Mondays through Thursdays.

The capacity of the existing Oakland Arena is 19,596. Average attendance levels at home games over the last 10 years are summarized in **Table 5-1**.

**TABLE 5-1: WARRIORS' HISTORIC GAME ATTENDANCE LEVELS BY YEAR**

Season	Average Attendance	Occupancy
2012-13	16,831	86%
2011-12	16,749	86%
2010-11	16,399	84%
2009-10	14,884	76%
2008-09	17,573	90%
2007-08	18,120	93%
2006-07	16,024	82%
2005-06	16,173	83%
2004-05	14,471	74%
2003-04	14,370	73%

Source: GSW Attendance and Employment Memo (Feb. 7, 2014).



Based on the information above, games in many years have, on average, almost filled the Arena to capacity. As a result, the discussion and controls in the following sections are based on 18,064 attendees.

## 5.2 EVENT CENTER PATRON ARRIVALS

### 5.2.1 Trip Origins and Arrival Distribution

Table 5-2 summarizes the known origins of attendees who currently attend games at Oracle Arena and estimated origins of future attendees. As shown, it is anticipated that at the proposed new Event Center site, the breakdown of trip origins will shift considerably. It is anticipated that fewer attendees will come from the East Bay (33 percent vs. 53 percent) and that more attendees will come from San Francisco, the South Bay, and the North Bay.

TABLE 5-2: ORIGINS OF NBA EVENT ATTENDEES			
Origin	Origins for Current Oakland Arena Location <sup>1</sup>		Weekday Inbound Forecast Origins for San Francisco Location <sup>1</sup>
San Francisco	16%		29.3%
Super District 1	N/A		14.8%
Super District 2	N/A		4.6%
Super District 3	N/A		5.5%
Super District 4	N/A		4.4%
North Bay	7%		8.9%
East Bay	53%		31.1%
South Bay	24%		26.7%
Out of Region	N/A		4%

Notes:

1. Source: *Technical Memorandum – Travel, Parking and Loading Demand Estimates for the Proposed Event Center & Mixed-Use Development at Mission Bay Blocks 29-32*, March 2015.

Assuming the pattern is similar for the proposed Event Center site, it can be expected that patron arrivals at the Event Center will begin approximately 2½ hours prior to event start, peak during the ½ hour prior to event start, and continue after the event is under way. Approximately 70 to 80 percent of attendees are assumed to depart in the hour immediately after the event ends.

For other events at the Event Center (e.g. family shows, theatre events) the arrival and departure distributions times are different compared to the peak NBA game event. Although the attendance levels will be lower for such events, due to the nature of the event and the audience it attracts, it is much more likely that all guests will arrive prior to the start time and will stay until the end.

### 5.2.2 Pedestrian Arrivals

Most attendees will take transit or drive and park at nearby garages and lots, and then walk to the Event Center. Transit and auto trips to games make up approximately 90 percent of all trips. Regardless of their primary mode

of travel, most guests will walk the final leg of their trip. **Figure 5-1** illustrates the projected routes that pedestrians will likely take as they walk from nearby transit stops/stations and the walking times associated with each route.

The main pedestrian entry points to the Event Center include the main plaza on the west side of the site with direct access from 3<sup>rd</sup> Street sidewalks, and the southeastern corner of the site with access from Terry François Boulevard, 16<sup>th</sup> Street, and the Bayfront Park. The majority of pedestrian traffic is expected to come from north of the site along The Embarcadero and the 3<sup>rd</sup> Street corridor, with its direct links to Market Street and major transit hubs. Some pedestrians walking from the Embarcadero may use Terry François Boulevard instead of 3<sup>rd</sup> Street. Upon completion of the Blue Greenway, Terry François Boulevard will become a much more attractive walking route to pedestrians coming to the site from the north or the south. The majority of pedestrians coming from the south and west are likely coming from nearby BART and Caltrain stations and will walk along 16<sup>th</sup> Street, 3<sup>rd</sup> Street, or Terry François Boulevard to the Event Center Development.

### **5.2.3 Transit Arrivals**

#### **Arrivals from Caltrain**

Most attendees who choose to take Caltrain to the Event Center are expected to get off at the 4<sup>th</sup> & King Station (0.7 mile walk) during the peak pre-game hour, while a very few may choose to get off at the 22<sup>nd</sup> Street Station. On weekends, train headways are typically one per hour; thus, most attendees using Caltrain will likely arrive in a single train. However some guests may come on an earlier train for weekend events to visit the city or the shop at the retail and restaurant uses on site. On weekdays, 6-7 trains arrive between 6:00 and 7:00 PM. With future electrification, Caltrain anticipates an additional train per hour.

From 4<sup>th</sup> & King most pedestrians will cross King Street, walk along 4<sup>th</sup> Street, across the 4<sup>th</sup> Street Bridge to Channel Street, and finally along 3<sup>rd</sup> Street or Terry François Boulevard to the Event Center. Muni assumes that about half of Caltrain riders will get on the T 3<sup>rd</sup> at Caltrain and ride to the Event Center. Key intersections along pedestrian routes from Caltrain should be monitored to determine if additional traffic control is necessary.

#### **Arrivals from UCSF Mission Bay Muni Platform**

Many event attendees coming from downtown San Francisco or BART or AC Transit or Golden Gate Transit will likely take Muni Metro (T 3<sup>rd</sup> Street Line) to the Event Center. Most Muni passengers are predicted to be coming from the north and will likely get off at the UCSF Mission Bay stop, located on 3<sup>rd</sup> Street south of South Street, approximately 500 feet away from the Event Center entry. Muni passengers coming from the south will either get off at the Mariposa Street stop and walk the remaining quarter mile to the Event Center, or will get off at the UCSF Mission Bay stop on 3<sup>rd</sup> Street north of South Street.

PCOs will also be positioned at key intersections and crossings to assist with safe pedestrian crossing and vehicle operations in the vicinity of the UCSF Mission Bay platform during peak events. To deter pedestrian crossings mid-block between South Street and 3<sup>rd</sup> Street, decorative fencing will be placed along the Muni transit right-of-way.

#### **Arrivals from Special Event Shuttles**

Event attendees arriving from the Mission and 16<sup>th</sup> Street BART station or Van Ness shuttles will be dropped off along the south side of 16<sup>th</sup> Street, just west of Illinois Street. Pedestrian access to the Event Center will be

provided at PCO-assisted crossings at either 3<sup>rd</sup> Street or Illinois Street. Transbay Terminal and Ferry Building shuttles will drop off patrons on the south side of South Street, just east of 3<sup>rd</sup> Street.






#### **5.2.4 Bicycle Arrivals**

Valet bicycle parking will be provided for peak events near the southeast corner of the site. A total of more than 300 attended, free, indoor valet bicycle parking spaces will be provided. Up to 200 additional bicycles (or more if demand exceeds this number) will be accommodated on game days through a combination of permanent independently accessible outdoor bike racks installed near on-site destinations and entries, and temporary staffed outdoor bike valet facilities. In addition, secure bike rooms located at grade in each office building will provide up to 80 total bicycle spaces for office users. The nearest bike share station is currently located at the 4<sup>th</sup> & King Caltrain Station, approximately 2/3 mile away, or a 15 minute walk. The project will sponsor a bike share station in the immediate vicinity of the Event Center Development, likely along Terry Francois Boulevard.






Based on the mode splits for different events, the most bicycle traffic is expected during Saturday peak event days, resulting in approximately 250 bicycle trips, of which approximately half will arrive in the hour preceding game start. If all bicyclists choose to use the bicycle valet, then the bicycle valet will be nearly filled to capacity during most events.

Most bicyclists traveling north or south to the Event Center Development are expected to use the Terry François Blue Greenway when it is complete. Bicyclists traveling west to the Event Center Development are expected to use 16<sup>th</sup> Street. All bicyclists will be expected to walk their bikes across 16<sup>th</sup> Street or Terry Francois Boulevard at designated crosswalks to access the bike valet. Signage to direct this movement will be clearly displayed to ensure organized, safe movements of bicycles and to reduce conflicts with vehicles and pedestrians. Location and design of the bike valet and nearby landscaping will also direct the safe movement of pedestrians and cyclists.

Pedicabs, will be accommodated near the site, especially during peak events. Most pedicabs are expected to travel north/south to the site and are expected to use the Terry François Blue Greenway when it is complete. A pedicab staging area is proposed for the east side of Terry François Boulevard just south of 16<sup>th</sup> Street. This is consistent with the bicycle focus in the southeast corner of the site.

-  BART Station
-  Caltrain Station
-  MUNI Station
-  MUNI Platform
-  Project Site

**Potential Pedestrian Path of Travel from Regional Transit**

-  From BART
-  From Transbay Terminal
-  From Caltrain
-  From Ferry Building
-  Walking Time to Warriors Arena



  
Not to Scale

POTENTIAL PEDESTRIAN PATHS OF TRAVEL FROM REGIONAL TRANSIT

### **5.2.5 Taxis and Charter Buses**

An evening NBA game is not forecast to attract more than 2-3 large charter buses on average<sup>12</sup>; however they may become more relevant or necessary to help meet auto mode share standards in the future. A charter bus zone will be located along the north side of 16<sup>th</sup> Street close to Terry François Boulevard for drop-off/pick-up activity during small events. A total of 500 feet of curb space (accommodating 6-8 buses at a time) will be available on the north side of the street between Illinois Street and Terry François Boulevard. No additional off-site staging for the buses is necessary or anticipated at this time.

While conventions are expected to draw a much smaller number of visitors, nearly half of all trips are forecast to be taken by shuttle bus or taxi.

A staffed taxi zone will be designated along the west side of Terry François Boulevard and along the south side of South Street for all events to ensure taxi maneuverability from the Event Center in all directions, especially post event, and to increase the attractiveness of taxi options for patrons exiting daily retail and restaurant uses on-site. Access for passenger drop-off/pick-up activity during concerts and peak events will occur in a separately designated curb space on the west side of Terry François Blvd. This zone will be managed to avoid vehicle conflicts with surrounding traffic. Drop-offs will be located on the west side of the street and will minimize conflicts with cyclists on Terry François Boulevard. During non-peak events, taxis would load along the Terry François Boulevard frontage.

### **5.2.6 Vehicle Arrivals at Event Center**

The Event Center parking garage will have approximately 950 parking spaces. 500 spaces will be available for pre-purchase by designated ticketholders, and others may be shared-use spaces for daytime office employees and evening Event Center patrons. Based on the arrival pattern of Event Center attendees, most vehicles will arrive at the garage in the hour preceding game tipoff. Parking pass-holders will self-park in the garage after having their credentials checked. Garage management procedures are described in Section 2.1.3 and Chapter 6.

The main garage access will be located on 16<sup>th</sup> Street, creating a 4-way stop controlled intersection at Illinois Street. Pre-event vehicle access to the garage will be distributed to a northbound through movement from Illinois Street, an eastbound left-turn movement from 16<sup>th</sup> Street, and a westbound right-turn movement from 16<sup>th</sup> Street. The Illinois Street intersection with the garage entrance/exit will be controlled by an all-way-stop, except for before and after large events, where it will be controlled by Parking Control Officers (PCOs). Operations will be monitored at this and other locations, and additional controls (e.g. signalization) may be added if deemed necessary to minimize conflicts between pedestrians and bicycles on the sidewalk/multi-use path and the vehicles entering the garage or exiting the site vicinity.










The suggested pre-event driving routes are shown on **Figure 5-2**. These routes will be provided to attendees prior to an event (via website, email, app, etc.) to encourage effective distribution of arrival traffic. In order to maintain clear access to the UCSF Campus and UCSF hospital center, guests traveling from south of the project site will not be encouraged to use Owens St. en route to the Event Center. Likewise, guests traveling from the west or north of the site will be encouraged to use alternatives to 16th Street to reduce congestion during UCSF

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<sup>12</sup> Golden State Warriors.

shift changes (primarily the night shift nurse arrival period from 6:30 PM to 7:00 PM). The pre-event routes shown are subject to revision based on monitoring during the first four years of operations.

Parking facilities shown on **Figure 5-2** are solely representative and do not pre-suppose third party agreements. The Warriors are exploring options for shared-use agreements to provide additional parking resources to guests and additional revenue to copious public and private lots in the vicinity. If parking demand is not met by supply in Mission Bay, the Warriors will secure agreements for satellite parking lots with transit or shuttle connections to the Event Center.

-  MUNI Platform
-  Caltrain Station
-  BART Station
-  Project Site
-  BART Line
-  Caltrain Line
-  Potential Pre-Event Driving Routes
-  Lane Closure
-  Representative Parking Facilities (to be confirmed)



Not to Scale

## SUGGESTED\* PRE-EVENT DRIVING ROUTES

\*Conceptual. For complete details on analyzed access routes and vehicle intersection assignments, please see project SEIR, Appendix TR.

## **5.3 EVENT CENTER PATRON DEPARTURES**

### **5.3.1 Trip Departure Distribution**

For a weekend peak event, the distribution of event attendees to post-game destinations is forecast to be the same as the pre-game trip origin distribution, as summarized in **Table 5-2**.

The existing pattern of departures at the Oakland Event Center varies depending on game circumstances. In general, 30-40 percent of fans depart prior to the final buzzer while 60-70 percent stays through the end of the game. Periodically, there are also post-event activities that encourage some attendees to stay longer. The presence of retail uses on the San Francisco site provides incentives, which are not available in Oakland, for patrons to remain on site for a period of time after events. When this is the case, departure times are more spread out.

For the purpose of analyzing departures, the busiest post-game hour is the hour including the end of the game, when up to 80 percent of attendees will depart. This time period will require the highest level of traffic control given the concentration of pedestrian activity exiting the Event Center.

### **5.3.2 Pedestrian Departures**

The main pedestrian exit points from the Event Center include the main plaza on the west side of the site with direct access to 3<sup>rd</sup> Street sidewalks and the southeastern corner of the site with access to 16<sup>th</sup> Street and Terry François Boulevard. Similar to pre-game conditions, pedestrians leaving the Event Center are expected to walk primarily along 3<sup>rd</sup> Street or Terry François Boulevard after the game, as illustrated in **Figure 5-1**. Event attendees will be directed to walk towards different exits depending on their mode of departure. Due to post-game distribution patterns, the volume of pedestrians leaving the Event Center post-game will be higher in the hour following a game than the volume arriving in the hour pre-game; following the first hour, the volume of pedestrians will drop significantly.

### **5.3.3 Transit Departures**

#### Departures towards Caltrain

Attendees who will take Caltrain following game's end will most likely walk or take Muni to board at the 4<sup>th</sup> & King Station, and a small share of Caltrain riders are expected to board at the 22<sup>nd</sup> Street Station. It is likely that all attendees will board the same late service train, which may be provided by Caltrain specifically on event nights. SFMTA Parking Control Officers will be stationed at key intersections along pedestrian routes towards Caltrain to monitor these intersections and adjust controls as needed to ensure safe and efficient flow of all modes.

#### Departures towards UCSF Mission Bay Muni Platform

Many event attendees departing towards downtown San Francisco, Caltrain, or BART will likely take Muni Metro (T 3<sup>rd</sup> Street Line) from the Event Center. Most Muni passengers are predicted to be leaving towards the north and will likely get on at the UCSF Mission Bay stop, located on 3<sup>rd</sup> Street at South Street, approximately 500 feet away from the Event Center Main Plaza. Muni passengers departing towards the south may get on at the Mariposa Street stop to avoid crowds at the closer UCSF Mission Bay stop. It is also predicted that some northbound passengers will walk south to the Mariposa Street stop to travel north in an attempt to avoid the



large crowds at the UCSF Mission Bay stop. To deter pedestrian crossings mid-block between South Street and 3<sup>rd</sup> Street, decorative fencing will be placed along the Muni transit right-of-way.

Departures will be more concentrated than pre-game arrivals, so Parking Control Officers (PCOs) will be stationed at all nearby Muni platforms. Both northbound lanes on 3<sup>rd</sup> Street will be closed between 16<sup>th</sup> Street and Mission Bay Boulevard South to accommodate the pedestrian flow exiting the Event Center. A portion of South Street will also be closed to prevent vehicle conflict with pedestrians at the intersection with 3<sup>rd</sup> Street.

### Departures towards Special Event Shuttles

Event attendees departing towards the Mission and 16<sup>th</sup> Street BART station will be directed to the Muni staging area along Illinois Street. Event attendees departing towards Van Ness will be directed towards the shuttle stop located on the north side of 16<sup>th</sup> Street east of the garage driveway. Northbound Illinois Street will be closed post-event to through traffic to allow unimpeded access for Muni. All traffic associated with adjacent office, clinic, or parking uses will be allowed full access at all times. Pedestrian access from the Event Center to the temporary Muni stop on Illinois will be directed either east or west along the north side of 16<sup>th</sup> Street to a pedestrian crossing located at the Illinois Street/parking garage driveway. The 16<sup>th</sup> Street north sidewalk will be designed with a minimum 15-foot clearance from the curb to provide adequate circulation and queuing space for pedestrians. Transbay Terminal and Ferry Building-bound attendees will be directed towards the shuttle stops located on the east side of 3<sup>rd</sup> Street north of South Street. Both northbound lanes on 3<sup>rd</sup> Street and all lanes on South Street west of 450 South St. will be closed to vehicle traffic to allow for safe and effective pedestrian access to special event shuttles.

#### **5.3.4 Bicycle Departures**

For those cyclists using the indoor bicycle valet, departures will be metered by the process of retrieving bicycles. It is forecast that approximately 300 bicycles will depart from the indoor valet bicycle parking facility over approximately 30 minutes with three staff retrieving a bike every 15-20 seconds. Some cyclists may utilize the planned bike share station after a game. Bicycles will also depart from nearby public bike racks and from the temporary outdoor bike valet area, when available.

Most bicyclists are expected to use the bikeway on Terry François Boulevard to travel north or south from the Event Center. Most cyclists traveling westbound will likely use the routes on 16<sup>th</sup> and 17<sup>th</sup> Streets. During peak event conditions, temporary lane closures will be in place on 16<sup>th</sup> Street and the westbound curb-side bike lane will be closed to accommodate shuttle bus loading. PCOs will use cones or other physical barriers to designate an alternate route for westbound cyclists through a closed vehicular lane from Terry François Boulevard to Illinois Street during post-event conditions. PCOs will facilitate safe access for cyclists along this segment of 16<sup>th</sup> Street.

Pedicabs, will be accommodated near the site, especially during peak events. Most pedicabs are expected to travel north/south to the site and are expected to use the Terry François Blue Greenway when it is complete. A pedicab staging area is proposed for the east side of Terry François Boulevard just south of 16<sup>th</sup> Street. This is consistent with the concentration of bicycle and cyclist-serving facilities in the southeast corner of the site.

#### **5.3.5 Taxis and Charter Buses**

During peak events, most taxi trips will occur immediately following the end of the event. On convention days, several hundred taxi trips will occur as attendees travel between the Event Center and nearby hotels and the Moscone Convention Center. Unlike game patron departures for an NBA event, which are heavily concentrated in the first hour following the end of a game, convention attendee departures will be more spread out.

A charter bus zone will be located along 16<sup>th</sup> Street for pick-off activity during both small events. A total of 500 feet of curb space (accommodating 6-8 buses) will be available on the north side of the street between Illinois St. and Terry François Boulevard.

Taxi zones will be designated for all events on the south side of South Street, east of Bridgeview Way and along the west side of Terry François Boulevard south of South Street. Terry François Boulevard will also include access for additional non-taxi pick-off activity at all times. This zone will be managed by PCOs and Event Center staff to avoid vehicle conflicts with surrounding traffic. This zone will be located on the west side of the street and will minimize conflicts with bicycles on Terry François Boulevard.

During a post-peak event scenario, when temporary lane closures are in place, taxis will have preferential treatment to access the designated taxi zones adjacent to the Event Center. PCOs will be able to assist taxis arriving and departing the site to ensure safe, efficient, and convenient pick-up/drop-off operations.

### **5.3.6 Vehicle Departures from Event Center Garage**

The intersection of 16<sup>th</sup> Street and Illinois Street at the garage driveway will be controlled by PCOs during the peak post-event period. Vehicles exiting from 16<sup>th</sup> Street will be forced to turn right (west – toward 3<sup>rd</sup> Street) or continue through to southbound Illinois Street. If this intersection becomes congested after events, Event Center staff may choose to direct some departing vehicles to the South Street garage access using signage inside the garage. Vehicle egress from both driveways is anticipated to take approximately twenty minutes in total.<sup>13</sup>

16<sup>th</sup> Street between 3<sup>rd</sup> Street and Terry François Boulevard will have restricted access, and will be used predominantly as a post-event shuttle staging area. Northbound lanes on Illinois Street (north of Mariposa Street) will be restricted to local traffic only and will also be used as a post-event shuttle staging area.

South Street, between 3<sup>rd</sup> Street and the 450 South Street Garage, will be closed post-event, and cars exiting the garages or coming from Bridgeview will be directed to travel east to Terry François Boulevard.

Vehicles with destinations along southbound I-280 will be suggested to travel either from 16<sup>th</sup> Street to the Owens Street extension, from Terry François Boulevard to Mariposa Street, or from 3<sup>rd</sup> Street to Cesar Chavez Street.

The suggested post-event driving routes are shown on **Figure 5-3**. These routes will be provided to attendees prior to an event to encourage effective distribution of departure traffic. All south-bound guests will be encouraged to use Mariposa Street, Illinois Street, or Third Street, not 16<sup>th</sup> Street and Owens Street, to access I-280 on-ramps. West-bound guests will not be encouraged to use Mission Bay Boulevard North, which is located close to several residential buildings. North-bound guests will be encouraged to leave the neighborhood efficiently and quickly by utilizing all available connections out of Mission Bay, including Third Street and Seventh Street. The post-event routes shown are subject to revision based on monitoring during the first four years of operations and may be modified to reflect new or updated neighborhood parking agreements.

Parking facilities shown on **Figure 5-2** are solely representative and do not pre-suppose third party agreements.










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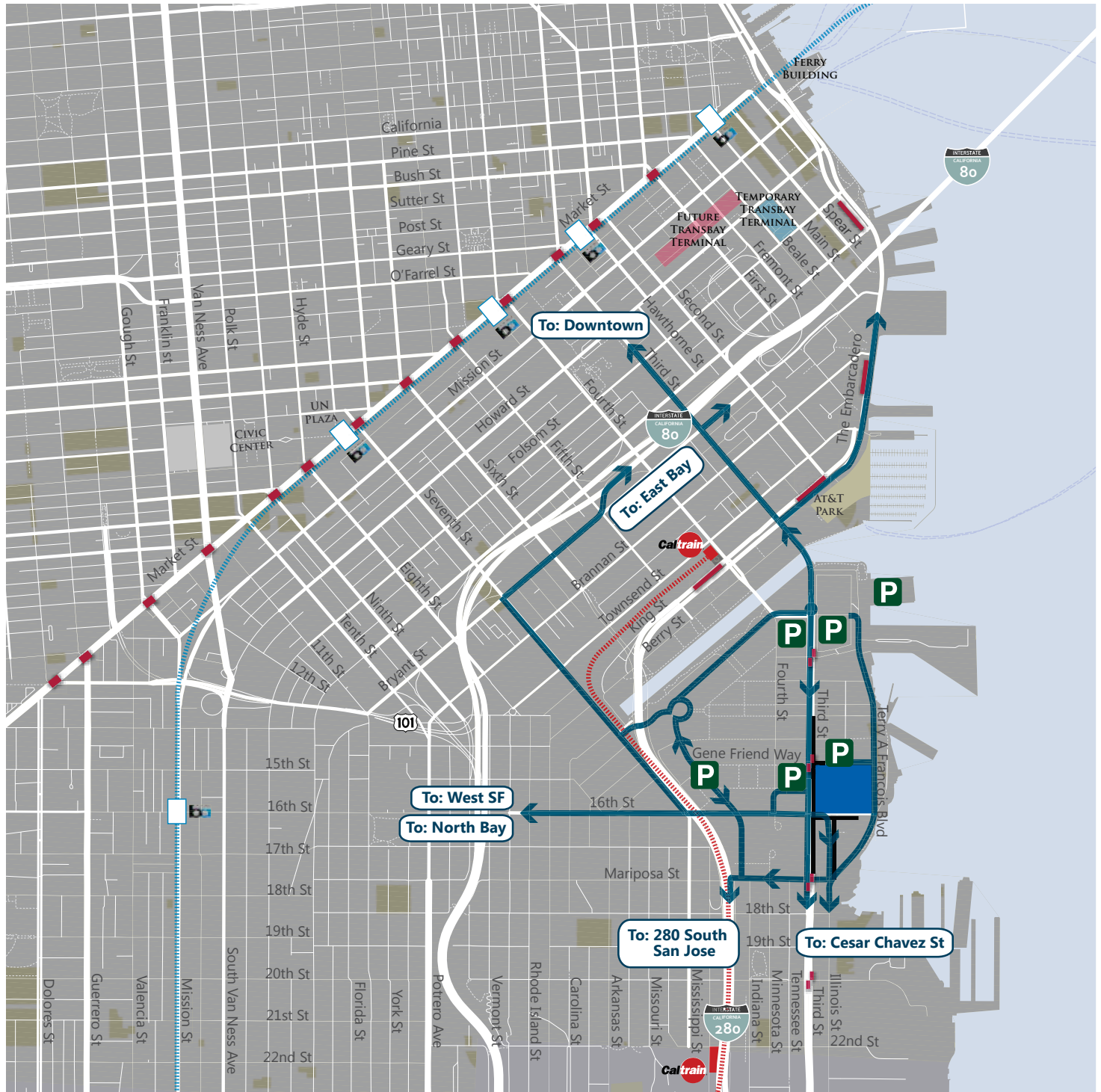
<sup>13</sup> Source: Parking garage schematic design studies, Walter P. Moore, 2014.

#### **5.4 DAILY NON-EVENT ARRIVALS AND DEPARTURES**

The project will provide a total of approximately 950 on-site parking spaces and 132 reserved spaces in the 450 South parking garage. Most of these spaces will be dedicated to office users (546), and Event Center use (230), with a limited number of valet parking spaces for retail users (162) and other commercial users (12). The 132 reserved spaces in the 450 South Street parking garage will be dedicated to GSW and Event Center employees.

Office users are forecast to travel to the site primarily by auto and transit modes, with the balance walking and taking other modes. Retail users are forecast to have a slightly lower auto and transit share, with a higher share of patrons arriving by walking or other modes. As described above, TDM programs are proposed to increase above the forecasted proportion of office users who bicycle, walk or take transit to the site, and reduce the proportion who drives and parks.

-  MUNI Platform
-  Caltrain Station
-  BART Station
-  Project Site
-  BART Line
-  Caltrain Line
-  Potential Post-Event Driving Routes
-  Lane Closure
-  Representative Parking Facilities (to be confirmed)



Not to Scale

## SUGGESTED\* POST-EVENT DRIVING ROUTES

\*Conceptual. For complete details on analyzed access routes and vehicle intersection assignments, please see project SEIR, Appendix TR.

## CHAPTER 6. CONTROLS BY EVENT SCENARIO

This chapter describes controls to be implemented around the Event Center Development given the range of scenarios previously described, starting with a typical, no-event day; and ending with a day when an Event Center event coincides with an event at AT&T Park. The primary goals of these controls are to ensure safety through reduction of conflicts between modes, manage all modes of traffic to ensure orderly access and egress reflecting transportation mode priority, and reduce nuisance and inconvenience to surrounding residents and businesses. The level of controls needed increases with the intensity of the scenario; thus, as events get larger, all controls listed for the smaller events are required, and additional controls are added.

The purpose of the transportation controls described in this chapter is to outline the necessary processes in order to meet the primary goals as described above.

The planned traffic control type (signalized or stop-controlled) for each intersection discussed in this section will be the following:

### Traffic Signal

- 3<sup>rd</sup> Street / 16<sup>th</sup> Street (existing)
- 3<sup>rd</sup> Street / South Street (existing)
- 3<sup>rd</sup> Street / Mariposa Street (existing)
- Terry François Boulevard / South Street (current side-street stop control)
- Terry François Boulevard / 16<sup>th</sup> Street
- Terry François Boulevard / Illinois Street / Mariposa Street (current stop control)

### All-way Stop Control

- 16<sup>th</sup> Street / Illinois Street / Event Center Development Garage Entrance (current side-street stop control)

While the initial traffic control for the 16<sup>th</sup> Street / Illinois Street / Event Center Development Garage Entrance intersection will be an all-way stop, conditions at the intersection will be monitored during various event and no-event days, and the GSW will install a traffic signal if needed.

### Side-Street Stop Control

- South Street / Bridgeview Way / Event Center Development Garage Entrance

The Event Center Transportation Coordinator (ECTC), designated by the GSW for the Event Center Development, will communicate regularly with SFMTA to provide information on events and identify those events that require traffic control. A summary of the traffic control strategies identified in this chapter for the various event scenarios is provided in **Table 6-1**.

**TABLE 6-1: SUMMARY OF TRAFFIC CONTROL STRATEGIES BY EVENT TYPE**

TRAFFIC CONTROL STRATEGY	EVENT SCENARIOS				
	No Event	Convention/Small Event (Weekday Daytime) <sup>1</sup>	Arena Concert (Evening) <sup>2</sup>	Peak Event/NBA Game (Evening)	Dual Event With AT&T Event
Coordination with SFMTA and Mission Bay/Ballpark Transportation Coordinating Committee (MBBTCC)		√	√	√	√
Muni Ticket Sales at Event Center Box Office		√	√	√	√
Taxi Zone on Terry François Boulevard		√	√	√	√
Taxi Zone on South Street	√	√	√	√	√
Designated Commercial loading zone (non-event hours)	√	√	√	√	√
Dedicated TMA Shuttle Stop	√	√	√	√	√
Dedicated Charter Bus Stop on 16 <sup>th</sup> Street		√			
Dedicated Shuttle Zone for Connection to 16 <sup>th</sup> BART Station			√	√	√
Dedicated Paratransit Stop on Terry François Blvd, north of 16 <sup>th</sup> Street (serving up to three vans)	√	√	√	√	√
Dedicated Media Truck Zone				√	√
PCO Supervisor at Event Center TMC			√	√	√
PCOs positioned at key locations throughout the surrounding intersections and transportation network		See Figures 6-1 and 6-2 for locations and times	See Figures 6-4 and 6-6 for locations and times	See Figures 6-8 and 6-10 for locations and times	See Figures 6-11 and 6-12 for locations and times
Event Center staff positioned at key locations throughout the site to facilitate crowd control, wayfinding, and curb management		√	√	√	√
Post-Event Temporary Lane Closure: NB lanes on 3 <sup>rd</sup> Street between 16 <sup>th</sup> Street and Mission Bay Boulevard South			√	√	√
Post-Event Temporary Lane Closure: South Street between 3 <sup>rd</sup> Street and 450 South Street garage entrance			√	√	√
Post-Event Temporary Lane Closure: NB Illinois Street between Mariposa Street and 16 <sup>th</sup> Street, except for local traffic and Shuttle staging and loading			√	√	√

**TABLE 6-1: SUMMARY OF TRAFFIC CONTROL STRATEGIES BY EVENT TYPE**

Post-Event Temporary Lane Closure: WB lanes on 16 <sup>th</sup> Street between Terry François Boulevard and Illinois Street, and EB lanes on 16 <sup>th</sup> Street between 3 <sup>rd</sup> Street and Illinois Street, Except for Shuttle staging and loading			√	√	√
Coordinate with BART, Caltrain, Muni			√	√	√
Coordinate with Giants Special Events Staff	√	√	√	√	√

1. The 55 family shows held each year, with an average of about 5,000 attendees, are expected to require similar controls to the small event.

2. Arena Concert is assumed for events of average 12,500 attendees.

Source: Fehr & Peers, 2014.

## 6.1 CONTROL RECOMMENDATIONS FOR NO-EVENT DAY SCENARIO

The number of trips generated by the Event Center office, retail and restaurants on a typical no-event day does not warrant special traffic controls. The Event Center Development garage will be staffed on a typical day to monitor access for delivery vehicles. Signage will be posted to direct traffic to the parking garage entrances as well as to a valet parking stand located inside the parking garage, which will be staffed during a typical day.

Curb designations on the Event Center Development frontage will be as follows:

- TMA Shuttle Stop on South Street: south side of South Street, east of 3<sup>rd</sup> Street (all days/hours).
- Metered On-Street Parking on south side of South Street: from TMA shuttle stop to Bridgeview Way.
- Commercial Loading Zones: south side of South Street, just east of TMA Shuttle Stop (one designated space) and between Taxi Zone and Terry François Boulevard (seven designated spaces).
- Commercial Loading Zone on Terry François Boulevard: on west side of Terry François Boulevard, just south of South Street (eight designated spaces).
- Commercial Loading Zone on 16<sup>th</sup> Street: on north side of 16<sup>th</sup> Street, between 3<sup>rd</sup> Street and Illinois Street (one designated space).
- Taxi Zone on South Street: on the south side of South Street between the Event Center garage access (opposite Bridgeview Way) and the commercial loading zone.
- Metered On-Street Parking on Terry François Boulevard: on portions of the west side from South Street to 16<sup>th</sup> Street, with the exception of the centrally located paratransit vehicle stop area. On-street parking will be prohibited along this stretch after 5:00 PM to allow event pick-up/drop-off.
- Paratransit Bus Stop on Terry François Boulevard: west side of Terry François Boulevard, north of 16<sup>th</sup> Street (all days/hours, serving up to three paratransit vans).
- Metered On-Street Parking on 16<sup>th</sup> Street: north and south sides of 16<sup>th</sup> Street from Illinois Street east to Terry François Blvd., and the north side of 16<sup>th</sup> Street from 3<sup>rd</sup> Street to Illinois Street. On-street parking will be prohibited along this stretch after 5:00 PM on event days. The segment between Illinois Street and Terry François Boulevard on the north side of this segment will be reserved for post-event shuttles and charter buses during events.

- Media Trucks on 16<sup>th</sup> Street: the north side of 16<sup>th</sup> Street between 3<sup>rd</sup> Street and Illinois Street will be reserved for media trucks for NBA events.

Valet parking will be provided for the retail visitors along the South Street frontage, just inside the Event Center parking garage entry opposite Bridgeview Way.

Accessible passenger loading zones will be provided consistent with the requirements as outlined in the Draft Pedestrian Right of Way Accessibility Guidelines (PROWAG).

On-street parking is not currently permitted on the east side of 3<sup>rd</sup> Street adjacent to the site, and will continue to be prohibited. Signage will be placed along the east side of 3<sup>rd</sup> Street that prohibits stopping at all times, including passenger loading or unloading, under no-event and all event scenarios. Enforcement will be provided to prohibit any drop-off or pick-up activity.

Figure 2-2 summarizes on-street parking restrictions and availability for no-event conditions.

## **6.2 CONTROLS FOR CONVENTION SCENARIO**

For the purposes of this TMP, a small event scenario is a 9,000 person convention. Conventions will be staffed by up to 6 Parking Control Officers (PCOs). The Event Center Development garage access and valet parking stand will be staffed as described above for a typical day.

### **6.2.1 General**

#### PCO Supervisor

A PCO Supervisor will be stationed in the Transportation Management Center starting at least one hour prior to the convention start time and until pedestrian and vehicle volumes on-street have returned to typical no-event conditions following event's end. The PCO Supervisor will deploy up to 6 PCOs and assign transportation control tasks pre-event; monitor traffic conditions before, during, and after the event; and deploy PCOs and assign transportation control tasks post-event, as needed.

The PCO Supervisor will have radio contact with the Field Supervisor and all PCOs on the street and phone contact with relevant city agencies and departments (Muni, SFMTA Signal Shop, SFPD, SFFD), transit operators (Muni, BART, Caltrans) and Event Center staff (security, valet attendants, etc.). The PCO supervisor will also have authority and discretion in how PCOs are deployed, and may adjust the controls described below as conditions warrant.

### **6.2.2 Pre- and Post-Event Controls**

Error! Reference source not found. and **Figure 6-1** show the location of temporary charter bus drop-off/pick-up locations for convention events. Convention events are expected to generate a large number of charter bus and taxi trips. Taxi trips will be served on the designated curb zone located on the south side of South Street and the west side of Terry François Boulevard.

All curbside parking and loading areas described for no-event conditions will convert to the event curb zones described below at 5:00 PM (before an evening event beginning 7:00 PM or later), or two hours before an event (starting at all other times). Event curb zone designations will revert back to no-event parking and loading conditions ninety minutes following an event's end.



### Charter Bus Stop Zone

To serve the demand for increased charter bus service, a bus stop zone will be designated along a portion of westbound 16<sup>th</sup> Street. This curbside zone will be 500 feet (accommodating 6-8 buses at a time) in length and will be designated for charter bus pick-up/drop-off activity during a convention.

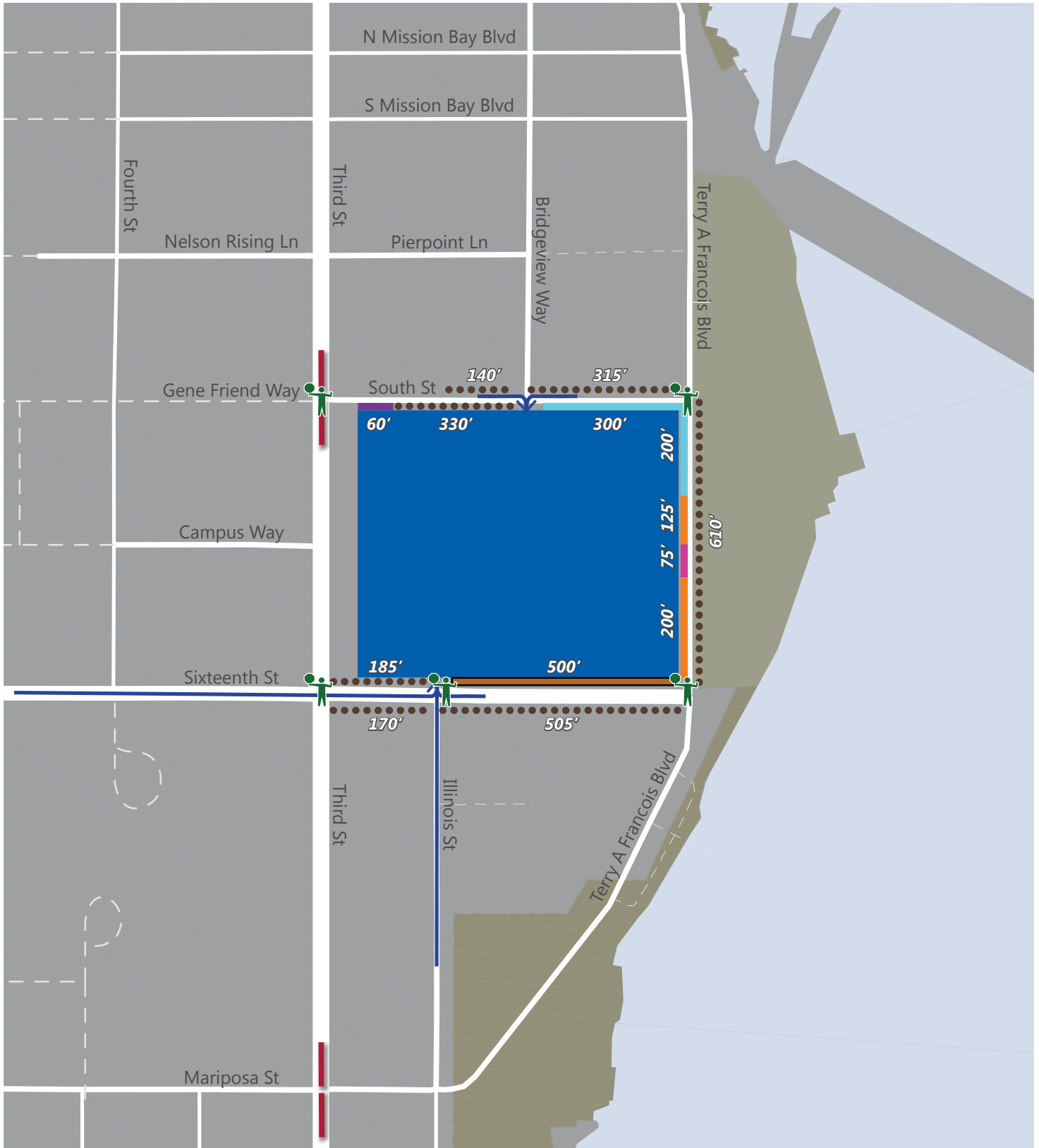
### PCO Locations

PCOs' primary task will be to direct shuttle and taxi traffic that will be bringing attendees from area hotels and the Moscone Convention Center. Up to six PCOs will be stationed at the following locations:

- 3<sup>rd</sup> Street and South Street
- South Street and Terry François Boulevard
- 3<sup>rd</sup> Street and 16<sup>th</sup> Street
- 16<sup>th</sup> Street and Illinois Street
- 16<sup>th</sup> Street and Terry François Boulevard

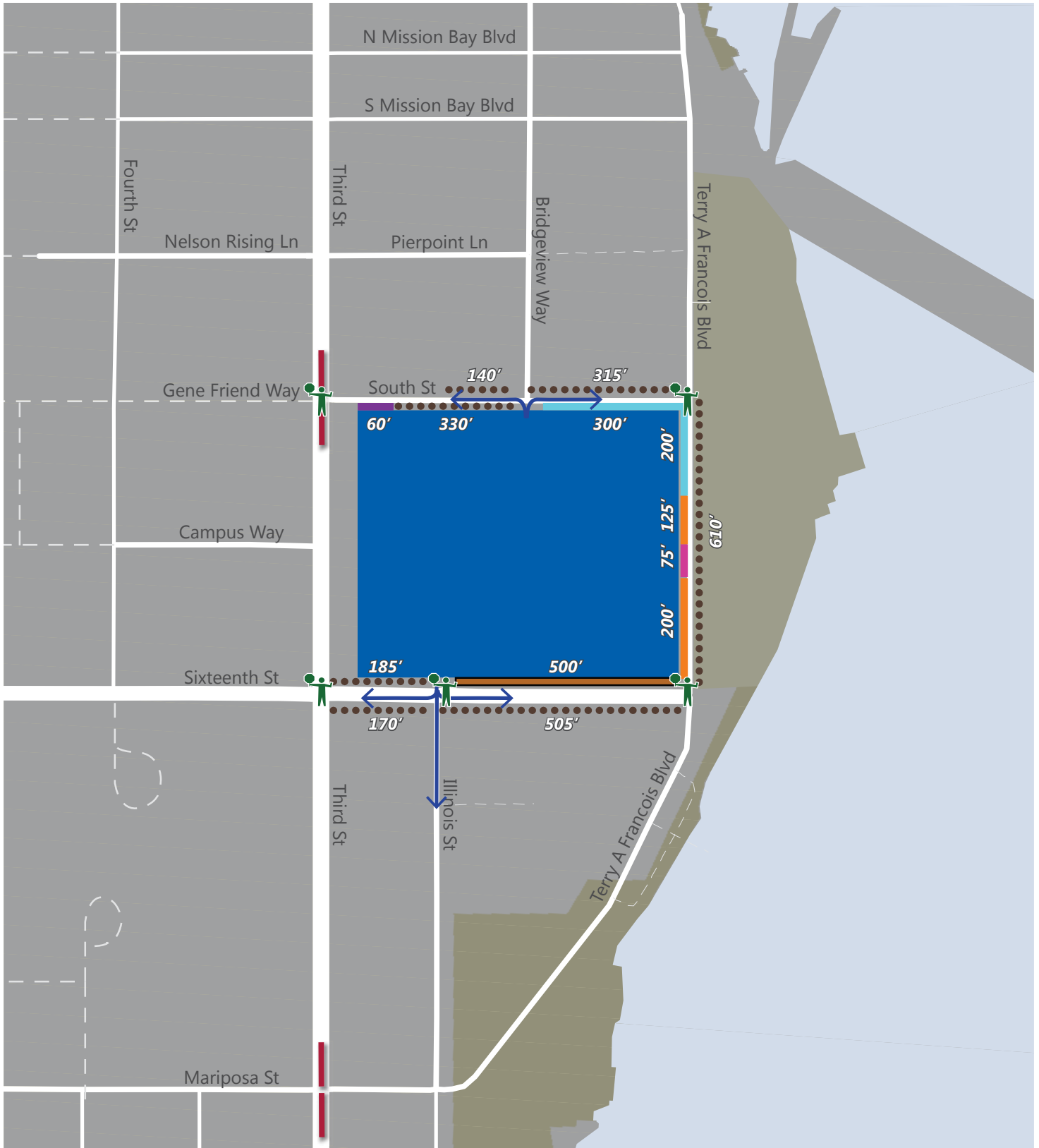
The PCO locations listed in this document are solely representative and will remain flexible to respond to changing traffic conditions once the Event Center Development is complete. The number of PCOs per suggested location will be determined in consultation with the SFMTA and refined based on monitoring during the first four years of operations.

- Project Site
- MUNI Platform
- On-Street Metered Parking
- Garage Entry
- TMA Shuttles
- Taxi
- Buses
- Paratransit Bus
- Charter Buses
- Black Car
- Passenger Drop-Off
- PCO Station
- Approximate Storage Length



Not to Scale

- Project Site
- MUNI Platform
- On-Street Metered Parking
- Garage Exit
- TMA Shuttles
- Taxi
- Buses
- Paratransit Bus
- Charter Buses
- Black Car
- Passenger Pick-up
- PCO Station
- Approximate Storage Length



Not to Scale

## **6.3 CONTROLS FOR ARENA CONCERT SCENARIO**

This section addresses controls for an approximately 12,500 person arena concert.

### **6.3.1 General**

#### PCO Supervisor

A PCO Supervisor will be stationed in the Transportation Management Center (TMC) starting at least two hours prior to the concert start time and until pedestrian, bicycle, and vehicle volumes on-street have returned to typical no-event conditions following event's end. The TMC will be housed within the security center in the Event Center, though the TMC's final design will be developed through coordination with SFMTA Enforcement. The PCO Supervisor/Field Supervisor will deploy up to 17 PCOs to locations and assign transportation control tasks pre-event; monitor traffic conditions before, during, and after the event; and deploy PCOs and assign transportation control tasks post-event. The number of PCOs estimated for deployment are based on information available at this time and may be adjusted both prior to and during venue operations as more detailed information and observations allow.

The PCO Supervisor will have radio contact with the Field Supervisor and with all PCOs on the street, and phone contact with relevant city agencies and departments (Muni, SFMTA Signal Shop, SFPD, SFFD), transit operators (Muni, BART, Caltrans) and Event Center staff (security, valet attendants, etc.). The PCO supervisor will also have authority and discretion in how PCOs are deployed, and may adjust the controls described below as conditions warrant.

Transit loading may also be monitored by Transit Fare Inspectors (TFIs) and SFMTA Passenger Assistance Program staff (MTAPs) stationed at Muni platforms. The appropriate number of staff stationed in these roles will be determined in consultation with the SFMTA prior to the project opening.

### **6.3.2 Curb Management**

All curbside parking and loading areas described for no-event conditions will convert to the event curb zones described below at 5:00 PM (before an evening event beginning 7:00 PM or later), or two hours before an event (starting at all other times). Event curb zone designations will revert back to no-event parking and loading conditions ninety minutes following an event's end.

Pre-event and post-event curb management for the concert scenario is shown in **Figure 6-2** and **Figure 6-4**. In order to manage the increased volume of attendees using regional transit, the concert scenario will also include designated curb space for a Muni bus that will travel back and forth to the 16<sup>th</sup> Street BART station exclusively. This pre-event bus stop will be 150 feet in length along the south side of 16<sup>th</sup> Street for BART passenger drop-off before concert events. These buses will then continue south on Illinois Street to Mariposa Street to return to the BART station. Post-event curb management will include a bus layover zone on northbound Illinois Street, where buses will layover to pick up passengers after a concert event. Post-event bus staging and passenger loading will be along the eastern side of Illinois Street and the north side of 16<sup>th</sup> Street east of Illinois St.

A concert event will also include increased drop-off/pick-up activity as attendees are shuttled to and from the event in passenger vehicles. To accommodate this, the 550 feet of "flex space" on Terry François Boulevard will include passenger drop-off/pick-up activity to be shared with taxis along the west side of the street. During concerts, as during Peak events, a taxi zone will also be located on the south side of South Street.

To provide a safe location for the high volumes of pedestrians to queue that are destined for the Muni station in the median of 3<sup>rd</sup> Street, and in consultation with the SFMTA, temporary lane closures will be implemented on northbound 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mission Bay Boulevard South, on westbound and eastbound on South Street from 3<sup>rd</sup> Street to the 450 South Street garage. Traffic exiting the 450 South Street garage, the north exit of the Event Center garage or Bridgeview Way will be directed east to Terry François Blvd. It is anticipated that the temporary lane closures will be in place for approximately 30–45 minutes during the peak post-event period, until most event attendees are able to board Muni trains on 3<sup>rd</sup> Street and most shuttle riders have boarded shuttles. It is anticipated that the no-event traffic volumes on the streets adjacent to the Event Center Development will be light after a typical concert event, so impacts to the existing traffic as a result of the temporary closure of northbound 3<sup>rd</sup> Street will be low. Traffic on Bridgeview Way will be monitored by PCOs and will be signed to encourage access for local traffic only to the uses within that block, including the 450 South Street Garage. Variable Message Signs (VMS) and detour signs that will be programed and/or placed well in advance of the temporary closures to notify drivers of alternate routes, including those depicted in **Figure 6-9**. Proposed locations for permanent Variable Message Signs are listed below:

- Northbound 3<sup>rd</sup> Street – South of Mariposa (existing VMS)
- Westbound 16<sup>th</sup> Street – East of I-280 (proposed new VMS)
- Southbound 3<sup>rd</sup> Street – South of Lefty O’Doul Bridge (proposed new VMS)
- Eastbound Mariposa Street – East of I-280 (proposed new VMS)

The City will also request the Caltrans install changeable message signs on I-280 upstream of key entry points onto the local street network.

Based on operating conditions for AT&T Park, it is assumed that SFMTA staff will set up and store barricades to mark and enforce temporary lane closures. Barricade equipment may be temporary stored in a truck at the southern end of Illinois St., just north of Mariposa, and/or in a storage facility located on-site.

The UCSF Women’s Cancer & Children’s Hospital, scheduled to open on February 1, 2015, is located on the west side of 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mariposa Street. Access to the hospital will be provided from, both 16<sup>th</sup> Street and Mariposa Street via an extension of 4<sup>th</sup> Street. Emergency vehicles traveling to the hospital will not be affected by the post-game partial street closures on northbound 3<sup>rd</sup> Street (north of 16<sup>th</sup> Street) described above, as multiple other routes to the hospital’s major access points will main open. Emergency vehicles exiting the hospital may need to travel northbound on 3<sup>rd</sup> Street, north of 16<sup>th</sup> Street, where the temporary closures are planned. In those situations, PCOs may remove temporary barriers and allow emergency vehicles to use northbound 3<sup>rd</sup> Street, or emergency vehicles may use the southbound lanes of 3<sup>rd</sup> Street to travel northbound. The Event Center Transportation Coordinator will provide the hospital with a list of dates and times during which partial street closures are anticipated. Post-event traffic will be directed to use both 16<sup>th</sup> Street and Mariposa Street to access I-280 ramps to enable fast and efficient departures from the site. Northbound traffic will be directed to westbound 16<sup>th</sup> Street and north on 7<sup>th</sup> Street, east on Bryant Street to the I-80 ramp at 5<sup>th</sup> Street.

### **6.3.3 Pre-Event Controls**

Pre-event controls are detailed here and illustrated on **Figure 6-2** and **Figure 6-3**.

### PCO Locations

21 PCOs shall be stationed at key locations, as determined by the PCO Supervisor before, during, and after events or as field conditions warrant, which could include a selection of those listed below. Their primary task will be to manage pedestrian and vehicle traffic.

- 3<sup>rd</sup> Street and South Street
- South Street and Bridgeview Way
- South Street and Terry François Boulevard
- 3<sup>rd</sup> Street and 16<sup>th</sup> Street
- 16<sup>th</sup> Street and Illinois Street
- 16<sup>th</sup> Street and Terry François Boulevard
- Mariposa Street and I-280 northbound ramps/Owens Street
- Mariposa Street and 3<sup>rd</sup> Street
- Mariposa Street and 4<sup>th</sup> Street
- Mariposa Street and Illinois Street
- Channel Street and 3<sup>rd</sup> Street
- Channel Street and 4<sup>th</sup> Street
- Mission Bay Boulevard North and Terry Francois Boulevard
- Mission Bay Boulevard South and Third Street
- King Street and Fourth Street
- Fifth Street, Harrison Street, and the I-80 westbound off-ramp
- Fifth Street, Bryant Street, and the I-80 eastbound on-ramp
- Seventh Street and Mission Bay Drive
- Seventh Street, Mississippi Street, and 16<sup>th</sup> Street
- One roving PCO (or more if necessary) to monitor general parking issues and respond to complaints called in throughout the neighborhood

The PCO locations listed in this document are solely representative and will remain flexible to respond to changing traffic conditions once the Event Center Development is complete. The number of PCOs per

suggested location will be determined in consultation with the SFMTA and refined based on monitoring during the first four years of operations. Based on visual verification of field conditions at the time of an event, the PCO supervisor may also modify PCO location assignments as conditions warrant.<sup>14</sup>

### **UCSF Mission Bay Muni Platform**

To accommodate pedestrians traveling to and from the Event Center through the intersection of Third Street and South Street, and to minimize conflicts with vehicles and Muni trains, PCOs stationed at this location shall implement strategies to allow pedestrians to cross the street safely. The strategies and level of active management shall be tailored to the event size for all events with 12,500 or more attendees, and could include extending the green time for pedestrians crossing the street, manually overriding the traffic signal and directing pedestrians to cross, erecting temporary pedestrian crossing barriers, allowing use of the closed Third Street as a pedestrian access route, providing a defined passenger waiting area within the closed Third Street, shielding passengers waiting to board light rail from adjacent pedestrian traffic, and deploying additional PCOs to this intersection.<sup>15</sup>

### **Event Center Garage Driveway on 16<sup>th</sup> Street**

Concert attendees with pre-sold parking passes for the Event Center garage will enter via the left turn lane on eastbound 16<sup>th</sup> Street leading to the garage driveway or from northbound Illinois Street to self-park. Event Center staff will check parking passes before vehicles enter the garage.

PCOs will be stationed at the Event Center garage driveway to facilitate vehicle egress (office employees leaving on weekday evenings) and ingress (event attendees entering the garage), minimize conflicts with pedestrians and bicycles on 16<sup>th</sup> Street, and coordinate with PCOs located at the adjacent 3<sup>rd</sup> Street / 16<sup>th</sup> Street intersection. A key purpose of the PCOs located at the adjacent intersections on 16<sup>th</sup> Street will be to give priority to the eastbound left turn movements from 16<sup>th</sup> Street into the garage to ensure that this inbound event traffic entering the Event Center garage does not queue back to the 16<sup>th</sup> Street / 3<sup>rd</sup> Street intersection. PCOs will also work in conjunction with Event Center staff that will be checking attendees' tickets for valid access to the garage on the day of the concert. Drivers who enter the eastbound left-turn pocket or are stationed to enter the garage on Illinois Street without a valid parking pass will be redirected to drive east on 16<sup>th</sup> Street to Terry François Boulevard towards other nearby garages or parking lots.

### **3<sup>rd</sup> Street / 16<sup>th</sup> Street Intersection**

PCOs will be stationed at the intersection of 3<sup>rd</sup> Street and 16<sup>th</sup> Street to maintain the flow of Muni trains on 3<sup>rd</sup> Street, provide for the safe movement of pedestrians and bicyclists, and facilitate the flow of vehicles to eastbound 16<sup>th</sup> Street to access the Event Center parking garage. PCOs will work to ensure that the intersection does not become blocked with vehicles. As noted above, the PCO stationed at 3<sup>rd</sup> Street/16<sup>th</sup> Street will work in conjunction with the PCO at the Event Center garage entrance to coordinate the flow of traffic into the garage.

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<sup>14</sup> See MMRP, M-TR-2a.

<sup>15</sup> See MMRP, M-TR-6.

### Drop-Off on Southbound Terry François Boulevard

Event Center ticket holders may be dropped off on the west side of Terry François Boulevard between South Street and 16<sup>th</sup> Street as shown on **Figure 6-2**. This curbside area will be shared with taxis.

#### **6.3.4 Post-Event Controls**

Many of the post-event controls are similar to the pre-event controls but are repeated here for ease of understanding, and the post-event curb and lane configurations are illustrated on **Figure 6-4** and **Figure 6-5**.

### PCO Locations

PCOs will be stationed at all of the same locations as identified previously for the pre-event scenario, with one exception. The PCO(s) located at the intersection of Mariposa Street and I-280 northbound ramps/Owens Street during the pre-event period will relocate to the intersection of 16<sup>th</sup> Street/ Owens Street during the post-event period.

### UCSF Mission Bay Muni Platform

Muni tickets will be sold at the Event Center box office before, during, and after events.

To accommodate pedestrians traveling to and from the Event Center through the intersection of Third Street and South Street, and to minimize conflicts with vehicles and Muni trains, PCOs stationed at this location shall implement strategies to allow pedestrians to cross the street safely. The strategies and level of active management shall be tailored to the event size for all events with 12,500 or more attendees, and could include extending the green time for pedestrians crossing the street, manually overriding the traffic signal and directing pedestrians to cross, erecting temporary pedestrian crossing barriers, allowing use of the closed Third Street as a pedestrian access route, providing a defined passenger waiting area within the closed Third Street, shielding passengers waiting to board light rail from adjacent pedestrian traffic, and deploying additional PCOs to this intersection.<sup>16</sup>

Temporary lane closures will also be in effect for enhanced pedestrian safety on northbound 3<sup>rd</sup> Street north of 16<sup>th</sup> Street and on South Street west of the 450 South St. garage exit. Muni staff will also be stationed to check transit tickets and manage the boarding process.

### Event Center Garage Driveway on 16<sup>th</sup> Street

During no-event conditions, traffic at the 16<sup>th</sup> Street / Illinois Street intersection will be managed by an all-way stop control. During events, the PCOs will be able to direct traffic at the intersection during event conditions to allow continuous flow on individual movements as needed. PCOs at the garage driveway located at the intersection will have the following objectives:

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<sup>16</sup> See MMRP, M-TR-6.



- Managing alternating flows of vehicle traffic exiting the garage with pedestrian-bicycle flows along 16<sup>th</sup> Street
- Managing alternating flows of vehicle traffic exiting the garage with shuttle traffic and occasional westbound traffic flow on 16<sup>th</sup> Street to accommodate safe and efficient shuttle loading and departure.
- Coordinating with PCOs located along 16<sup>th</sup> Street so that they stop pedestrian crossings of 16<sup>th</sup> Street during the same windows of time that vehicles are released from the Event Center garage onto east- and westbound 16<sup>th</sup> Street
- Maintaining vehicle access to garages for the 409 and 499 Illinois Street buildings, as well as future UCSF buildings on Blocks 33 and 34, from 16<sup>th</sup> Street and Illinois Street.

Post-events, southbound traffic exiting the Event Center garage will be advised to travel west on 16<sup>th</sup> Street to southbound Owens Street to access I-280. Any traffic heading to the north from the parking garage will be advised to travel west on 16<sup>th</sup> Street to northbound 7<sup>th</sup> Street due to the temporary northbound closure on 3<sup>rd</sup> Street.

### **3<sup>rd</sup> Street / 16<sup>th</sup> Street**

PCOs will be stationed at the intersection of 3<sup>rd</sup> Street and 16<sup>th</sup> Street to facilitate the flow of vehicles from westbound 16<sup>th</sup> Street from the parking garages, along with Muni trains, bicyclists, and pedestrians while preventing event traffic from going north on 3<sup>rd</sup> Street. They will work in conjunction with the PCO at the garage entrance to stop pedestrians crossing 16<sup>th</sup> Street during the same window that vehicles are exiting the garage on 16<sup>th</sup> Street, and prohibit northbound traffic from accessing 3<sup>rd</sup> Street north of 16<sup>th</sup> Street due to the temporary lane closures and direct traffic to northbound Terry François Boulevard.

### **Temporary Lane Closures**

Up to 17 PCOs will be stationed at key locations to redirect traffic due to the temporary lane closures. The PCO station located on South Street east of 3<sup>rd</sup> Street will manage the South Street partial closure as well as Bridgeview Way. The PCOs will direct all traffic exiting the 450 South Street and Event Center garages to Terry François Boulevard via eastbound South Street, and restrict northbound traffic from using Bridgeview Way except for neighborhood traffic. The PCOs will also direct any southbound traffic on Bridgeview Way left onto eastbound South Street

PCOs will also be stationed at the Terry François Boulevard / South Street intersection to manage traffic exiting the garages on South Street. They will direct traffic either north or south on Terry François Boulevard, and restrict vehicle access onto westbound South Street. They will also manage alternating flows of pedestrian crossings of South Street and vehicles turning onto Terry François Boulevard.

PCOs will be stationed on 3<sup>rd</sup> Street at Mariposa Street to direct no-event northbound traffic to alternative routes in advance of the temporary closure on northbound 3<sup>rd</sup> Street, to reduce congestion at the intersection of 3<sup>rd</sup> Street / 16<sup>th</sup> Street. Northbound traffic will be redirected east along Mariposa Street to northbound Terry François Boulevard. Variable message signs will also direct no-event through traffic to Terry François Boulevard in advance of the intersection of 3<sup>rd</sup> Street / Mariposa Street. All PCOs stationed at locations along 3<sup>rd</sup> Street will also assist emergency vehicles and autos needing emergency access to the UCSF Medical Center to navigate congested conditions and utilize closed travel lanes as needed. New permanent Variable Message Signs (VMS) will be added at three locations, and existing VMSs will operate to provide traffic alerts, messages, and alternative driving routes for neighborhood residents at the following locations:

- Northbound 3<sup>rd</sup> Street – South of Mariposa (existing VMS)
- Westbound 16<sup>th</sup> Street – East of I-280 (proposed new VMS)
- Southbound 3<sup>rd</sup> Street – South of Lefty O’Doul Bridge (proposed new VMS)
- Eastbound Mariposa Street – East of I-280 (proposed new VMS)

Based on operating conditions for AT&T Park, it is assumed that SFMTA staff will set up and store barricades to mark and enforce temporary lane closures.

### Temporary Turn Restrictions

Temporary turn restrictions will be in place post-event to discourage vehicles traveling westbound on 16<sup>th</sup> Street from turning left onto 3<sup>rd</sup> Street, Owens Street or Mississippi Street. PCOs will be responsible for coning off left turn pockets at these three intersections and enforcing left-turn restrictions. Signage will be provided inside event garages to direct vehicles destined for I-280 to use Terry François Boulevard to Mariposa Street as the primary access.

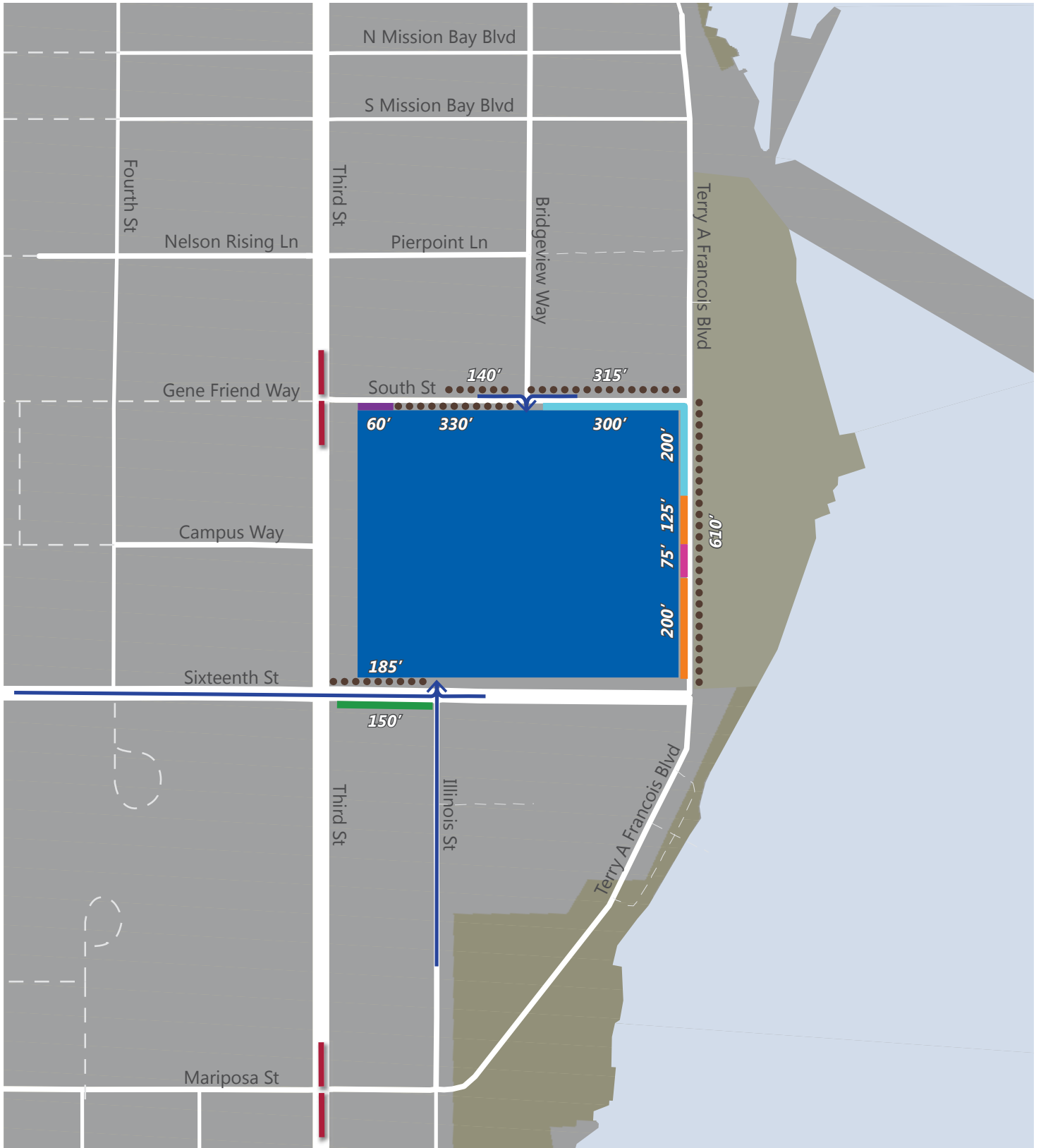
### Passenger Pick-Up on Terry François Boulevard

The passenger pick-up location will be the same as the pre-event drop-off location – on the west side of Terry François Boulevard. This location will also include Paratransit loading, however each space will be designated and separated.

### Terry François and 16<sup>th</sup> Intersection

PCOs will be stationed at the intersection of Terry François Boulevard and 16<sup>th</sup> Street following a concert to manage bicycle and pedestrian flows, detour traffic from the temporary lane closures on South Street and 3<sup>rd</sup> Street, as well as event traffic from nearby parking facilities. Traffic will be directed mostly north and south on Terry François Boulevard to avoid adding to the congestion on 16<sup>th</sup> Street and to avoid conflicts with shuttle buses. Post-event PCO controls are proposed to be the same and are illustrated on **Figure 6-5**.

- Project Site
- MUNI Platform
- TMA Shuttles
- Buses
- Charter Buses
- Passenger Drop-off
- Paratransit Bus
- Taxi
- Lane Closure
- Black Car
- Approximate Storage Length
- Garage Entry
- On-Street Metered Parking



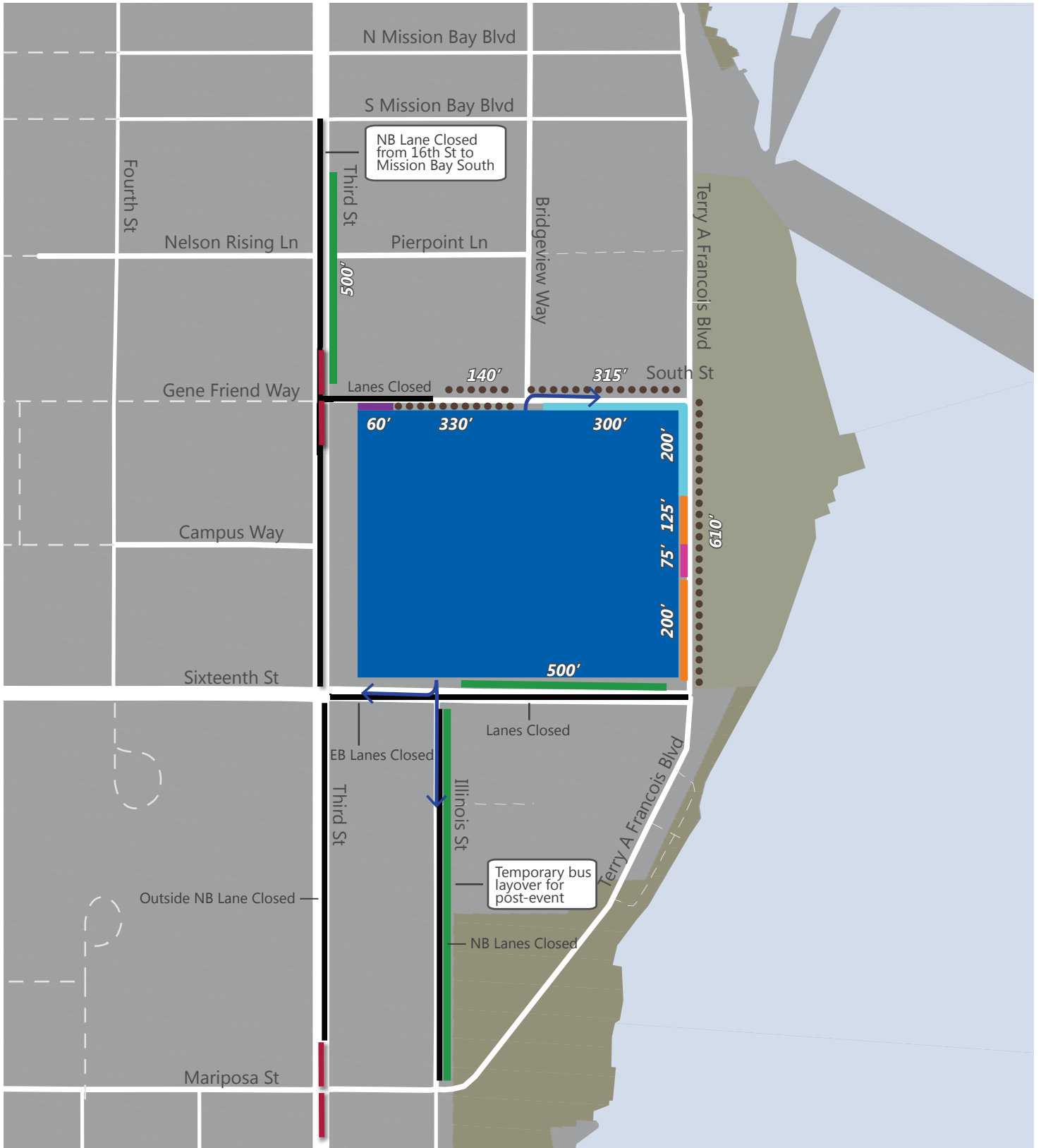
Not to Scale

■ MUNI Platform   
 ⋯ Caltrain Line   
 ■ Project Site   
 PCO Station



N  
 Not to Scale

- Project Site
- MUNI Platform
- TMA Shuttles
- Buses
- Charter Buses
- Passenger Pick-up
- Paratransit Bus
- Taxi
- Lane Closure
- Black Car
- Approximate Storage Length
- On-Street Metered Parking
- Garage Exit



Not to Scale

- MUNI Platform
- Caltrain Line
- Project Site
- PCO Station
- Existing VMS
- Proposed New VMS
- Post-Event Lane Closure



Not to Scale

## **6.4 CONTROLS FOR PEAK EVENT SCENARIO**

### **6.4.1 General**

#### PCO Supervisor

As with a concert event, a PCO Supervisor will be stationed in the Transportation Management Center and/or in the field starting at least two hours prior to the event's start time and until pedestrian, bicycle, and vehicle volumes on-street have returned to typical no-event conditions following event's end. The PCO Supervisor will deploy up to 18 PCOs to locations and assign transportation control tasks pre-event monitor traffic conditions before, during, and after the event; and deploy PCOs and assign transportation control tasks post-event.

Transit loading may also be monitored by Transit Fare Inspectors (TFIs) and SFMTA Passenger Assistance Program staff (MTAPs) stationed at Muni platforms.

### **6.4.2 Curb Management**

All curbside parking and loading areas described for no-event conditions will convert to the event curb zones described below at 5:00 PM (before an evening event beginning 7:00 PM or later), or two hours before an event (starting at all other times). Event curb zone designations will revert back to no-event parking and loading conditions ninety minutes following an event's end.

Pre-event curb management will be the same as that shown for the concert scenario with one addition. GSW games will require media coverage and designated curbside parking for media satellite trucks. The total curb length required will be up to 200 feet during regular season games, which includes parking for 2 uplink trucks and 4 ENG trucks. This will be provided on the north side of 16<sup>th</sup> Street starting just east of 3<sup>rd</sup> Street. A curb distance of 150 feet will be designated for media trucks, as shown in **Figure 6-6**.

Post-event curb management will be the same as that shown for the concert scenario with the exception of 16<sup>th</sup> Street. The media satellite truck parking detailed above in the pre-event curb management for the peak event will also be implemented in the post-event curb management. All other post-event curb designations for a peak event are the same as the post-event concert scenario, including the temporary lane closures on South, 3<sup>rd</sup>, and Illinois Streets, the special event shuttle stops, and the additional passenger pick-up zone on Terry François Boulevard. These are shown on **Figure 6-8**.

To increase safety for the high volumes of pedestrians walking to the Muni Station on 3<sup>rd</sup> Street, temporary lane closures will be implemented on northbound 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mission Bay Boulevard South, on westbound and eastbound South Street west of the parking garages. It is anticipated that the background traffic volumes will be light after a game, so impacts to the existing traffic patterns will be low. Variable message and detour signs will be placed well in advance of the temporary closures to notify drivers of alternate routes. Proposed locations for permanent variable message signs are listed below:

- Northbound 3<sup>rd</sup> Street – South of Mariposa (existing VMS)
- Westbound 16<sup>th</sup> Street – East of I-280 (proposed VMS)
- Southbound 3<sup>rd</sup> Street – South of Lefty O'Doul Bridge (proposed VMS)
- Eastbound Mariposa Street – East of I-280 (proposed VMS)

Emergency vehicles exiting the UCSF hospital west of 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mariposa Street will be granted access to northbound 3<sup>rd</sup> Street during the post-event street closure described above. PCOs may remove temporary barriers and allow emergency vehicle access to northbound 3<sup>rd</sup> Street in those situations, or emergency vehicles may drive in the southbound lanes to travel northbound. GSW staff will provide the hospital with a list of dates and times of post-event street closures.

### **6.4.3 Pre-Event Controls**

Pre-event controls will be the same as the concert scenario, but are repeated here and illustrated on **Figure 6-7**.

#### **PCO Locations**

21 PCOs shall be stationed at key locations, as determined by the PCO Supervisor before, during, and after events or as field conditions warrant, which could include a selection of those listed below. Their primary task will be to manage pedestrian and vehicle traffic.

- 3<sup>rd</sup> Street and South Street
- South Street and Bridgeview Way
- South Street and Terry François Boulevard
- 3<sup>rd</sup> Street and 16<sup>th</sup> Street
- 16<sup>th</sup> Street and Illinois Street
- 16<sup>th</sup> Street and Terry François Boulevard
- Mariposa Street and I-280 northbound ramps/Owens Street
- Mariposa Street and 3<sup>rd</sup> Street
- Mariposa Street and 4<sup>th</sup> Street
- Mariposa Street and Illinois Street
- Channel Street and 3<sup>rd</sup> Street
- Channel Street and 4<sup>th</sup> Street
- Mission Bay Boulevard North and Terry Francois Boulevard
- Mission Bay Boulevard South and Third Street
- King Street and Fourth Street
- Fifth Street, Harrison Street, and the I-80 westbound off-ramp
- Fifth Street, Bryant Street, and the I-80 eastbound on-ramp
- Seventh Street and Mission Bay Drive
- Seventh Street, Mississippi Street, and 16<sup>th</sup> Street



- One roving PCO (or more if necessary) to monitor general parking issues and respond to complaints called in throughout the neighborhood

The PCO locations listed in this document are solely representative and will remain flexible to respond to changing traffic conditions once the Event Center Development is complete. The number of PCOs per suggested location will be determined in consultation with the SFMTA and refined based on monitoring during the first four years of operations. Based on visual verification of field conditions at the time of an event, the PCO supervisor may also modify PCO location assignments as conditions warrant.<sup>17</sup>

### **UCSF Mission Bay Muni Platform**

To accommodate pedestrians traveling to and from the Event Center through the intersection of Third Street and South Street, and to minimize conflicts with vehicles and Muni trains, PCOs stationed at this location shall implement strategies to allow pedestrians to cross the street safely. The strategies and level of active management shall be tailored to the event size for all events with 12,500 or more attendees, and could include extending the green time for pedestrians crossing the street, manually overriding the traffic signal and directing pedestrians to cross, erecting temporary pedestrian crossing barriers, allowing use of the closed Third Street as a pedestrian access route, providing a defined passenger waiting area within the closed Third Street, shielding passengers waiting to board light rail from adjacent pedestrian traffic, and deploying additional PCOs to this intersection.<sup>18</sup>

### **Event Center Garage Driveway on 16<sup>th</sup> Street**

Game attendees with pre-sold parking passes for the Event Center garage would enter via the left turn lane on eastbound 16<sup>th</sup> Street leading to the garage driveway or from northbound Illinois Street to self-park. GSW staff will check parking passes before vehicles enter the garage.

PCOs will be stationed at the Event Center garage driveway to facilitate vehicle egress (office employees leaving on weekday evenings) and ingress (event attendees entering the garage), minimize conflicts with pedestrians and bicyclists on 16<sup>th</sup> Street, and coordinate with PCOs located at the adjacent 3<sup>rd</sup> Street / 16<sup>th</sup> Street intersection. A key purpose of the PCOs located at the adjacent intersections on 16<sup>th</sup> Street will be to ensure safety to all modes by minimizing conflicts between modes while ensuring the flow of vehicles into the garage does not result in queues that back up into adjacent intersections. They will also work in conjunction with Event Center staff that will be checking attendees' tickets for valid access to the garage on game day. Drivers who enter the eastbound left-turn pocket or are stationed to enter the garage on Illinois Street without a valid parking pass will be redirected to drive east on 16<sup>th</sup> Street to Terry François Boulevard towards other nearby garages or parking lots.

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<sup>17</sup> See MMRP, M-TR-2a.

<sup>18</sup> See MMRP, M-TR-6.

### **3<sup>rd</sup> Street / 16<sup>th</sup> Street Intersection**

PCOs will be stationed at the intersection of 3<sup>rd</sup> Street and 16<sup>th</sup> Street to maintain the flow of Muni trains on 3<sup>rd</sup> Street, and provide for the safe movement of pedestrians, bicyclists, and vehicles. PCOs will work to ensure that the intersection does not become blocked with vehicles. As noted above, the PCO stationed at 3<sup>rd</sup> Street/16<sup>th</sup> Street will work in conjunction with the PCO at the Event Center garage entrance.

### **Drop-Off on Southbound Terry François Boulevard**

Event Center ticket holders may be dropped off on the west side of Terry François Boulevard between South Street and 16<sup>th</sup> Street as shown on **Figure 6-6**. This curbside area will be separately designated, but shared.

#### **6.4.4 Post-Event Controls**

All of the post-event controls are generally the same as the post-event controls for a concert scenario but are repeated here for ease of understanding when reviewing all controls for the peak event exclusively. The post-event curb and lane configurations are illustrated on **Figure 6-8** and **Figure 6-9**.

Muni tickets will be sold at the Event Center box office before, during, and after events.

### **PCO Locations**

PCOs will be stationed at locations determined by the PCO Supervisor, which may include those identified previously for the pre-event scenario, with two exceptions. At least one PCO will be located at the intersection of 16<sup>th</sup> Street/Owens Street to facilitate heavy left turn flows from westbound 16<sup>th</sup> Street onto southbound Owens Street and access to I-280. One PCO will also be located at the intersection of Fifth Street/Bryant Street/I-80 eastbound ramps.

### **UCSF Mission Bay Muni Platform**

Temporary lane closures will be in effect for enhanced pedestrian safety on northbound 3<sup>rd</sup> Street north of 16<sup>th</sup> Street and on South Street east of 3<sup>rd</sup> Street. Muni staff will also be stationed to check tickets and manage the boarding process.

To accommodate pedestrians traveling to and from the Event Center through the intersection of Third Street and South Street, and to minimize conflicts with vehicles and Muni trains, PCOs stationed at this location shall implement strategies to allow pedestrians to cross the street safely. The strategies and level of active management shall be tailored to the event size for all events with 12,500 or more attendees, and could include extending the green time for pedestrians crossing the street, manually overriding the traffic signal and directing pedestrians to cross, erecting temporary pedestrian crossing barriers, allowing use of the closed Third Street as a pedestrian access route, providing a defined passenger waiting area within the closed Third Street, shielding passengers waiting to board light rail from adjacent pedestrian traffic, and deploying additional PCOs to this intersection.<sup>19</sup>

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<sup>19</sup> See MMRP, M-TR-6.

### Event Center Garage Driveway on 16<sup>th</sup>

PCOs at the Event Center garage driveway at the intersection of 16<sup>th</sup> Street / Illinois Street will have the following objectives:

- Managing alternating flows of vehicle traffic exiting the garage with pedestrian-bicycle flows along 16<sup>th</sup> Street
- Managing alternating flows of vehicle traffic exiting the garage with shuttle traffic and occasional westbound traffic flow on 16<sup>th</sup> Street to accommodate safe and efficient shuttle loading and departure.
- Coordinating with PCOs located along 16<sup>th</sup> Street so that they stop pedestrian crossings of 16<sup>th</sup> Street during the same windows of time that vehicles are released from the Event Center garage onto east- and westbound 16<sup>th</sup> Street
- Maintaining vehicle access to garages for the 409 and 499 Illinois Street buildings, as well as future UCSF buildings on Blocks 33 and 34, from 16<sup>th</sup> Street and Illinois Street.

To extend the effective length of the westbound left turn pocket at the 16<sup>th</sup> Street / 3<sup>rd</sup> Street intersection, temporary cones will be placed to close the eastbound left turn lane on 16<sup>th</sup> Street into the Event Center garage entrance after a game, if necessary, extending the turn pocket to 160 feet. The extended turn pocket will be used for westbound vehicles making a left turn onto southbound 3<sup>rd</sup> Street. Motorists wishing to enter the Event Center garage from eastbound 16<sup>th</sup> Street will be able to make a left turn from the eastbound through lane.

Southbound traffic exiting the Event Center garage will be advised to travel west on 16<sup>th</sup> Street to southbound Owens Street to access I-280. Any traffic heading to the north from the parking garage will be advised to travel west on 16<sup>th</sup> Street to northbound 7<sup>th</sup> Street due to the temporary northbound closure on 3<sup>rd</sup> Street.

### 3<sup>rd</sup> Street / 16<sup>th</sup> Street

PCOs will be stationed at the intersection of 3<sup>rd</sup> Street and 16<sup>th</sup> Street to facilitate the flow of vehicles from westbound 16<sup>th</sup> Street from the parking garages, along with Muni trains, bicyclists, and pedestrians while preventing event traffic from going north on 3<sup>rd</sup> Street. They will work in conjunction with the PCO at the garage entrance to stop pedestrians crossing 16<sup>th</sup> Street during the same window that vehicles are exiting the garage on 16<sup>th</sup> Street, and prohibit northbound traffic from accessing 3<sup>rd</sup> Street north of 16<sup>th</sup> Street due to the temporary lane closures and direct traffic to northbound Terry François Boulevard.

### Temporary Lane Closures

Up to 17 PCOs will be stationed at key locations to redirect traffic due to the temporary lane closures. The PCO station located on South Street east of 3<sup>rd</sup> Street will manage the temporary South Street lane closure as well as Bridgeview Way. The PCOs will direct all traffic exiting the 450 South Street (office and retail employees) and Event Center (event attendees) garages to Terry François Boulevard via eastbound South Street, and restrict northbound traffic from using Bridgeview Way, except for neighborhood traffic. These PCOs will also direct any southbound traffic on Bridgeview Way left onto eastbound South Street.

PCOs will also be stationed at the Terry François Boulevard / South Street intersection to manage traffic exiting the garages on South Street. They will direct traffic either north or south on Terry François Boulevard, and restrict vehicle access onto westbound South Street. They will also manage alternating flows of pedestrian crossings of South Street and vehicles turning onto Terry François Boulevard. PCOs will also allow for local traffic to access garages on 16<sup>th</sup> Street and Illinois Street.

PCOs will be stationed on 3<sup>rd</sup> Street at Mariposa Street to direct no-event northbound traffic to alternate routes in advance of the temporary closure on northbound 3<sup>rd</sup> Street to reduce congestion at the intersection of 3<sup>rd</sup> Street / 16<sup>th</sup> Street. Northbound traffic will be redirected east along Mariposa Street to northbound Terry François Boulevard. Variable message signs (VMSs) will also direct traffic to Terry François Boulevard in advance of the intersection of 3<sup>rd</sup> Street / Mariposa Street. VMSs and detour signs will be programmed and/or placed well in advance of the temporary closures to notify drivers of alternate routes, including those depicted in **Figure 6-9**. Permanent Variable Message Signs will be placed at the following locations to notify drivers of detours in advance:

- Northbound 3<sup>rd</sup> Street – South of Mariposa (existing VMS)
- Westbound 16<sup>th</sup> Street – East of I-280 (proposed VMS)
- Southbound 3<sup>rd</sup> Street – South of Lefty O’Doul Bridge (proposed VMS)
- Eastbound Mariposa Street – East of I-280 (proposed VMS)

All PCOs stationed at locations along 3<sup>rd</sup> Street will also assist emergency vehicles and autos needing emergency access to the UCSF Medical Center to navigate congested conditions and utilize closed travel lanes as needed.

### **Temporary Turn Restrictions**

Temporary turn restrictions will be in place post-event to discourage vehicles traveling westbound on 16<sup>th</sup> Street from turning left onto 3<sup>rd</sup> Street, Owens Street or Mississippi Street. PCOs will be responsible for coning off left turn pockets at these three intersections and enforcing left-turn restrictions. Signage will be provided inside event garages to direct vehicles destined for I-280 to use Terry François Boulevard to Mariposa Street as the primary access.

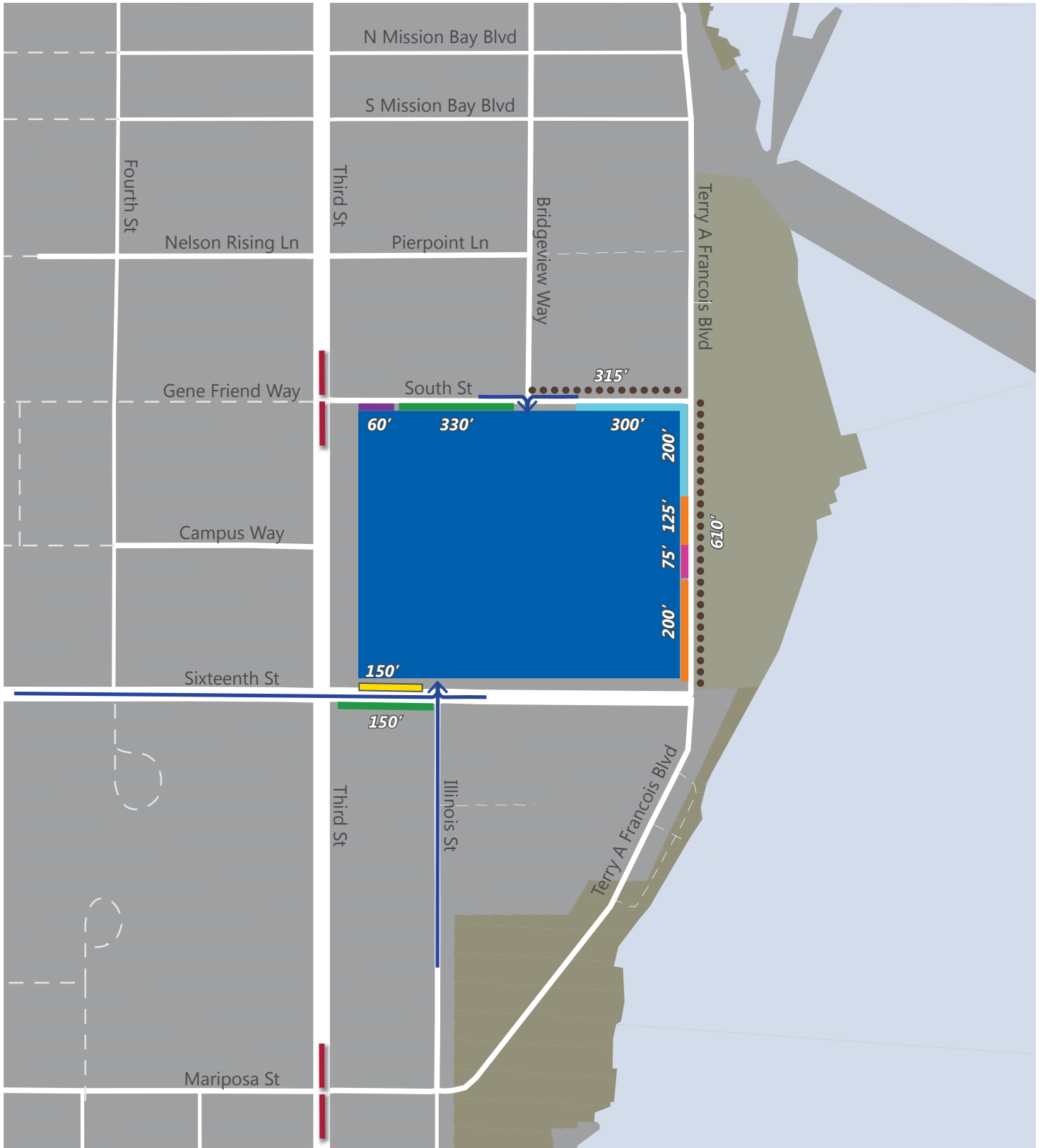
### **Passenger Pick-Up on Terry François Boulevard**

The passenger pick-up location will be the same as the pre-event drop-off location – on the west side of Terry François Boulevard. This location will also include Paratransit loading.


### **Terry François and 16<sup>th</sup> Intersection**

PCOs will be stationed at the intersection of Terry François Boulevard and 16<sup>th</sup> Street following a game’s end to manage bicycle and pedestrian flows, detour traffic from the temporary lane closures on South Street and 3<sup>rd</sup> Street, as well as event traffic from nearby parking facilities. Traffic will be directed mostly north and south on Terry François Boulevard to avoid adding to the congestion on 16<sup>th</sup> Street and to avoid conflicts with shuttle buses.

- Project Site
- Taxi
- Paratransit Bus
- Lane Closure
- Black Car
- Approximate Storage Length
- MUNI Platform
- TMA Shuttles
- Buses
- Media Trucks
- Passenger Drop-off
- On-Street Metered Parking
- Garage Entry



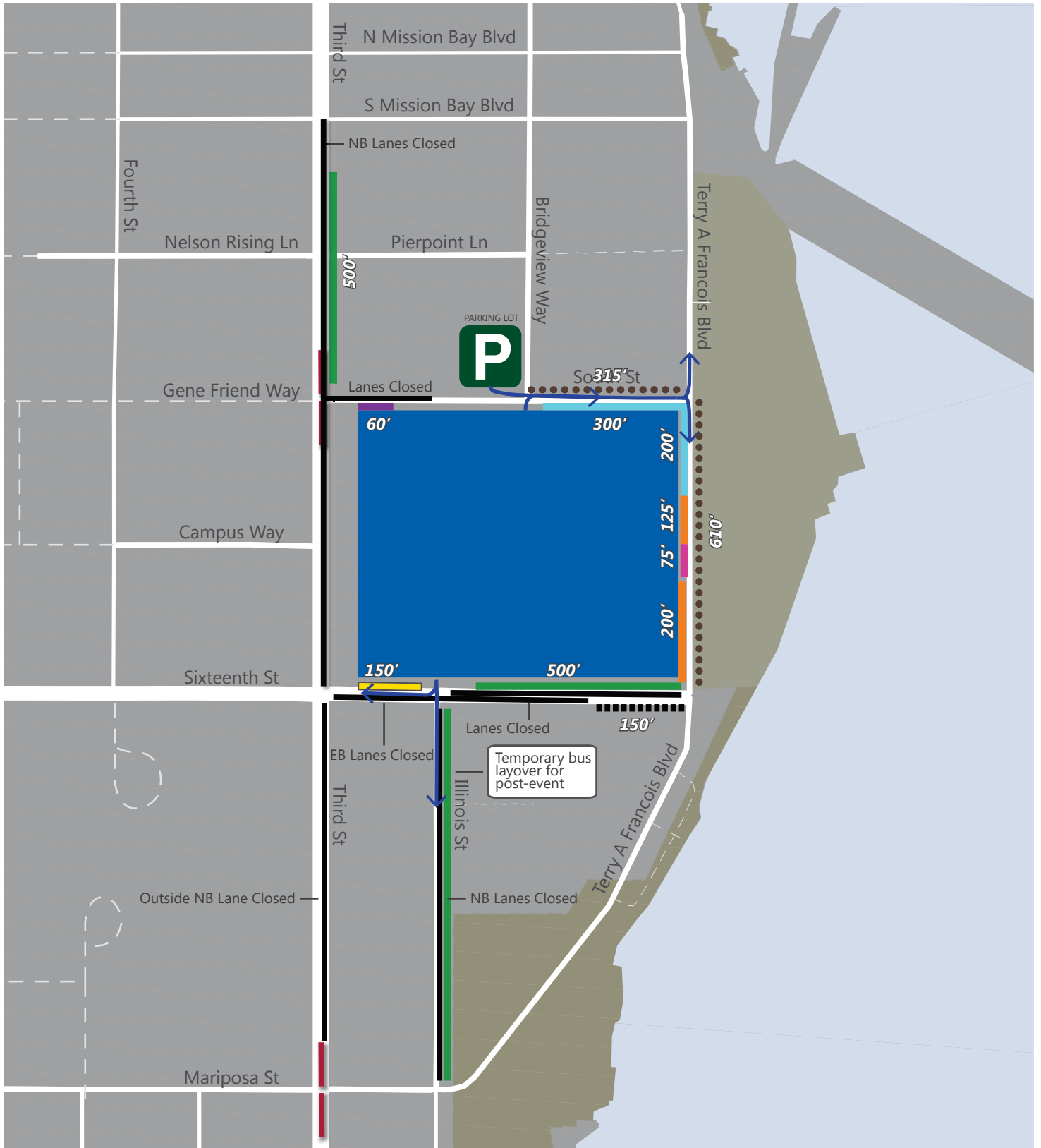
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█ MUNI Platform   
 ⋯ Caltrain Line   
 █ Project Site   
  PCO Station



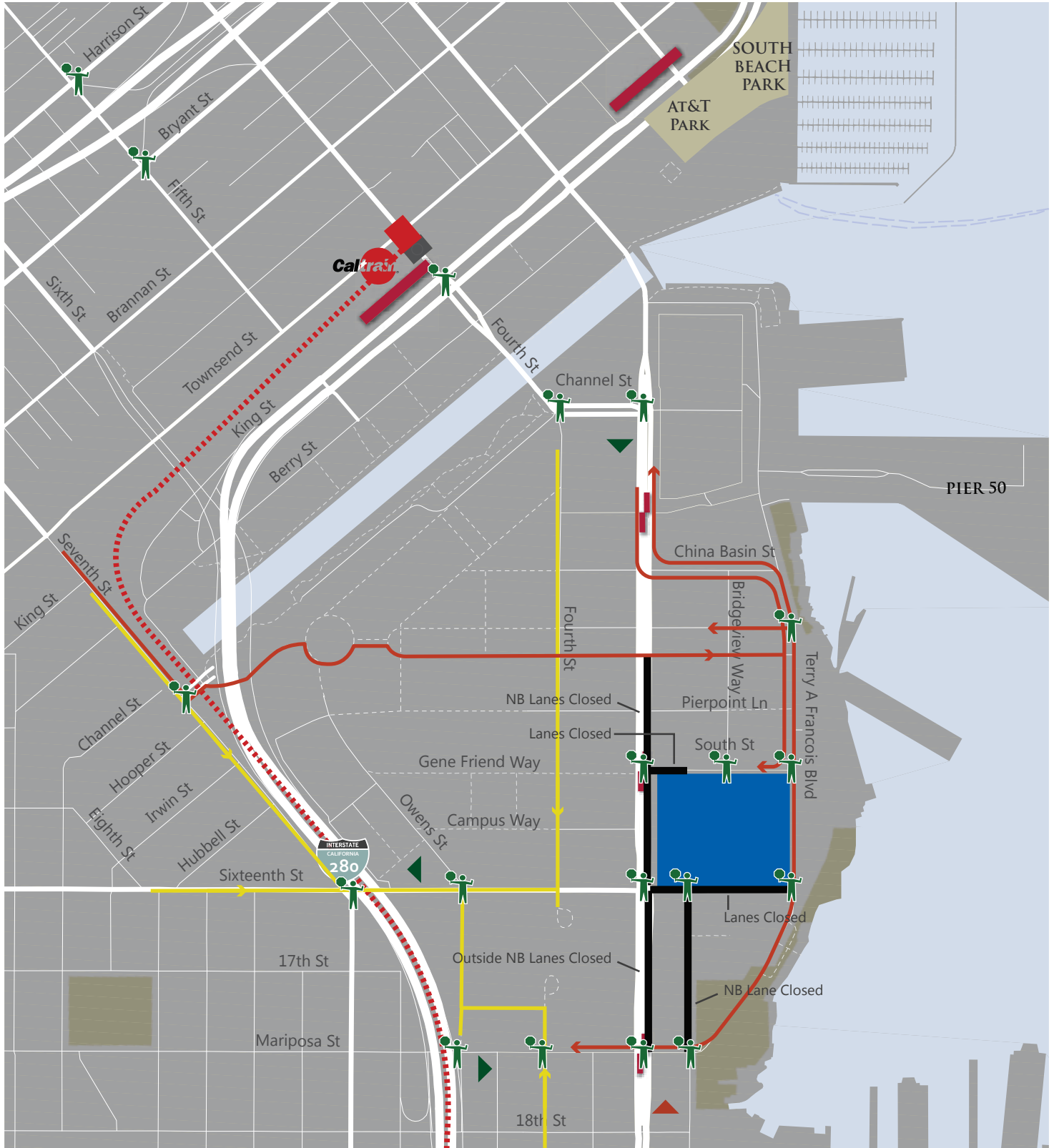
Not to Scale

- Project Site
- MUNI Platform
- TMA Shuttles
- Buses
- Media Trucks
- Passenger Pick-up
- Paratransit Bus
- Taxi
- Lane Closure
- Black Car
- Approximate Storage Length
- Garage Exit
- On-Street Metered Parking



Not to Scale

- MUNI Platform
- Caltrain Line
- Project Site
- PCO Station
- Existing VMS
- Lane Closure
- Alternate Routes for Local Traffic
- Alternate Routes for Hospital and other Traffic
- Proposed New VMS



Not to Scale



## **6.5 CONTROLS FOR PEAK EVENT COINCIDING WITH AT&T PARK EVENT SCENARIO**

See Section 2.2 for a description of the scenario in which a peak Event Center event coincides with an AT&T Park event.

### **6.5.1 General**

On days where Event Center events coincide with AT&T Park events, pedestrian, bicycle, and vehicle volumes along Terry François Boulevard and 3<sup>rd</sup> Street will be greater. Controls implemented as part of the Event Center should be coordinated with controls implemented as part of the AT&T Park standard TMP so that:

- Efforts are not duplicated; and
- Controls are complementary rather than contradictory.

### **PCO Locations**

The Warriors support the formation of a working group, comprised of the Warriors, Giants, SFMTA, Mission Bay CAC, UCSF, MBBTCC, and other stakeholders, to regularly discuss potential overlaps and the resulting traffic and transit conditions, and to propose solutions on an individual event basis. For example, if the AT&T Park TMP includes PCO control at any PCO intersections listed in this document and events' start or end times coincide, additional PCOs may not be necessary at that location. **Figure 6-10** and **Figure 6-11** show where PCOs would be stationed pre- and post-event during a dual event scenario, including three new post-event dual event location options for PCO's at Mariposa Street and Fourth Street; 16<sup>th</sup> Street and Fourth Street; and King Street, Fifth Street, and the I-280 ramps.<sup>20</sup>

Transit loading may also be monitored by Transit Fare Inspectors (TFIs) and SFMTA Passenger Assistance Program staff (MTAPs) stationed at Muni platforms.

### **Enhanced Transit Service**

To accommodate Muni transit demand to and from the Event Center Development and AT&T Park on the T Third light rail line during dual events, the Warriors shall work with the SFMTA and the MBBTCC to provide enhanced Muni light rail service and/or shuttle buses between key Market Street locations and the project. Examples of the enhanced service include Muni bus shuttles between Union Square and/or Powell Street BART/Muni station and the project site. The need for enhanced Muni service shall be based on characteristics of the overlapping events (e.g., projected attendance levels, and anticipated start and end times).<sup>21</sup>

Similarly, to accommodate transit demand to the East Bay during dual events, the Warriors shall work with the Ballpark/Mission Bay Transportation Coordinating Committee to consult with BART to provide additional service from San Francisco following weekday and weekend evening events. The additional East Bay BART service could

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<sup>20</sup> See MMRP, M-TR-11a.

<sup>21</sup> See MMRP, M-TR-13.

be provided by operating longer trains. The need for additional BART service shall be based on characteristics of the overlapping events (e.g., event type, projected attendance levels, and anticipated start and end times).<sup>22</sup>

### **Additional Strategies**

In addition, the Warriors shall work with the City to pursue and implement additional strategies to reduce transportation impacts associated with overlapping events at AT&T Park and the proposed Event Center. In accordance with project mitigation measure M-TR-11c, these strategies shall include one or more of the following:

- The Warriors shall exercise commercially reasonable efforts to avoid scheduling non-Golden State Warriors events of 12,500 or more Event Center attendees that start within 60 minutes of the start of events at AT&T Park.
- When overlapping non-Golden State Warriors events of 12,500 or more Event Center attendees and evening SF Giants games, the Warriors shall exercise commercially reasonable efforts to negotiate with the event promoter to stagger start times such that the event headliner starts no earlier than 8:30 p.m.
- In the event that the off-site parking lots at 19th Street and the Western Pacific site are implemented (see section 2.1.5, above), the SFMTA shall consult with Caltrans in assessing the feasibility of signaling the intersection of Pennsylvania/I-280 southbound off-ramp. If determined feasible by the SFMTA and Caltrans, the SFMTA and Caltrans shall establish the level of traffic volumes that would trigger the need for a signal (“traffic signal warrants”), and the Warriors shall fund GSW’s fair share cost of the design and implementation of the new signal, based on project contributions to annual average weekday traffic volumes at this intersection.
- In addition, as part of monitoring of traffic conditions during overlapping events, the SFMTA shall consult with Caltrans regarding the need to deploy an SFMTA PCO or CHP officer to expedite traffic exiting I-280 southbound (i.e., waving vehicles exiting I-280 southbound and turning left onto southbound Pennsylvania Street through the existing stop sign) during overlapping events when the Western Pacific parking lot is used for project event parking. The PCO or CHP officer would be deployed during those events prior to installation of a traffic signal or if signalization of this intersection is determined not to be feasible.
- To manage traffic flows and minimize congestion associated with non-Golden State Warriors events overlapping with events at AT&T Park, and to incentivize event attendees and UCSF employees to use alternatives to the private automobile, the City and the Warriors shall pursue and implement additional transportation management actions during the pre-event period during overlapping events. This measure shall be implemented in coordination with and in addition to PCO placements and TDM strategies already in place (see Chapters 4 and 6, above). Such strategies which would be enacted during the first year of the Event Center’s operation and modified or implemented annually thereafter based on the results of field monitoring and annual surveys, and shall include one or more of the following:

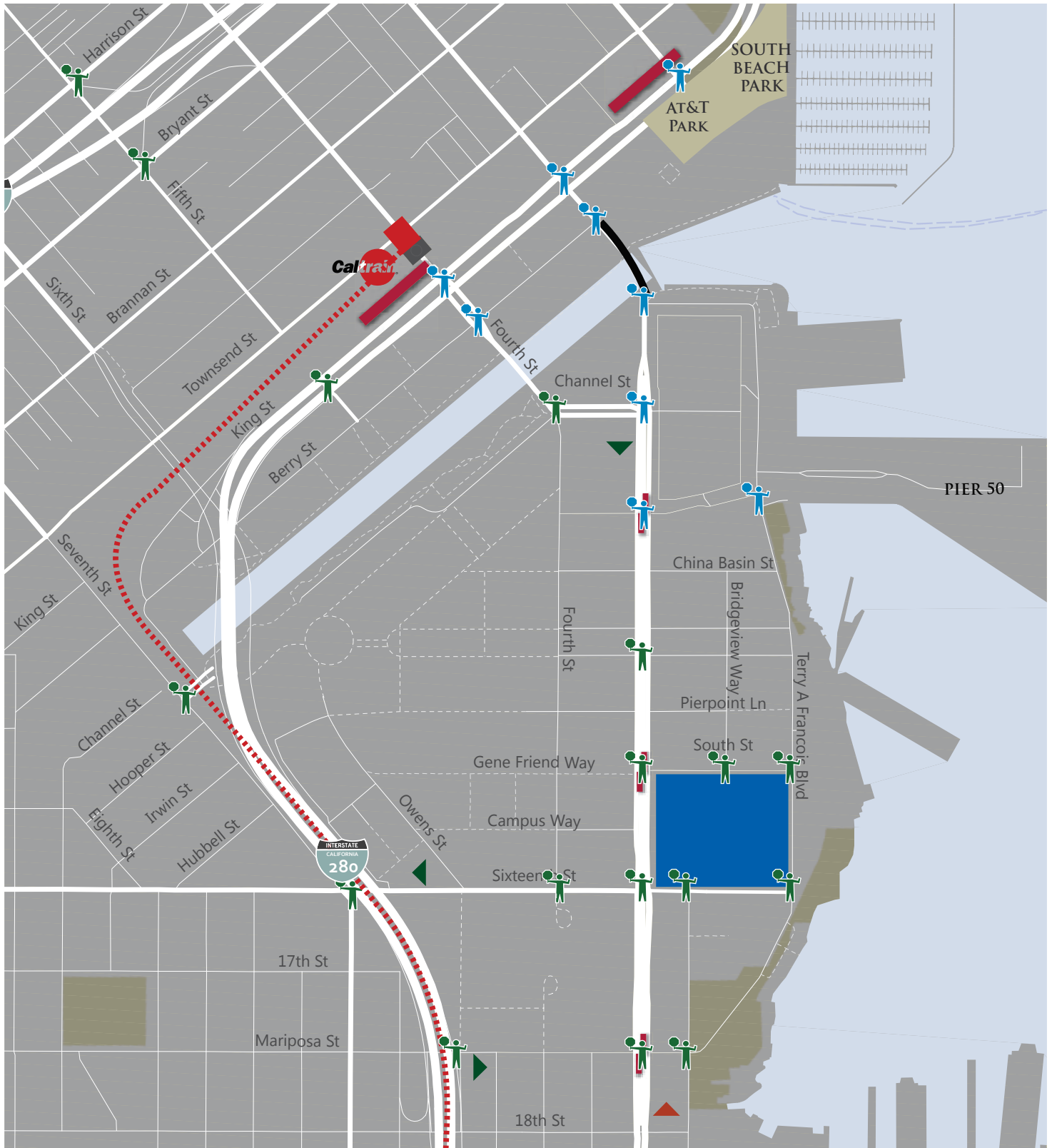
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<sup>22</sup> See MMRP, M-TR-14.

- Strategies to Increase Use of Non-auto Modes
  - Encouraging coordinated parking pricing strategies among nearby facilities designed to discourage driving for event attendees and employees.
  - Marketing “No drive” events.
  - Installing Clipper Card add-value machines on-site at the Event Center to facilitate purchase and value-adding, and to minimize impacts on transit "dwell times" of paying cash fares.
  - Exploring implementation of congestion pricing tools to charge event-related fees for driving and parking in the immediate area.
  - Establishing event-sponsored promotions to encourage additional use of transit, such as event-branded Clipper Cards, bundled discounts and subsidies for transit ticket purchases, or automatic prize/raffle entries/merchandise discounts for event attendees taking transit.
  - Exploring implementation of priority access or fast-track security clearance to the Event Center for attendees arriving by transit or bicycling to the Event Center.
  - Promoting the above strategies through event tickets and ticketholder emails, website transit information, and real-time updates.
  - Consulting with local TMAs targeting employees who might drive during the peak pre-event period to provide increased shuttle service, alternative travel mode promotions, and advertising the use of real-time information and technology applications.
  - Sponsoring use of taxis, TNCs, or pedicabs by the Warriors to facilitate the connection between the regional transit hubs and the Event Center, as well as between the regional transit hubs and AT&T Park.
- Strategies to Increase Transit, Capacity of Alternative Modes, and Enhance Pedestrian Safety
  - Providing additional PCOs to manage and direct local traffic, and to favor circulation of pedestrians, cyclists, and persons arriving or departing by transit.
  - Expanding the network of PCO-controlled intersections during the peak pre-event period beyond those identified in the Local/Hospital Access Plan.
  - Exploring implementation of a program to require employees driving in the vicinity during the peak pre-event period to produce vehicle badges (e.g., rearview hanger, sticker) by employer for access to local employment sites, and coordinating with SFMTA and SFPD to honor said badges.
  - Using the Western Pacific site for off-site parking for all events, not only large overlapping events.
  - Increasing transit or High Occupancy Vehicle (HOV) capacity by operating additional SFMTA buses and/or additional private shuttle buses.

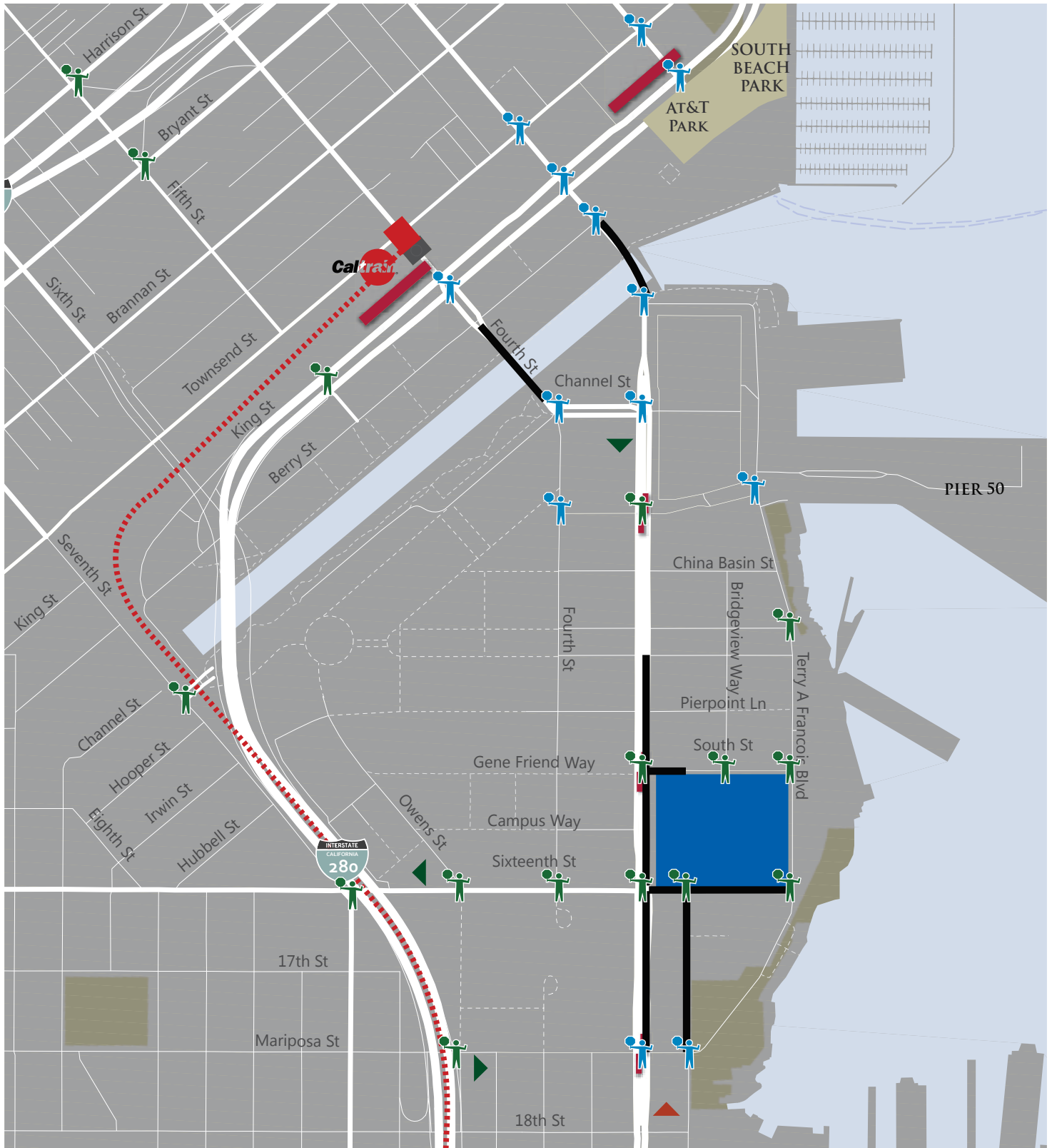
- Supporting WETA analysis of the feasibility and operational benefits of a ferry/water taxi landing near 16th Street.
- Increasing capacity and use of alternative modes, such as secure or valet bicycle parking, bicycle sharing, or bicycle infrastructure along the east-west corridors.
- Expanding the SFMTA’s Vision Zero treatments to nearby intersections to improve the physical pedestrian environment to enhance pedestrian safety.

- MUNI Platform
- Caltrain Line
- Project Site
- Existing VMS
- Proposed New VMS
- GSW PCO
- AT&T PCO
- Lane Closure



Not to Scale

- MUNI Platform
- Caltrain Line
- Project Site
- Existing VMS
- Proposed New VMS
- GSW PCO
- AT&T PCO
- Lane Closure



Not to Scale

## **6.6 LOCAL/HOSPITAL ACCESS PLAN FOR ALL EVENT SCENARIOS**

### **6.6.1 General**

A Local/Hospital Access Plan (L/HAP) to facilitate movements in and out to residents and employees in the UCSF and Mission Bay Area would be implemented for the pre-event period for all large weekday evening events at the Event Center (i.e., those events with more than 12,500 attendees that start between 6:00 and 8:00 p.m.). The L/HAP would be configured to discourage event attendees arriving by car from using portions of Fourth Street, Owens Street, UCSF campus internal roads such as Nelson Rising Lane, Campus Lane, Fifth Street, and local residential streets.

#### Signage

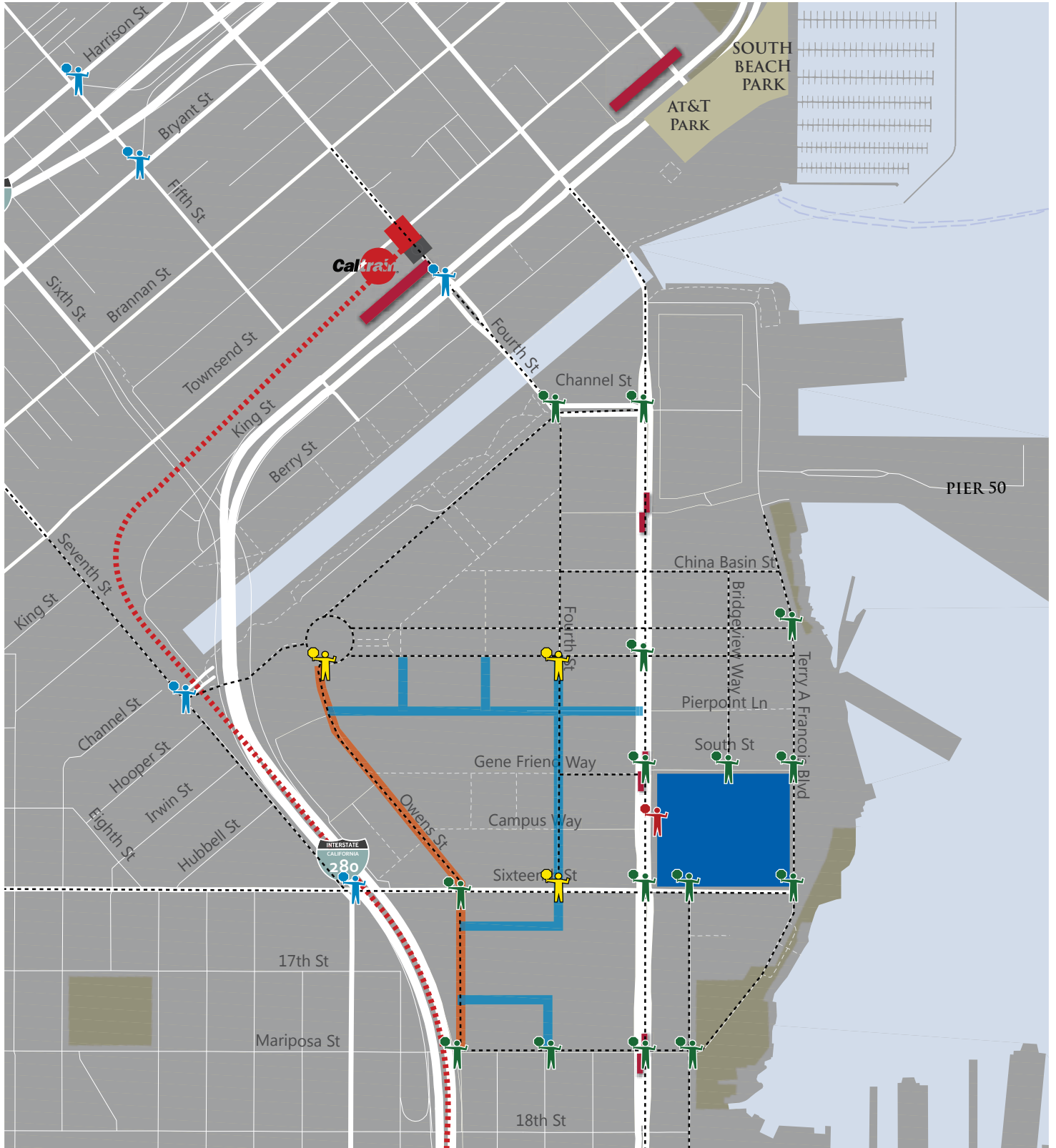
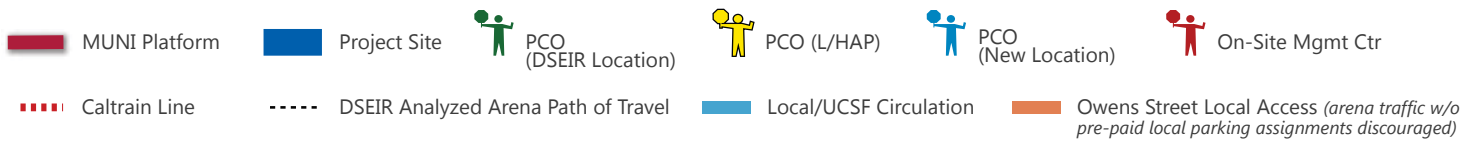
As part of the L/HAP, special temporary and permanent signage would be positioned at appropriate locations to direct event traffic towards designated routes in order to access off-street parking facilities serving the Event Center and away from streets within the Local/Hospital Access Plan network. The Warriors will work with UCSF, SFMTA, Caltrans, and DPW to develop a UCSF emergency vehicle access and garage signage plan for I-280 and Mariposa, Owens, and 16th Streets to reflect the desirable access routes for UCSF and event center access.<sup>23</sup>

#### PCO Locations

In addition, three PCOs would be stationed at key intersections (i.e., Fourth/16th, Owens/Mission Bay Traffic Circle, and Fourth/Nelson Rising Lane) before the start of an event to facilitate local driver access to their destinations. These three additional PCOs would also be available after the event to be positioned at the most effective locations to direct outbound pedestrians, bicyclists, and vehicles, as determined by the PCO Supervisor.

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<sup>23</sup> See MMRP, I-TR-10a.



Not to Scale



## CHAPTER 7. FREIGHT LOADING

### 7.1 FREIGHT ACCESS FOR EVENT CENTER DEVELOPMENT (BLOCKS 29-32)

Freight access to the Event Center Development site located on Blocks 29-32 will be provided as described below and as shown on Figure 8-1 and Figure 8-2.

- Event Center Loading Docks – A formal truck loading area will be located on the lower level of the parking structure. Trucks will enter and exit the loading dock via access-controlled truck-only lanes in the parking structure’s driveway on 16<sup>th</sup> Street at Illinois Street. All trucks that service events at the Event Center, including semi-trailer trucks, single unit trucks, and trash trucks, will use the loading dock area. The loading area will provide a “hammerhead” turnaround area so that trucks can easily maneuver into and out of the loading slips. Truck access will be limited to the extent feasible during pre- and post-event times to minimize potential conflicts with vehicles arriving or departing the garage.
- Retail Truck Loading Docks – Smaller loading docks for single unit trucks will be located on the Lower Level of the parking structure. This area will be available for use by the visitor-serving retail uses. Trucks will enter and exit the loading area via the access-controlled truck-only lanes in the driveway on 16<sup>th</sup> Street at Illinois Street.
- Office Truck Loading Docks – Loading docks for the office towers will be located on the Lower Level of the parking structure in two areas. Three loading docks for the South Street office tower will be provided in the northwest corner of the loading area and one loading dock for the 16<sup>th</sup> Street office tower will be located in the southwest corner of the loading area, just to the left of the first garage ramp. Both loading areas will also include trash compactors for the office towers. Trucks will enter and exit the loading area via the access-controlled truck-only lanes in the driveway on 16<sup>th</sup> Street at Illinois Street.
- South Street and Terry François Boulevard Commercial Curbside Loading – Parking along portions of the Event Center Development frontage will be designated for commercial truck deliveries for retail uses. On-street commercial loading zones will be designated as active loading zones all hours.

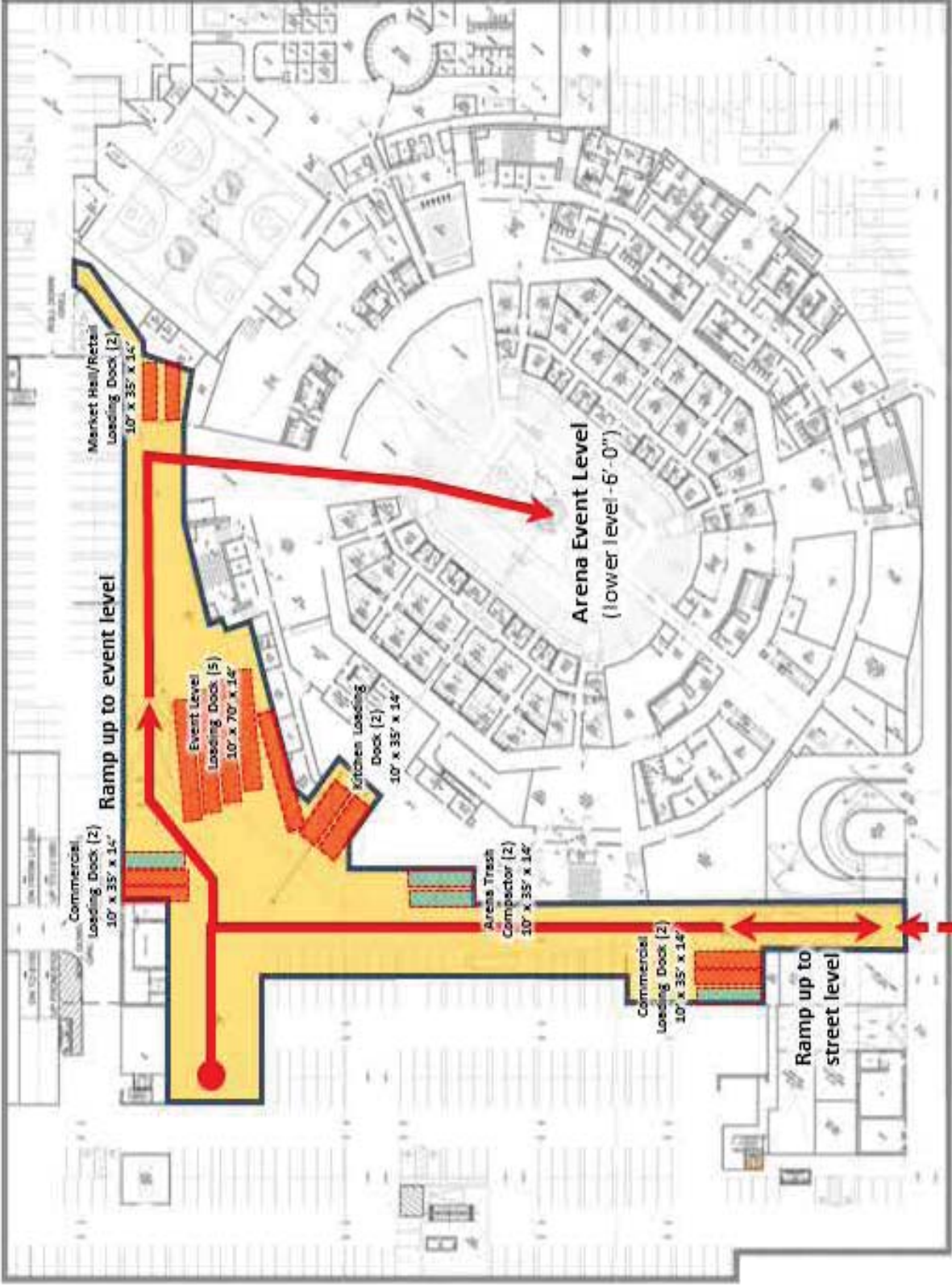
Market Hall Loading – There will also be a small separate loading area, exclusive to the Market Hall uses, for which small delivery vehicles will enter via the South Street garage entrance.

To reduce potential conflicts between driveway operations, including loading activities, and pedestrians, bicycles and vehicles on South Street, Terry Francois Boulevard, and 16th Street, the Warriors will prepare a Loading Operations Plan, and submit the plan for review and approval by the OCII, or its designee, and the SFMTA. As appropriate, the Loading Operations Plan will be periodically reviewed by the Warriors, the OCII or its designee, and SFMTA and revised if required to more appropriately respond to changes in street or circulation conditions.

The Loading Operations Plan will include a set of guideline related to the operation of the on-site and on-street loading facilities, as well as large truck curbside access guidelines; it will also specify driveway attendant responsibilities to minimize truck queuing and/or substantial conflicts between project-generated loading/unloading activities and pedestrians, bicyclists, transit and autos. Elements of the Loading Operations Plan will include:

- Commercial loading activities within on-street commercial loading spaces on South Street, Terry Francois Boulevard, and 16th Street will comply with all posted time limits and all other posted restrictions.
- Double parking or any form of illegal parking or truck loading/unloading will not be permitted on any streets adjacent to the Event Center Development, and particularly on 16th Street which would include a bicycle lane. Working with the SFMTA Parking Control Officers, building management will ensure that no truck loading/unloading activities occur within the bicycle lanes on 16th Street.
- All move-in and move-out activities for commercial office uses will be coordinated by building management, and, in the event that moving trucks cannot be accommodated within the below-grade loading area, building management will obtain a reserved curbside permit from the SFMTA in advance of move-in or move-out activities.

Trash Compactors  
Loading Slips



Not to Scale



# TRUCK TURNING PLANS

FIGURE 8-2



## **CHAPTER 8. EMERGENCY VEHICLE ACCESS**

The Event Center Development is served by the San Francisco Fire Department (SFFD) and the San Francisco Police Department (SFPD). A new SFFD fire house and SFPD headquarters building is being constructed at Block 8 in the Mission Bay South area on China Basin Street east of 3<sup>rd</sup> Street.

The Event Center Development project also anticipates installing on-site generators capable of providing up to three megawatts (MW) of emergency, standby and optional power in the case of temporary loss of normal utility power. The on-site generators would provide power to the Transportation Management Center (TMC) during such an emergency to facilitate efficient communication between TMC staff and emergency service personnel.

### **8.1 EMERGENCY VEHICLE ACCESS FOR EVENT CENTER**

Emergency vehicle access to the Event Center Development site will be provided as described below and shown on Figure 9-1.

- SFFD vehicles from the new fire house on China Basin Street would access the Event Center Development via southbound 3<sup>rd</sup> Street or Terry François Boulevard. Direct access to the Event Center Arena will be provided via the southeast corner plaza on the corner of Terry François Boulevard and 16<sup>th</sup> Street. Fire Department vehicles traveling south on 3<sup>rd</sup> Street would make a left at 16<sup>th</sup> Street. Fire Department vehicles traveling south on Terry François Boulevard would make a right turn onto 16<sup>th</sup> Street. Emergency vehicles servicing office buildings will use either 16<sup>th</sup> Street or South Street. SFPD vehicles or supplemental SFFD vehicles from other fire houses would access the western plaza via 3<sup>rd</sup> Street either from 16<sup>th</sup> Street (for vehicles traveling from the west via 16<sup>th</sup> Street) or from 3<sup>rd</sup> Street (for vehicles traveling from the north or from the south via 3<sup>rd</sup> Street). Exclusive transit rights-of-way along 3<sup>rd</sup> Street and 16<sup>th</sup> Street will accommodate emergency vehicles when traffic congestion might otherwise impair access, and emergency vehicles will be permitted on closed-streets as needed.

Staff in the TMC will also closely coordinate with emergency service personnel to facilitate access as needed.

### **8.2 EMERGENCY VEHICLE ACCESS FOR UCSF HOSPITAL**




The UCSF Women’s Cancer & Children’s Hospital, which opened on February 1, 2015, is located on the west side of 3<sup>rd</sup> Street between 16<sup>th</sup> Street and Mariposa Street. Access to the hospital is provided from both 16<sup>th</sup> Street and Mariposa Street via extensions of 4<sup>th</sup> Street.

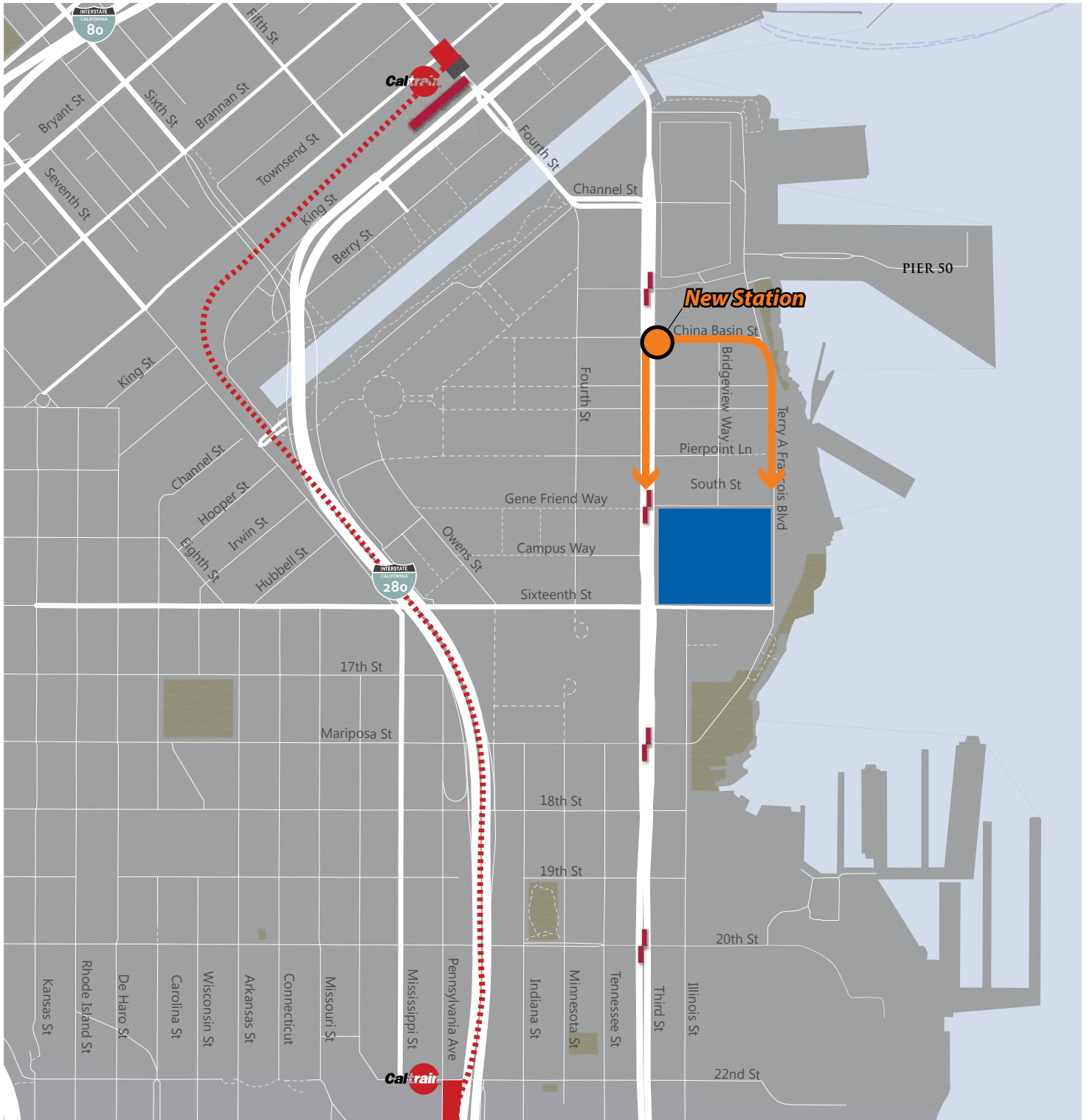
16<sup>th</sup> Street will have a transit-only lane, as well as one mixed-flow travel lane in each direction, which will provide adequate room for vehicles to pull over to the side of the road and for emergency vehicles to pass. Mariposa Street will have PCOs, who would be responsible for ensuring that vehicle queues do not block access to the Fourth Street Medical Center entrance.

Emergency vehicles traveling on 3<sup>rd</sup> Street en route to 16<sup>th</sup>, Mariposa, or Fourth Streets would be able to travel on Muni’s light rail right-of-way in the median. Under post-peak event conditions with northbound lane closures, they could also travel northbound within the southbound lanes. If necessary to access the closed section to directly access adjacent uses, emergency vehicles traveling northbound on 3<sup>rd</sup> Street would be permitted to continue through the closed segment, as PCOs would be able to remove the temporary barriers.

Drivers arriving at the UCSF hospital with urgent but not emergency conditions would be able to take advantage of the Local/Hospital Access plan, as well as the network of PCOs being implemented as part of the proposed project (both described in this TMP). Drivers would be able to explain their situation to the first PCO that they encounter in their path, who would then be able to radio to other PCOs ahead and facilitate the movement of the vehicle. In more extreme cases of emergency, PCOs could direct private vehicles to use transit-only lanes under PCO control, such as those on 16<sup>th</sup> Street. PCOs would not be reassigned to, or responsible for, providing assistance for a specific emergency trip to UCSF by emergency or non-emergency vehicles.

A complete discussion of plans and procedures for emergency vehicle access to the UCSF hospital is available in the project SEIR (Impact TR-10, Impact TR-17, Impact TR-25, Impact C-TR-10, and Response TR-9). Additional Pre- and Post-event curb management and controls as related to the UCSF Hospital access for patients and staff are described in Chapter 6.

-  New Fire/Police Station
-  Emergency Vehicle Route to Project Site
-  Project Site



Not to Scale

## CHAPTER 9. COMMUNICATION

### 9.1 OUTREACH

Outreach can provide useful trip planning information to guests and employees, in order to minimize confusion and risk of conflicts by providing advanced information on transportation choices for accessing the Event Center; and by alerting attendees to the location and purpose of temporary controls and measures. The following is an outreach strategy to accompany Event Center events. Outreach about transportation will promote use of non-auto modes to the Event Center.

Ticket purchase confirmation will include the following information:

- In addition to the option to pre-purchase parking at the Event Center, all attendees will receive a statement explaining that parking will be extremely limited on site and may not be available, an explanation of transit and bicycle resources, and detailed information about options for getting to the Event Center, including:
  - List of transit options available, including links to trip planning tools, schedules, fare information, and forms of payment (i.e. Clipper card brochure)
  - Location of real time transit information displays on the Event Center site
  - Reminder that Muni fares will be checked on the street, prior to walking up the Muni platform; that Muni tickets must be purchased ahead of time, and that they may be purchased at the Event Center box office
  - Links to web-based trip planning tools and resources (by transit, walking, bicycling, and driving)
  - Information on how to use transit (fare and payment information), best stops and stations for accessing the Event Center, walking routes to the Event Center from transit hubs
  - Recommended walking paths to the Event Center from transit hubs and other origins
  - Information on bicycle routes (i.e. link to San Francisco's Bicycle and Walking Map) and free bicycle valet services
  - Directions to general pick-up/drop-off location along Terry François Boulevard
  - Information on TMA shuttles (routes, times, stop locations)
  - Information on parking availability and pricing, and ability to pre-purchase parking at event center [this should be last on our list, as it will be last on our customers']
- For attendees who do purchase parking in the garage with their ticket:
  - Directions to the Event Center from different origins and instructions describing the best path to access the Event Center garage
  - Information on controls that will be in place following game's end and how to most effectively exit the Event Center garage towards desired destinations



## 9.2 WAYFINDING

Wayfinding can support easy, safe walking and bicycling trips, and reduce the risk of conflicts for all modes by directing people away from potential conflict points. The following is a wayfinding strategy to accompany Event Center events.

### 9.2.1 Pre-Event Wayfinding

- Signage, in accordance with San Francisco standards, directing visitors to Event Center, transit, taxi stands, identifying bikeways, locations of bicycle parking, bike share pods, etc. within ¼ mile of Event Center.
- Build a base of permanent, intuitive wayfinding network that highlights local transit hubs and major destinations, and includes estimates of walking times along the most comfortable pedestrian corridors.
- Wayfinding efforts will be increased or emphasized during playoff NBA games due to these events attracting out of town attendees who will presumably be unfamiliar with the transportation network and transit options. These efforts may include additional temporary signage in the Event Center vicinity.
- Signage at all corners of the site directing walk-up attendees to Event Center entrances along routes that minimize pedestrian crossings of the Event Center garage driveway.
- Signage directing bicyclists to the indoor bicycle valet parking or temporary bicycle corrals. Signage will be placed at the following locations:
  - Northbound Illinois Street before the entry to the garage
  - Northbound and Southbound Terry François Boulevard just before the site
  - Eastbound 16<sup>th</sup> Street just before the site
- Signage directing eastbound bicyclists along 16<sup>th</sup> Street to walk up the sidewalk on the east side of 3<sup>rd</sup> Street to access bicycle rack parking located in the west plaza.
- Signage that directs vehicles towards the Event Center garage or other nearby garages/lots, including wayfinding signage on I-280 to direct vehicles to the best exit to access the site.

### 9.2.2 Post-Event Wayfinding

- Signage at Event Center exits that directs pedestrians leaving the site away from the Event Center garage driveway and towards key destinations such as BART (west and north), Caltrain (north), 22 Fillmore bus route (west) and Muni South Street stop (northwest corner).
- Signage outside bicycle valet parking directing bicyclists to use the Blue Greenway along Terry François Boulevard.
- Signage that directs vehicles towards the suggested post-event route, including garage exit wayfinding.

### **9.3 MISSION BAY/BALLPARK TRANSPORTATION COORDINATING COMMITTEE**

To optimize effectiveness of the transportation management strategies for day-to-day operations and events in the Mission Bay area, at AT&T Park, on the UCSF Mission Bay campus, and at the proposed project site, the Warriors shall actively participate as a member of the Mission Bay/Ballpark Transportation Coordinating Committee (MBBTCC) in order to evaluate and plan for operations at all three facilities (i.e., AT&T Park, UCSF Mission Bay Campus, and the proposed Event Center). This committee would, among other roles, serve as a single point for communication and coordination of transportation management strategies.

The Transportation Coordinating Committee shall consult on changes to and expansion of transit services, and for developing and implementing strategies within their purview that address transportation issues and conflicts as they arise. In addition, the committee shall serve as a liaison for operation of the facilities, monitoring conditions, and addressing community issues related to events, and the Warriors shall make good faith efforts to notify the committee regarding events.<sup>24</sup>

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<sup>24</sup> See MMRP, M-TR-11b,

## **CHAPTER 10. MONITORING, REFINEMENT, AND PERFORMANCE STANDARDS**

The Golden State Warriors will monitor and refine the TMP in conjunction with the City of San Francisco and the various transit providers throughout the life of the project through field monitoring during the project's first four years of operations and an annual surveying and reporting program thereafter, as described in the project Mitigation Monitoring and Reporting Program (MMRP). The TDM plan will be continually refined by improving existing measures and introducing new strategies. All proposed and approved changes to the TMP will be reported in to the Executive Director of OCII and referenced in the MMRP Annual Report (described below).

### **10.1 PURPOSE**

The monitoring and refinement of the TMP will be conducted to accomplish the following objectives.

1. Weekday Event Auto Mode Share: Targeted average auto mode share should be no greater than 53 percent for weekday peak event arrivals (6:00 PM – 8:00PM).
2. Weekend Event auto Mode Share: Targeted average auto mode share should be no greater than 59 percent for weekend peak event arrivals (6:00 PM – 8:00PM).
3. Vehicle Queuing on City Streets: Traffic entering the parking garage from eastbound 16<sup>th</sup> Street does not spill back to 16<sup>th</sup> Street or into the Third Street intersection due to garage ingress.
4. Vehicle Queueing on City Streets: Event traffic does not block access to the UCSF emergency room entrance for emergency vehicles or patients on Mariposa Street between I-280 and Third Street.
5. Pedestrian Flows: Pedestrians do not spill out of sidewalks onto streets with moving vehicles, or out of crosswalks when crossing the street.
6. Bicycle Parking: Signage is clearly visible to direct bicyclists to event valet and other bicycle parking, and ensure that adequate bicycle parking supply is provided to accommodate a typical peak event.
7. Transit Mode Share: All Muni light rail and special event shuttle passengers are able to board their transit vehicle within 45 minutes following an event.
8. Good Neighbor: Mission Bay TMA shuttles continue to run and maintain capacity for simultaneous neighborhood use.

### **10.2 MONITORING METHODS**

The following methods will be employed to monitor TMP strategies.

1. Quarterly Coordination Meetings – the on-site Transportation Coordinator and key Event Center staff will meet quarterly with the City's designated representative, SFMTA TDM Manager, other key City staff, and other transportation service providers to evaluate the TMP strategies throughout the life of the project.
2. Inaugural Event Monitoring – a designated team of Event Center and City staff will monitor pre-event and post-event transportation conditions at several of the first Warriors' games and concerts held at

the Event Center, per Performance Standards described in Section 10.4 and relevant adopted City standards.

3. Subsequent Event Monitoring - a designated team of Event Center and City staff will monitor pre-event and post-event transportation conditions intermittently during the first four years of operation at the Event Center, per Performance Standards described in Section 10.4 and relevant adopted City standards.
4. Curb Pick-Up and Drop-Off Operations – the on-site Transportation Coordinator will regularly monitor curb operations during the first year of operation.
5. Event Attendee Surveys – annual travel surveys of at least 600 attendees<sup>25</sup> will be conducted at five weekday evening games and at one of each other event type (including a dual-event scenario, if one occurs) at the Event Center. The surveys will identify such data as pre-event origin and post-event destination, arrival and departure times, arrival and departure modes, transit provider, parking location, number of vehicle occupants (auto mode), etc.
6. Event Center Development Employee Surveys – annual travel surveys of permanent and temporary employees will be conducted to identify the same travel information for Warrior employees as well as to determine their awareness of alternative modes and travel demand management programs that are available to them. Warriors will commit to a minimum of 60 percent survey completion rate.
7. Mission Bay Neighbor Surveys – annual travel surveys will be conducted Event Center to identify the same travel information for local residents and employers, who will be contacted via the Mission Bay Citizens Advisory Committee (CAC) distribution list. The results of these surveys will be shared and discussed with the CAC as requested.
8. UCSF Surveys – annual travel surveys will be conducted Event Center to identify the adequacy of access for emergency vehicles and personal to the UCSF hospital center and children’s emergency room. Surveys will include UCSF campus staff, emergency service providers, and the UCSF patient population.
9. Parking Strategies – data will be collected on parking utilization rates, and effectiveness of on-site and off-site remote parking strategies, for all event and no-event types.

### **10.3 MONITORING DOCUMENTATION**

The results of the monitoring process will be documented as follows.

1. TMP Travel Survey Memo – a memorandum will be prepared within three months of the inaugural events (NBA game, concert, and convention) that documents the results of the initial travel surveys as well as ongoing event monitoring.
2. TMMRP Annual Report – a report will be developed and submitted to OCII annually, beginning one year following commencement of project construction and continuing for the life of the project. The

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<sup>25</sup> Comparable to surveys conducted at other new, urban multi-purpose venues (including Barclays Center in Brooklyn, NY).

MMRP Annual Report shall summarize the current implementation and compliance status at the time of the report for all mitigation and improvement measures, and all TMP measures, for which the Warriors have been assigned some or all reporting responsibility; for measures that another entity (e.g., a transit service provider) is responsible for implementing, the Warriors shall report on readily available information about the implementation and compliance status of such measures but such reporting responsibility does not transfer responsibility for implementation of such measures to the Warriors. This annual report may include the TMP monitoring surveys and reports discussed above. Event Center, that addresses how effectively the TMP is meeting the monitoring objectives described above, while also proposing changes, adjustments, and improvements to the TMP and TDM as needed. The survey will be developed in coordination with SFMTA and OCII.

3. Mission Bay TMA Annual Report – a report is prepared annually to verify the Mission Bay TMA’s compliance with applicable transportation mitigation measures from the 1998 Mission Bay Subsequent EIR. Tenants on Blocks 29-32, including the Warriors, will contribute annually to the Mission Bay TMA. Consequently, the Mission Bay TMA Annual Report will include discussion of programs funded in part by the Warriors in service of goals similar to those outlined in the above TMP.

#### **10.4 PERFORMANCE STANDARDS**

The TMP includes various performance measures once the project is in operation and initial monitoring results are available, the results will be measured against these criteria. If not achieved, the Warriors will be required to work with the appropriate agency or stakeholder group to ensure that the standards are met. The following performance standards have been developed:

1. Weekday Auto Mode Share: Targeted average auto mode share should be no greater than 53 percent for weekday peak event arrivals (6:00 PM – 8:00PM).
2. Weekend Auto Mode Share: Targeted average auto mode share should be no greater than 59 percent for weekend peak event arrivals (6:00 PM – 8:00PM).
3. Vehicle Queuing on City Streets: Traffic entering the parking garage from eastbound 16<sup>th</sup> Street does not spill back to 16<sup>th</sup> Street or back to the 3<sup>rd</sup> Street intersection due to garage ingress.
4. Vehicle Queuing on City Streets: Event traffic will not block access to the UCSF Emergency Room entrance for emergency vehicles or patients on Mariposa Street between I-280 and 3<sup>rd</sup> Street.
5. Pedestrian Flows: Pedestrians do not spill out of sidewalks onto streets with moving vehicles, or out of crosswalks when crossing the street.
6. Bicycle Parking: Signage is clearly visible to direct bicyclists to event valet and other bicycle parking, which has an adequate supply to accommodate a typical peak event.

7. Transit Mode Share: All Muni Metro and additional shuttle passengers are able to board their transit vehicle within 45 minutes following an event.<sup>26</sup>
8. Good Neighbor Policy: Mission Bay TMA shuttles continue to run and maintain capacity for simultaneous neighborhood use.

In the event that ongoing monitoring shows at any time that the performance standards outlined above are not being met, the Warriors will explore additional travel demand strategies, operational efforts, or minor redesigns to meet the goals of this TMP. Revisions to policy will be brought before the Mission Bay CAC, which includes representatives from UCSF, as requested by that body for public comment prior to implementation. A representative list of possible strategies is as follows:

1. Increase Warriors contribution to the Mission Bay TMA to directly fund incremental, event-only service, which may include additional shuttle bus purchases and/or expanded hours of operation.
2. Establish a partnership with a private shuttle provider for incremental, event-only service to and from satellite parking locations (if designated) or transit centers.
3. Facilitate charter bus/private shuttle program purchases for group ticket sales and/or suite purchases for events. Reduce the project parking demand through a variety of mechanisms, including pricing.
4. Explore partnerships with car-sharing services (e.g., Zipcar, City CarShare) for spaces on-site to reduce car ownership amongst employees.
5. Expand media campaigns, including in social media, which promote walking and/or bicycling to the Event Center.
6. Conduct cross-marketing strategies with Event Center businesses (e.g., 10 percent off merchandise/food if patrons arrive by transit and/or bike or on foot).
7. Carry out public education campaigns.
8. Offer special event ferry service to the closest ferry station to the project site (similar to the existing service provided between AT&T Park and Alameda, Marin and Solano Counties by Golden Gate Transit, Alameda/Oakland and Vallejo ferry service).
9. Provide transit fare subsidies to event ticket holders.
10. In consultation with the SFMTA, remove any street furniture or landscaping obstructing pedestrian paths of travel or Muni staging areas.

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<sup>26</sup> 45 minutes has been deemed an appropriate period of time given the anticipated time patrons will spend egressing from the building, crossing the 3.2 acre plaza, locating the appropriate transit stop for their final destination, and queuing accordingly. It reflects anticipated delay by some patrons who may remain in the Event Center following an event's end to take advantage of promotions, watch post-game interviews, etc., and by other guests who may patronize the retail businesses located on-site following an event but prior to leaving Mission Bay.

11. Cooperate with future City efforts for active interventions to effectively manage and price the parking supply in the project vicinity to reduce traffic congestion.

## CHAPTER 11. CONDITIONS WITHOUT TSP

In the event that the Muni Transit Service Plan (TSP) for the Warriors Event Center and Mixed Use Development is not implemented, the Warriors shall be responsible for meeting **incremental performance standards and monitoring and reporting requirements**, as described below. The resulting intensified efforts to achieve and maintain modal shares provide assurance that the transportation network will continue to function adequately if at any time fiscal or political obstacles interfere with continuous implementation of the TSP by the City.

### 11.1 AUTO MODE SHARE PERFORMANCE STANDARD<sup>27</sup>

#### 11.1.1 General

Under no-TSP conditions, the Warriors shall be responsible for implementing TDM measures intended to reach an auto mode share performance standard for different types of events. Specifically, the Warriors shall work to achieve the following performance standards:

1. For weekday events that have 12,500 or more attendees, the project shall not exceed an arrival auto mode share of 53 percent.
2. For weekend events that have 12,500 or more attendees, the project shall not exceed an arrival auto mode share of 59 percent.

The Warriors shall also be responsible for monitoring and reporting related to the achievement of these performance standards, as described further below, if the TSP is not implemented.

The performance standards shall be achieved by the middle of the Golden State Warriors' third season at the event center, and for every Golden State Warriors season thereafter.

The Warriors may implement any combination of TDM strategies, including those identified in the above list of TDM measures or elsewhere in this TMP, to achieve the above performance standards. Potential strategies include, but are not limited to:

- Providing shuttle bus service between major transportation hubs such as Transbay Transit Terminal, BART stations, Caltrain stations and the event center.
- Providing bus shuttles between park & ride lots, remote parking facilities, or other facilities or locations within San Francisco, and the event center.
- Facilitating charter bus packages through the event sales department to encourage large groups to travel to and from the event center on charter buses.
- Reducing the project parking demand through a variety of mechanisms, including pricing.

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<sup>27</sup> See MMRP, M-TR-18.



- Offering high occupancy vehicle parking at more convenient locations than parking for the general public and/or at reduced rates.
- Undertaking media campaigns, including in social media, that promote walking and/or bicycling to the event center.
- Conducting cross-marketing strategies with event center businesses (e.g., discount on merchandise/food if patrons arrive by transit and/or bike or on foot).
- Carrying out public education campaigns.
- Offering special event ferry service to the closest ferry station to the project site (similar to the existing service provided between AT&T Park and Alameda and Marin Counties by Golden Gate Transit, Alameda/Oakland and Vallejo ferry service).
- Providing incentive for arrivals by bike.
- Providing transit fare incentives to event ticket holders.

### **11.1.2 Monitoring and Reporting**

The Warriors shall retain a qualified transportation professional<sup>28</sup> to conduct travel surveys, as outlined below, and to document the results in a *Transportation Demand Management Report*. Prior to beginning the travel survey, the transportation professional shall develop the data collection methodology in consultation with and approved by OCII (or its designated representative, such as the Planning Department's Environmental Review Officer (ERO)) and in consultation with SFMTA. It is anticipated that data collection would occur at least during four days for two different types of events, for a total of eight days annually. Specifically, data collection shall be conducted during at least two weekday and two weekend NBA basketball games with 12,500 or more attendees, and two weekday and two weekend non-basketball events with attendance of 12,500 or more attendees.

The schedule of the travel surveys shall be as follows:

- Comprehensive travel surveys of basketball game attendees shall be conducted between December and April of every season.
- Comprehensive travel surveys of non-basketball event attendees (conventions events, concerts, family shows, etc.) could be collected any time during the year.

The following data of event attendees shall be collected as part of the travel surveys:

- Origin/destination of the trip (city, zip code, home/work/other)
- Mode of travel to/from event center

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<sup>28</sup> The Transportation Demand Management Report shall be performed by a qualified transportation professional from the Planning Department's *Transportation Consultant Pool*.

- If by transit, list mode and name of transit operator (AC Transit, BART, Caltrain, Muni, etc.)
  - If by rail or ferry, name of station trip started and ended
  - If by auto, number of people in the vehicle
  - If by auto, parking location and approximate walking time to event center
  - If by auto, ask if following trips would continue as auto, or if anticipate a mode shift.
  - If by bicycle or walking, name the origin of the trip. If a transfer from regional transit, name the origin and operator.
- If by bike share, name the origin (i.e., the pick up location) of the trip. Note if trip is a “last mile” connection from regional transit, and include the origin and operator.
  - Arrival and departure times at the event center.

The travel survey shall employ whatever methodology necessary, as approved by the OCII (or its designee) in consultation with SFMTA, to collect the above described data including but not limited to: manual or automatic (e.g., video or tubes) traffic volume counts, intercept surveys, smart phone application-based surveys, and on-line surveys.

The *Transportation Demand Management Report(s)* shall be submitted to OCII, or its designee, for review within 30 days of completion of the data collection. If OCII, or its designee, finds that the project exceeds the stated mode share performance standard, the Warriors shall revise the proposed project’s Transportation Management Plan (TMP) to incorporate a set of measures that would lower the auto mode share. OCII, or its designee, shall review and approve the revised TMP. For basketball events, the TMP shall be revised by no later than August 15th of the calendar year to ensure adequate lead time to implement TDM measures prior to the start of the following basketball season. For non-basketball events, the proposed project’s TMP shall be revised within 90 days of submittal of the *Transportation Demand Management Report* to incorporate a set of measure that would lower the auto mode share.

If the project does not meet the stated performance standard, the Warriors shall implement TDM measures and collect data on a semi-annual basis (i.e., twice during a calendar year) to assess their effectiveness for basketball games and other events. The implementation of TDM measures shall be intensified until the auto mode split performance standard is achieved. Upon achievement of the performance standard, the Warriors may resume travel survey data collection for basketball and non-basketball events on an annual basis. If the Warriors demonstrates three consecutive years of meeting the auto mode share performance standard, the comprehensive data collection effort may occur every two years.

The data collection plan described above may be modified by OCII, or its designee, in consultation with SFMTA if field observations and/or other circumstances require data collection at different times and/or for different events than specified above. The modification of the data collection plan, however, shall not change the performance standards set forth in this mitigation measure.

## 11.2 SAFE PEDESTRIAN ACCESS PERFORMANCE STANDARD<sup>29</sup>

### 11.2.1 General

During events with 3,000 or more attendees, the Warriors shall be responsible for providing trained personnel (e.g., off-duty SFPD staff) to control pedestrian, bicycle and vehicular flows to and from the event center at the intersections immediately adjacent to the project site and to ensure that Muni platforms serving the site or vicinity are not over capacity. The trained personnel shall be provided during pre- and post-event periods. The Warriors shall ensure that conflicts between various modes are reduced to the maximum extent possible through adequate staffing of trained personnel as well as other measures, as appropriate.

Other pedestrian management measures that could be implemented include but are not limited to: installation of barricades, proper signage and announcements to disperse patrons to other streets around the project site, such as to Terry Francois Boulevard, and cross-marketing incentives such as discounts at the restaurant and retail establishments to extend the peak departure period. Through the implementation of various strategies, the project sponsor shall ensure that pedestrian conflicts with other modes are minimized by separating vehicles, bicycles, transit and pedestrian flows to the greatest extent possible, including ensuring that various modes are adequately instructed about when it is their turn to proceed. The Warriors shall also ensure that Muni platform is not overcrowded by staging event attendees on the adjacent sidewalks as needed.

At the intersection of Third/South, the trained personnel shall implement strategies to allow pedestrians to cross the street safely. The strategies could include allowing authorized personnel to manually override the traffic signal and direct pedestrians to cross, erecting temporary pedestrian crossing barriers, allowing use of the closed Third Street as a pedestrian access route, providing a defined passenger waiting area within the closed Third Street, and shielding passengers waiting to board light rail from adjacent pedestrian traffic.

### 11.2.2 Monitoring and Reporting

The Warriors shall retain a qualified transportation professional<sup>30</sup> to conduct field observations of pedestrian hazards and safety conditions along Third Street adjacent to the project site, as outlined below, and to document the results in a *Pedestrian Access Report*. City staff shall verify the field data collection results. Prior to beginning field observations, the transportation professional shall develop the data collection methodology in consultation with and approved by OCII, or its designee, in coordination with SFMTA. The data collection methodology shall be reviewed and revised annually, if appropriate. Field observations shall be conducted during the following event types and attendance levels:

- at least two weekday NBA basketball games with 12,500 or more attendees;
- at least two weekend NBA basketball games with 12,500 or more attendees;
- at least two weekday non-basketball game events with 12,500 or more attendees;

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<sup>29</sup> See MMRP, M-TR-22.

<sup>30</sup> The Transportation Demand Management Report shall be performed by a qualified transportation professional from the San Francisco Planning Department's *Transportation Consultant Pool*. Available online at <http://www.sf-planning.org/index.aspx?page=1886>. Accessed May 28, 2015.

- at least two weekend non-basketball game events with 12,500 or more attendees;
- at least two weekday non-basketball game events with 3,000 to 9,000 attendees; and,
- at least two weekend non-basketball game events with 3,000 to 9,000 attendees; and
- at least two weekday convention events of 9,000 or more attendees

The pedestrian hazard and safety conditions field observations shall occur on an annual basis. The *Pedestrian Access Report* shall be submitted to SFMTA, OCII and Planning Department for review within 30 days of completion of the data collection. If OCII finds that the project does not meet the performance standard outlined below, the Transportation Management Plan (TMP) shall be revised to incorporate techniques to minimize conflicts between pedestrians and other modes. The TMP shall be revised within 90 days of submittal of the Pedestrian Access Report. When the project is not meeting the stated performance standard, the Warriors shall collect data on a semi-annual basis (i.e., twice during a calendar year) to assess the effectiveness of various measures incorporated into the revised TMP. The implementation of various measures shall be intensified until pedestrian access to and from the site occurs in a safe manner, as determined by OCII, or its designee.

The performance standard for safe pedestrian operations consists of the following: substantial numbers of pedestrians are not spilling onto the Muni right-of-way area, are not illegally crossing Third Street midblock, are not overcrowding the Muni platforms, and are not crossing intersections against the signal. Upon achievement of the performance standard, the project sponsor may resume field observations for basketball, non-basketball and convention events on an annual basis. If the sponsor demonstrates three consecutive years of meeting the performance standard, the comprehensive data collection effort may occur every two years.

Further, in reviewing the Pedestrian Access Report, OCII, or its designee, may adjust the size of the events for which this measure is applicable. For example, if small scale events (e.g., those with 5,000 attendees) do not result in crosswalk and/or Muni platform overcrowding or other similar pedestrian safety conditions, OCII, or its designee, may revise this mitigation measure to apply to events of 5,001 or more attendees.

**APPENDIX A:  
EVENT ACTIVITY SEQUENCES**

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## Typical Warriors Game Sequence (7:30 pm tip off)

Day Prior 2 to 4 pm	If the game is nationally televised (5-7 games per year), 1-2 TV trucks for the national broadcaster(s) will typically arrive the day before the game. Trucks are parked in the loading dock and technicians will begin to setup for game broadcast.
Game Day 7 am to noon	Game day food service deliveries at loading dock (scheduled around TV broadcast and team arrival and departures). Average Time of delivery is scheduled to avoid peak commute hours and other factors that may influence efficiency and impact. Average individual deliveries required per Warriors game is six. Most if not all are scheduled to occur the day prior.
9 am	<p>Food service prep team arrives. Typically 25 to 35 game day personnel plus approximately 30 baseline staff. Staff will arrive on foot and be encouraged to use public transit.</p> <p>Home and visiting team TV trucks (2 trucks) arrive and deploy in the loading dock. If trucks are in market and the dock is available, they may arrive the day before the event. Typical call is morning on game day. The trucks can arrive as late as early afternoon.</p>
10 am	<p>TV broadcasting crew arrives one hour following TV truck arrival and begins to prepare for the game broadcast. Typically 40 personnel total. The crew arrives via the loading dock.</p> <p>Pre-game shoot around. Visiting teams will in some cases use an off-site venue for shootaround. Specific times vary. The window is typically 10 am to 1 pm. Typically 25 personnel per team. Visiting team arrives in two buses. Home team arrives individually. After pre-game shoot around, visiting players and coaches and home team players will typically leave the building. The visiting team arrives and departs via the loading dock. The home team will either use the loading dock or segregated parking in the Event Center garage.</p>
1 pm	Building pre-cleaning crew arrives. This practice varies from building to building and is more common for outdoor venues. Personnel vary based on event type and general building practice. Likely 15 to 20 total. In some cases, there is no pre-clean. In others, the pre-clean happens early in the morning on game day. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.
5 to 5:30 pm	Teams return for the game. The visiting team will arrive in two buses via the loading dock. The home team will either use the loading dock or segregated parking in the Event Center garage.
5 to 6 pm	Game day building staff arrives. Includes guest service and food service personnel. Typically 500 to 600 total. Staff will arrive at the staff entrance on foot and be encouraged to use public transit.
5:30 to 6 pm	Police, building security, and guest services personnel deploy to manage guest ingress approximately 30 minutes prior to doors.

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6 to 6:30 pm	Doors open 60 to 90 minutes prior to tip off. Guests begin to arrive. We anticipate that approximately 80% of guests will access the building via the entrance at the main plaza. Arrival distribution varies slightly based on day of week and market dynamics. 80% to 90% of guests are in the building by tip off. Final guests typically enter by the end of the first quarter.
7:30	Tip off.
9:30 pm	Police, building security, and guest services personnel deploy to manage guest egress approximately 30 minutes prior to anticipated game end.
10 pm	Game ends. Broadcast technicians immediately begin load-out.  Cleaning crew arrives and immediately begins post-show clean. Typically 25 to 50 personnel. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.  Change over crew arrives and immediately begins change over. Typically 20 personnel. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.
11 to 11:30 pm	Venue clear of guests and all event staff.
Day After Game	
11:30 pm to 12 am	TV trucks leave the venue.
2 to 3 am	Post-game clean complete, cleaning crew leaves the building.
4 am	Change over complete. Crew leaves the building.

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## Typical Concert Sequence (7:30 pm Show Time)

Event Day 4 to 8 am	Show trucks (which carry all show components including the stage, sound equipment and controls, video equipment and controls, props) arrive in market. They will typically stage somewhere off site but close to the venue. The number of trucks varies based on the size and complexity of the show. An A list show will usually require approximately 20 trucks. Once trucks have been unloaded, they are driven off site and will not return until the show is complete and the load-out process begins.
6 to 8 am	The production team (15 to 30 personnel for A list shows) arrives at the venue as does the local stagehand crew. Initial production trucks access the loading dock and show load-in commences. The production team will arrive in tour buses and access the building via the loading dock. The stagehand crew will arrive on foot and be encouraged to use public transit. The show trucks enter and exit the venue as the show components are unloaded. Load-in typically occurs over approximately four to six hours.
7 am to noon	Event day food service deliveries at loading dock (scheduled around other event related arrivals and departures). Average individual deliveries required are six. Most if not all are scheduled to occur the day prior.
9 am	Food service prep team arrives. Typically 25 to 35 event day personnel plus approximately 30 baseline staff. Staff will arrive on foot and be encouraged to use public transit.
1 pm	Building pre-cleaning crew arrives. This practice varies from building to building and is more common for outdoor venues. Personnel vary based on event type and general building practice. Likely 15 to 20 total. In some cases, there is no pre-clean. In others, the pre-clean happens early in the morning on event day. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.
2 to 4 pm	Performer(s) arrive(s) for sound check. Sound check typically lasts 30 to 60 minutes. The performer(s) will arrive in tour buses via the loading dock.
5 to 6 pm	Event day building staff arrives. Includes guest service and food service personnel. Typically 500 to 600 total and varies based on show type and expected attendance. Staff will arrive at the staff entrance on foot and be encouraged to use public transit.
5:30 to 6 pm	Police, building security, and guest services personnel deploy to manage guest ingress approximately 30 minutes prior to doors.
6 to 6:30 pm	Doors open 60 to 90 minutes prior to show time. Guests begin to arrive. We anticipate that approximately 80% of guests will access the building via the main entrance for Event Center shows, and 80% will access the building via the main theatre entrance for theatre shows. Arrival distribution varies slightly based on day of week and market dynamics. 90%+ of guests are in the building by show time. Final guests typically enter within another 30 minutes following show time.
7:30 pm	Show time.

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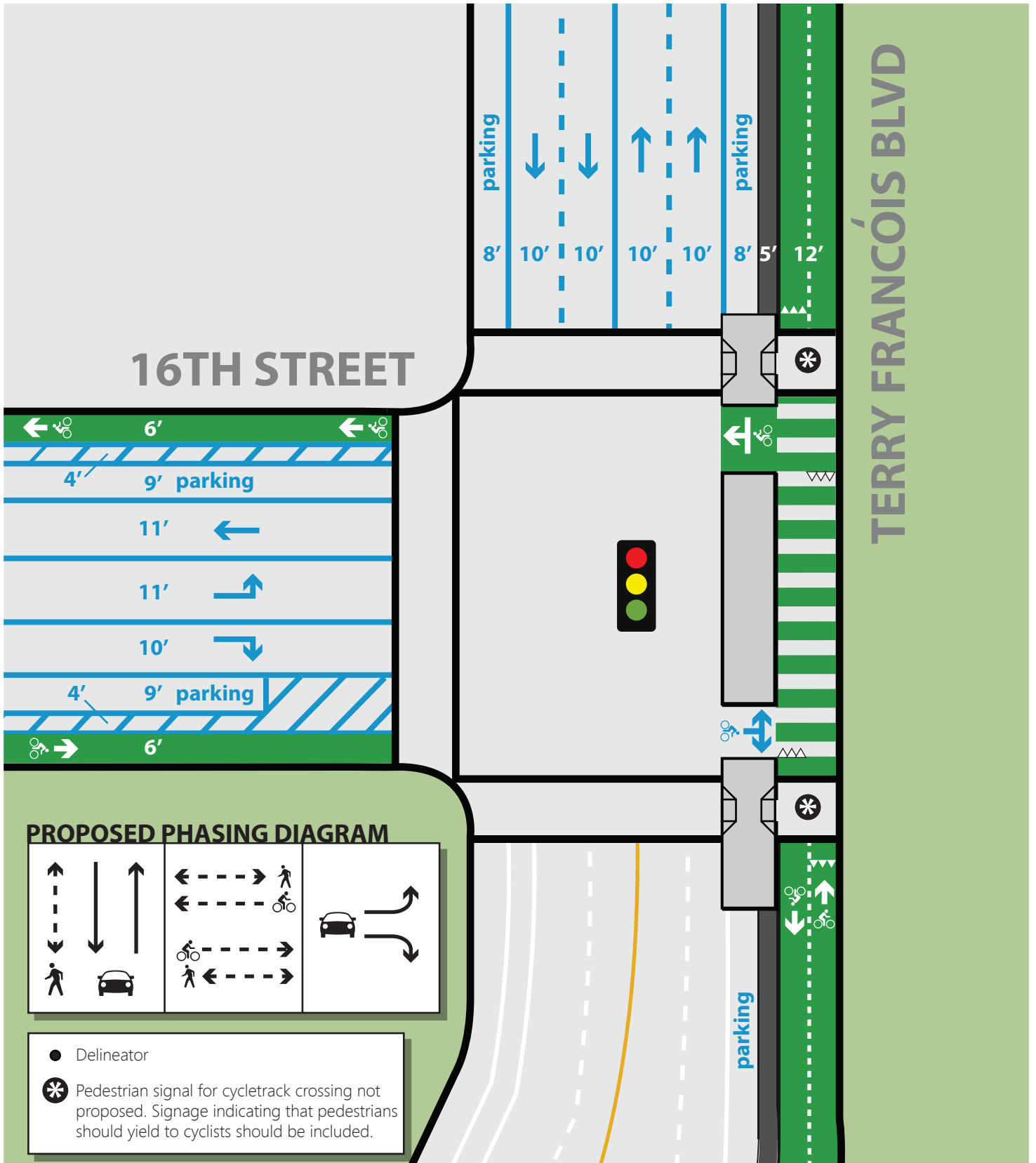


10 pm	Police, building security, and guest services personnel deploy to manage guest egress approximately 30 minutes prior to anticipated show end.
10:30 pm	Show ends. Production team immediately begins load-out.  Cleaning crew arrives and immediately begins post-show clean. Typically 25 to 50 personnel. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.  Change over crew arrives. Typically 20 personnel. The crew will arrive at the staff entrance on foot and be encouraged to use public transit.
11:30 to 12 am	Venue clear of guests and all event staff.
Day After Event	
1 to 3 am	Show trucks leave the venue.
2 to 3 am	Post show clean complete, cleaning crew leaves the building.
4 am	Change over complete. Crew leaves the building.

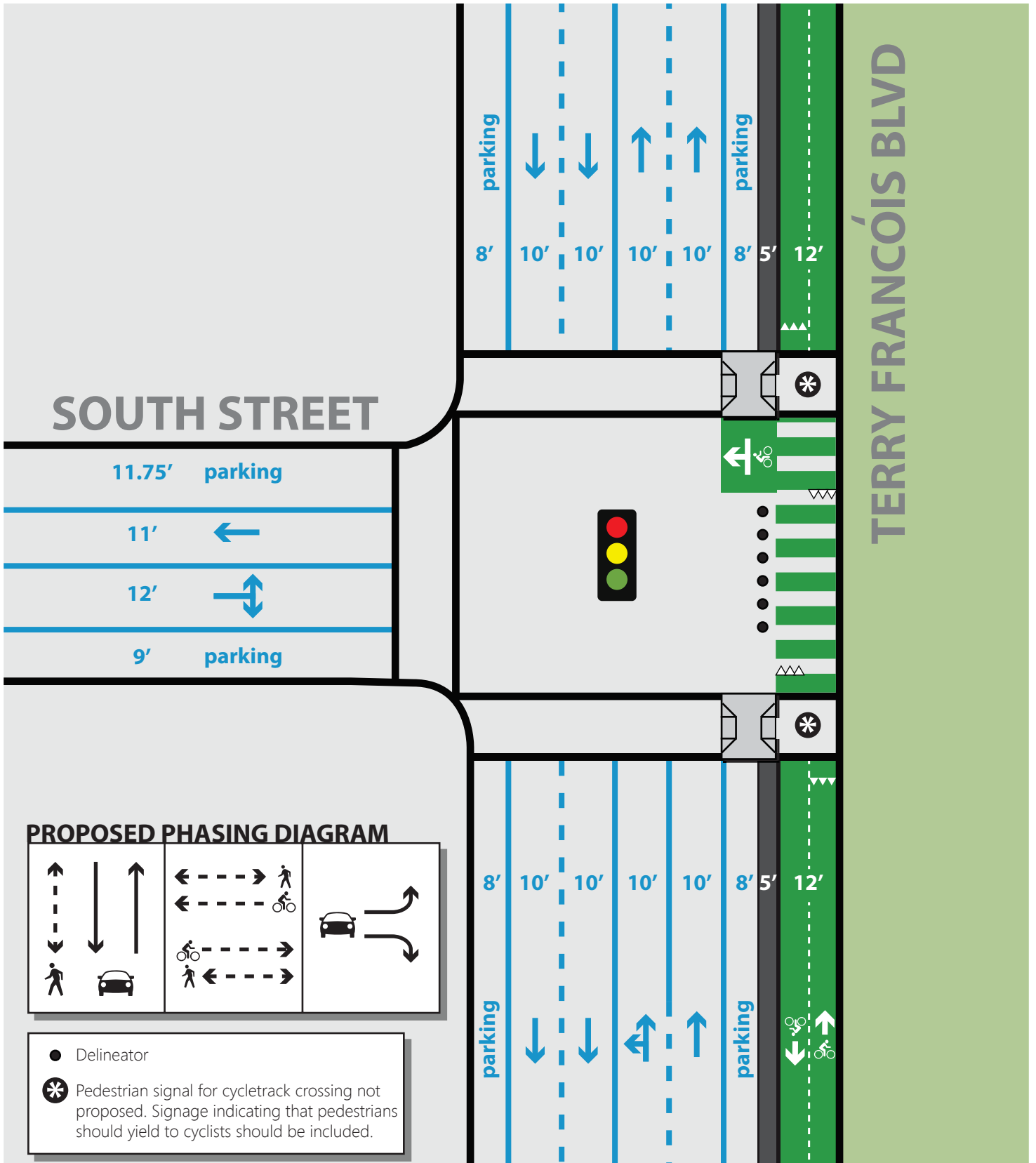
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**APPENDIX B:  
INTERSECTION CONCEPT LEVEL FIGURES**

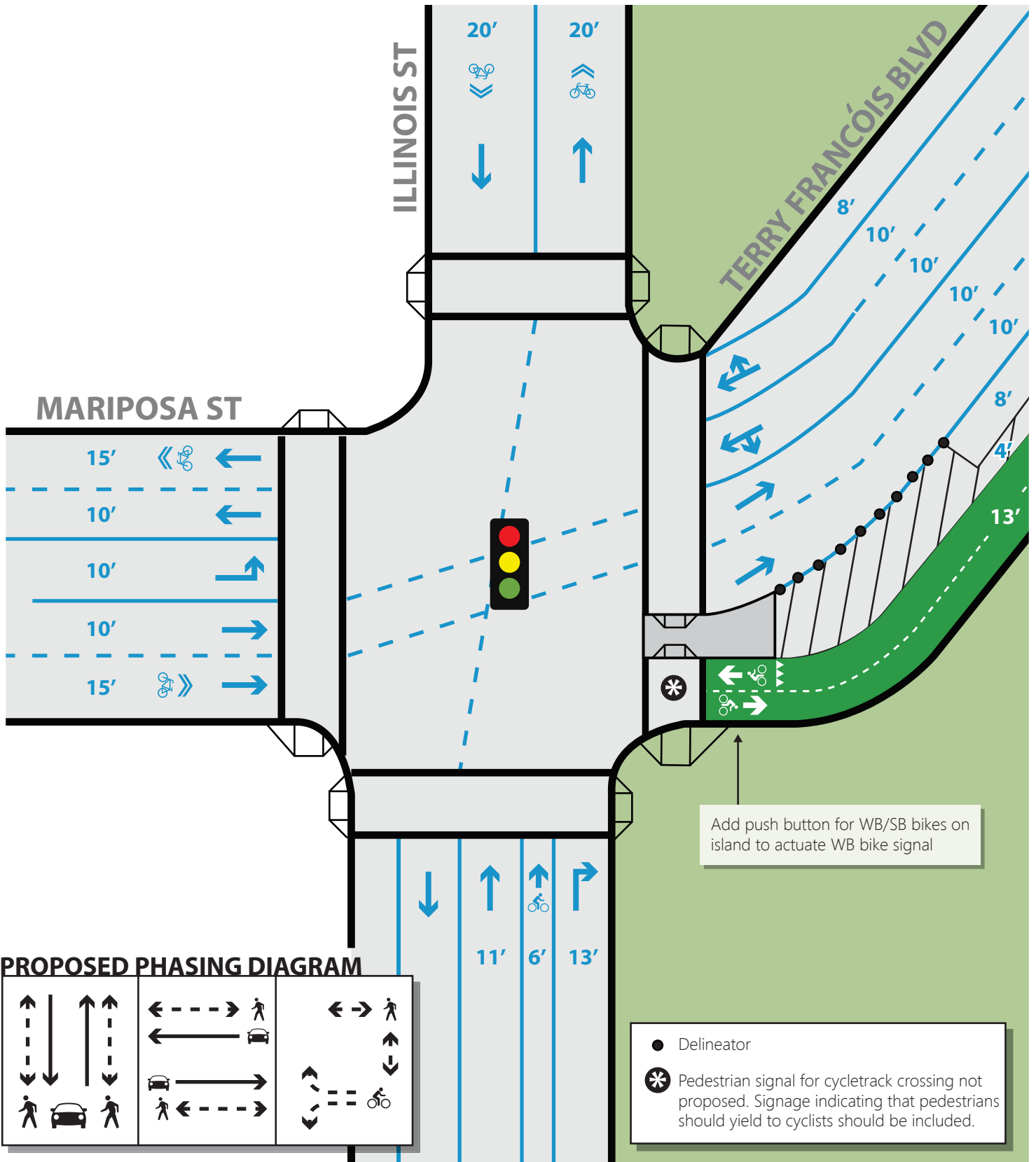
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Not to Scale



Not to Scale



Not to Scale